

National Action Plan on Education for Sustainable Development

The German contribution to the UNESCO Global Action Programme

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Contents

Preface	3
<hr/>	
1. The National Action Plan on Education for Sustainable Development	5
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Preamble	7
The Education Sectors in the National Action Plan	9
Early Childhood Care and Education	11
I. Integrating ESD into curricula	12
II. Establishing ESD as part of the institutional mission of ECCE providers.....	14
III. Integrating ESD into initial and further training for ECCE professionals	15
IV. Supporting ESD as the basis of professional action.....	17
V. Establishing networks with informal and formal education spaces.....	20
School	23
I. ESD as a responsibility of the education system.....	24
II. Teacher and educational assistant training for sustainable development	29
III. Learning spaces/social spaces, collaboration and ESD	32
IV. Embedding of ESD in curricula and syllabuses	35
V. Participation and ESD	37
Technical and Vocational Education and Training	41
I. Status review at all levels	41
II. Potential of TVET for ESD	42
III. Establishing workplaces and vocational schools as sustainable learning spaces.....	44
IV. Sustainability skills profile.....	47
V. Implementation of TVET for SD in curricula and teaching.....	49
Higher Education	51
I. Aligning higher education funding and incentive systems with substantive and structural sustainability and ESD	52
II. Systematically linking research and ESD using quality criteria	54
III. Supporting a diversified higher education system with a range of ESD paths, ESD pioneers and second followers	59
IV. Encouraging, supporting and enabling real participation of students and graduates as key architects of sustainable development	62
V. Developing transformational narratives for ESD	66

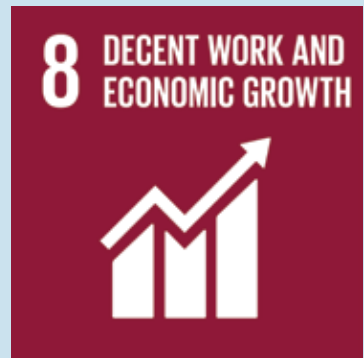
Non-Formal and Informal Learning/Youth	69
I. Effective participation of young people.....	70
II. Diversity and inclusion.....	72
III. Promoting and recognising change agents and multipliers.....	75
IV. Establishing ESD-focused educational landscapes.....	80
V. Developing transformative metaphors and narratives.....	82
VI. Opportunities for freedom of action and expression.....	85
VII. Developing viable funding models and instruments.....	86
Local Authorities	89
I. ESD as a location factor.....	90
II. ESD skills building in policy-making, civil society and administration.....	92
III. ESD incentives and permanently establishing ESD in all local authorities.....	94
IV. Networking and participation.....	96
V. Developing a local authority sustainable development code.....	97
2. Education for Sustainable Development until 2030 – Conceptual and Policy Framework	99
3. Implementation of the UNESCO Global Action Programme on Education for Sustainable Development in Germany	103
Appendix	107
Overview of Commitments.....	108
Cross-cutting commitments.....	108
Expert Forum on Early Childhood Care and Education.....	109
Expert Forum on Schools.....	111
Expert Forum on Technical and Vocational Education and Training.....	115
Expert Forum on Higher Education.....	117
Expert Forum on Non-Formal and Informal Learning/Youth.....	125
Expert Forum on Local Authorities.....	129
Members of the National Platform and the Expert Forums	130
Members of the National Platform on Education for Sustainable Development.....	130
Members of the Expert Forums.....	132
References.....	136
Imprint.....	137

Foreword

How can we ensure food security for the people on our planet? How can we achieve sustainable energy supply? And how can we take decisions and actions to attain more sustainability globally? These are questions which are crucial for our future and to which we urgently need to find answers. Answers that don't create a burden for future generations, but facilitate sustainable development for our planet, as already called for by the United Nations in 1992 and once again reinforced in the global Sustainable Development Goals in 2015, adopted by all 193 member states in the form of Agenda 2030. If we are to achieve these goals, we must organise our education system in a way that children, adolescents and adults acquire the knowledge and the skills that are needed to answer these questions. We need creative ideas, visions and the courage to shape sustainable development. Sustainability has to be an educational goal, both globally and nationally. The United Nations supports this goal with the UNESCO Global Action Programme (GAP) on Education for Sustainable Development (2015–2019). Germany's contribution is the National Action Plan on

Education for Sustainable Development (ESD). Chaired by the Federal Ministry of Education and Research (BMBF), the National Platform on ESD adopted the National Action Plan on 20 June 2017. It sets out the roadmap for transforming our education system towards greater sustainability. The overarching goal of the National Action Plan is the structural implementation of ESD in all sectors of the German education system. The 130 short, medium and long-term goals in the National Action Plan identify where we need to start in the process of transforming our education system: for example, in the education and training of teachers, in curricula and syllabuses, and on the ground in places of learning such as preschools, schools, businesses, higher education institutions and sports clubs. And we need to consistently involve young people in this transformation process. All of this serves to advance the one goal of enhancing the sustainability of our life on Earth and thus to improve our future livelihoods. Thank you very much to all those who have helped to develop this National Action Plan and to those who continue to be committed to education for sustainable development.

The Federal Ministry of Education and Research





1. The National Action Plan on Education for Sustainable Development



Preamble



Preamble

We can be the first generation to succeed in ending poverty; just as we may be the last to have a chance of saving the planet¹.

(Ban Ki-Moon, UN Secretary-General, 2007–2016)

With this National Action Plan on Education for Sustainable Development, we – the members of the National Platform on Education for Sustainable Development – support the goal, each within our own remit, of establishing Education for Sustainable Development in all areas of the German education system.

In 2015, the United Nations adopted the Sustainable Development Goals (SDGs) as part of the Agenda 2030². The SDGs set out the framework for surmounting immense challenges in relation to poverty, gender equality, global health hazards, the increasing frequency and intensity of natural disasters, violent extremism, terrorism and related humanitarian crises, the displacement of people, the depletion of natural resources and climate change.

The Agenda 2030 is a plan of action for people, planet and prosperity.³ To meet these challenges, we must initiate comprehensive and profound societal transformations and carry them through to completion.

“By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development.”

Target 4.7 of the United Nations Sustainable Development Goals, 2015

Education plays a key role in this process. It permits a sound understanding of the challenges and critical debate of potential solutions. Education enables the shaping of political, economic and societal change.

Education for Sustainable Development is education in the service of empowering people to think and act in terms of their impact on the world and the future. How will my decisions influence people of future generations or in other parts of the world? For example, what are the consequences of the way I consume and travel or what kinds of and how much energy I use? Education for Sustainable Development enables every individual to understand the impact of their own actions on the world and to make responsible choices.

¹ United Nations (2015), p. 13, paragraph 50.

² United Nations (2015).

³ Ibid., Preamble.

Target 4.7 of the SDGs establishes Education for Sustainable Development as a separate action area for the first time. The UNESCO Global Action Programme on Education for Sustainable Development (GAP ESD 2015–2019) supports global activities to reorient education and learning so that everyone has the opportunity to acquire the knowledge, skills, values and attitudes that empower them to contribute to sustainable development.

In order to attain these international goals, Germany has steadily expanded its commitment and activities with regard to Education for Sustainable Development. Particularly noteworthy are the Federal Government's revised German Sustainable Development Strategy of 2016 and the comprehensive and sweeping implementation of the UNESCO Global Action Programme on Education for Sustainable Development under the auspices of the Federal Ministry of Education and Research. These have pushed education as a key factor for achieving sustainability high up on the agenda within the Federal Government, the Länder (the 16 states of the Federal Republic of Germany), local authorities, the private sector, the academic and scientific community, and civil society.

Education for Sustainable Development is a task both for the state and for society and, as such, presents challenges for all involved. This National Action Plan on Education for Sustainable Development is the outcome of a broad participative process with the active involvement of representatives of the Federal Government, the Länder, local authorities, the private sector, the scientific community and civil society. The National Action Plan is an outcome of their joint efforts in an 18 months-plus dialogue and negotiation process.

In an online consultation in February and March 2017, the public submitted nearly 8,000 ratings and over 700 suggestions on objectives formulated in the Expert Forums. The forum experts discussed these contributions and integrated them into the National Action Plan. The National Action Plan is subdivided into priority action areas, specific objectives and recommendations for measures contributing to the achievement of the objectives. The advisory nature of the measures allows the various stakeholders in

the education system to select the instruments that are appropriate for them in their respective areas of activity and responsibility. Some of the proposed measures require changes in the law and additional human and financial resources. These are decisions that can only be made by the respective legislators and authorities.

The SDGs targeted for 2030 provide a suitable framework for the initiation and achievement of long-term structural changes. Now is the time to set the scene for those changes.

The National Action Plan has the cross-cutting goal of establishing Education for Sustainable Development in the structure of the German education system for the long term. The plan provides the basis and direction for the implementation phase that is now to follow. In line with the international call for monitoring, the National Action Plan provides an important point of reference for measuring our progress in establishing Education for Sustainable Development.

The National Action Plan is an important milestone, but not an end in itself. It will continue to evolve through further elaboration of the individual objectives and measures and as an outcome of evaluations that can be performed under the framework of both the National Platform and the Education for Sustainable Development Agenda Congress. Additionally, it extends a call for further participants to become involved. New participants can and should join the implementation process that we are launching as the National Platform together with our supporting panels – the Expert Forums and Partner Networks.

As the members of the National Platform, we welcome this National Action Plan on Education for Sustainable Development and will make it our own. Within the framework of our organisations and institutions, we will contribute to achieving the objectives and measures formulated here within the scope of our responsibilities and capabilities. Our commitments already contribute tangible measures towards attainment of the goals.

Berlin, 20 June 2017



The Education Sectors in the National Action Plan

Germany hereby presents a National Action Plan on Education for Sustainable Development (ESD). The action areas, objectives and measures set out in the following show how ESD can be advanced in Germany. The members of the National Platform and all organisations and institutions involved in the process thus fulfil the comprehensive mandate under the Agenda 2030 and in particular Target 4.7.

As Chancellor Angela Merkel emphasised, “There are less than 5,000 days left to meet the SDGs in 2030. That is of course a very short time given the size of the task involved in the comprehensive transformation we aim to achieve. So it is true to say that every day really counts.”⁴

The action areas, objectives and measures are grouped into the main sectors of the education system. A brief introduction serves to place each education sector in the context of ESD.

Commitment of the Federal Ministry of Education and Research (BMBF):

For the development of the National Action Plan on ESD, BMBF launched a comprehensive participative process involving other ministries, the Länder and local authorities as well as stakeholders from the scientific community, the private sector, civil society and education. BMBF will continue to support and coordinate the participative multi-stakeholder process in the implementation of the National Action Plan through to the end of the UNESCO Global Action Programme on ESD (2015 to 2019).

⁴ Chancellor Merkel (2017).

Early Childhood Care and Education



Early Childhood Care and Education

Child day-care and other forms of Early Childhood Care and Education (ECCE) facilities are the first education spaces that children encounter outside of the family. They make an important contribution to Early Childhood Care and Education and, together with parents, lay the foundations for children's individual educational careers, and for lifelong learning.

Implementing Early Childhood Care and Education for Sustainable Development (ECCE for SD) means providing children from birth to the age of six with opportunities for playful engagement with future-oriented issues and questions and with the latitude to take charge and shape their immediate surroundings in the spirit of sustainable development. Children's individual, everyday experiences, needs and interests are taken here as points of reference for introducing and approaching a wide variety of sustainable development issues such as water, food, energy and equity. Varied learning opportunities and open learning arrangements such as morning assembly, project work, experimenting, philosophising, free play and numerous other formats characterise the everyday routine of child day-care facilities and help make sustainable development part of children's experience.

The action areas, objectives and measures set out in the following define and add detail to the activities needed to embed ESD in Early Childhood Care and Education in line with the goals of the Global Action Programme. They place the focus on ideals for the future and have both a substantive and a policy core.

The measures inferred from the action areas and objectives are to be understood as supporting measures for embedding ESD, to a greater extent than is already the case, in the professional work of child day-care facilities, providers and associations and of initial and further training institutions. The guiding principle is a whole system view of education that builds on existing conceptual foundations and structures in the work of child day-care facilities, takes into account social, cultural, economic and environmental dimensions as well as physical and cognitive capabilities, and is seen as an integral part of the existing system. The members of the Expert Forum on Early Childhood Care and Education have set themselves the task of coordinating and supporting the implementation of the identified objectives and measures in order to contribute to the embedding of ESD in pre-primary education.

Commitment of the Federal Ministry of Education and Research (BMBF):

BMBF will fund the Haus der kleinen Forscher ('Little Scientists') Foundation with a focus on ESD through to the end of the Global Action Programme (2019).

Action Area I: Integrating ESD into curricula

A number of Länder have incorporated ESD into Early Childhood Care and Education curricula in various ways in recent years. Areas for improvement now need to be identified and recommendations made for implementing ESD in other Länder. At the same time, strategies and measures need to be developed to ensure that the resulting curricula are implemented in ECCE practice.

Commitment of the Haus der kleinen Forscher Foundation:

Outcomes of research on promoting Education for Sustainable Development (ESD) in Early Childhood Care and Education – a review on embedding ESD in curricula and syllabuses; target dimensions for ESD at the three levels children, ECCE professionals/teachers and ECCE heads – will be used to develop core values, a substantive and conceptual framework of ECCE for SD, and Länder-specific cross matrices.

Objective 1:

A set of core values reflecting the significance of ESD as a whole system view of education is to be made available (2019) and incorporated in the introductory chapters to curricula.

Measures:

- In consultation with the Expert Forum on Early Childhood Care and Education, an expert group is to be tasked with drafting a set of core values on the basis of available materials and conceptual frameworks. The core values will set out the conceptual underpinnings and the significance, goals and required knowledge, skills and abilities associated with ECCE for SD.

- The Expert Forum on Early Childhood Care and Education will consult on the draft core values and approve their submission to the Ministry.
- The core values will be presented and discussed in relevant bodies to ensure that they are taken up and made known. Such bodies include the Länder working group on child day-care facilities, the Länder joint open working group of the WiFF professional development initiative for ECCE professionals, relevant committees and working groups of the Federal Association of Non-statutory Welfare (BAGFW) and the Child and Youth Welfare Association (AGJ), and the Länder curriculum commissions.

Objective 2:

A substantive and conceptual framework of ECCE for SD is to be developed and will serve as the basis for discussion and revision of the curricula at Länder level (2019).

Measures:

- In consultation with the Expert Forum on Early Childhood Care and Education, a call will be issued for an expert report for development of the substantive and conceptual framework of ECCE for SD.
- The draft framework will be consulted on by the Expert Forum on Early Childhood Care and Education and submitted to the Länder curriculum commissions.

Objective 3:

Länder-specific cross matrices will show where curricula match the requirements for ESD and where elements of curricula need to be revised (2019).

Measures:

- Länder-specific cross matrices will be commissioned in consultation with the Expert Forum on Early Childhood Care and Education. They will be developed on the basis of the identified substantive and conceptual modules on ESD and of an expert report commissioned by the Haus der kleinen Forscher Foundation on the subject of ESD and curricula.
- The cross matrices will be discussed and approved by the Expert Forum on Early Childhood Care and Education and made available to the Länder curriculum commissions for revision of their curricula.

Objective 4:

The substantive and conceptual framework of ESD is to be discussed at Länder level (from 2020).

Measures:

- From the start of the implementation phase of the National Action Plan, regional conferences on ESD-related topics will be held throughout Germany in collaboration with all Expert Forums. The conferences will be attended by multipliers, who include representatives of associations of ECCE providers, the German Association of Towns and Municipalities, and ECCE professional training providers. The conferences will be hosted by the National Platform and the Expert Forum.

Objective 5:

ESD is to be incorporated into Länder curricula.

Measures:

- Working with the Federal Ministry of Family Affairs, Senior Citizens, Women and Youth, the Federal Ministry of Education and Research and the Länder, the Expert Forum on Early Childhood Care and Education will consult on the reporting formats to be used at federal and Länder level to document the implementation of the elements of ESD.
- The Federal Government and the Länder will agree on a suitable reporting format. They will agree on the preparation and publication of a status report and final report on the implementation of ESD.

Objective 6:

Strategies and measures for implementing Länder curricula in child day-care facilities are to be agreed at Länder level.

Commitment of the Haus der kleinen Forscher Foundation:

In collaboration with the Expert Forum on Early Childhood Care and Education and associations of ECCE providers, the Haus der kleinen Forscher Foundation will hold a national conference on ESD.

Measures:

- In 2017, the Expert Forum on Early Childhood Care and Education will develop a strategy paper setting out the need for the binding implementation of curricula together with implementation options.
- The strategy paper will follow on from the quality targets jointly laid down by the Federal Government and the Länder in the interim report "Developing and Financially Ensuring Early Education" and will be made available to the Federal-Länder working group of the same name (2017).
- The question of binding implementation of curricula will be discussed with relevant stakeholders.
- In 2017, the ministries concerned will be provided with written recommendations to which the strategy paper is attached.
- In collaboration with the Expert Forum on Early Childhood Care and Education and the Haus der kleinen Forscher Foundation, associations of ECCE providers will hold a national conference on the subject in early 2018.

Action Area II: Establishing ESD as part of the institutional mission of ECCE providers

Local authorities and the Federal Association of Non-statutory Welfare (BAGFW) recognise the need for and long-term benefits of ESD in pre-primary education. Accordingly, they support the development of educational approaches based on ESD. ECCE providers and their national associations will be supported by the Expert Forum in incorporating ESD and bindingly implementing it in their respective guiding principles and quality management systems.

Objective 1:

ESD is to be formulated as a benchmark in the guiding principles of ECCE providers (2019).

Measures:

- By the end of 2017, the Expert Forum on Early Childhood Care and Education will formulate a draft text module that is suitable for use in the guiding principles of ECCE providers and allows provider-specific modification.
- The text module will be made available to providers through their provider associations in 2018.

Objective 2:

ESD quality requirements, practice indicators and verification options are to be developed for the revision of ECCE providers' quality management systems (2019).

Measures:

- In consultation with the Expert Forum on Early Childhood Care and Education, an expert group will be commissioned, on the basis of the Länder curricula, existing conceptual modules for child day-care facilities and the concept of holistic ECCE, to outline Education for Sustainable Development in a set of quality requirements and operationalise them with practice indicators and verification options.

- The expert group's work outcomes will be consulted on by the Expert Forum on Early Childhood Care and Education, modified as necessary and released for publication in the first half of 2018.
- Through ECCE provider associations, the quality requirements, practice indicators and verification options will be made available to ECCE providers as modules for their quality management systems in the second half of 2018.

Objective 3:

ECCE providers and their associations will discuss the elements of ESD and their significance for Early Childhood Care and Education (2021).

Measures:

- From 2018 to 2021, working in collaboration with the responsible Länder ministries and Länder-level associations of ECCE providers, the Expert Forum on Early Childhood Care and Education will hold regional conferences on the subject in the Länder.
- The subject of ESD will be covered in professional journals, circulars put out by ECCE providers and other publications in 2019.
- By 2024, ECCE providers and their associations will develop approaches for embedding ESD in their organisations in accordance with their provider-specific profiles.



Action Area III: Integrating ESD into initial and further training for ECCE professionals

ESD should be introduced at higher education institutions both as a standalone module and as a cross-cutting subject that runs through entire courses of study. In addition to engaging with the subject personally during their course of study, students also need to complete work experience in child day-care facilities with a view to their later task of teaching ESD. Continuing training should seek to impart knowledge and enable personal access to the subject, based for example on the successful further training approaches developed by Leuchtpol and Haus der kleinen Forscher.

Commitment of the Federal Ministry of Family Affairs, Senior Citizens, Women and Youth (BMFSFJ):

BMFSFJ welcomes the addition of Education for Sustainable Development to the work of the Haus der kleinen Forscher Foundation and is committed to ensuring that it is publicised (such as through the www.fruehe-chancen.de ECCE portal) and widely adopted in practice.

Objective 1:

The Standing Conference of the Ministers of Education and Cultural Affairs of the Länder (KMK) will integrate Education for Sustainable Development as part of the training provided in tertiary education colleges.

Measures:

- The National Platform will make the developed conceptual foundations available to KMK.

Objective 2:

Further and continuing training approaches for Education for Sustainable Development are to be made available for trainers and ESD consulting services (2019).

Commitment of Bündnis Zukunfts- Bildung/Innowego Forum Bildung & Nachhaltigkeit eG:

Innowego – Forum Bildung & Nachhaltigkeit eG, together with its partner organisations the Youth Association for the Protection of Nature (NAJU im NABU e. V.) and the Lias-Grube environmental station, will create a good practice model for continuing training on ESD as part of their Klima-Kita-Netzwerk (climate/ECCE network) project, with the thematic focus on climate action and resource conservation for further and continuing training of ECCE professionals in line with the National Action Plan on ESD (to 2020).



Measures:

- In an expert report commissioned in consultation with the Expert Forum on Early Childhood Care and Education, elements and requirements of training for the specific target group will be collated in a key issues paper.
- The Expert Forum will provide advice for the key issues paper and present it for discussion at a symposium.
- Available training materials will be collated and effectively publicised by a contractor on a target group-specific basis.
- Training will be provided for ESD consulting services and for further and continuing training educators on the basis of the key issues paper and the continuing training materials.

Objective 3:

ESD is to be made a fixed feature of further and continuing training (2019).

Measures:

- A guide to further and continuing training providers and process consultants will be commissioned and made available in consultation with the Expert Forum on Early Childhood Care and Education.
- It is recommended that purpose-linked funding be made available for the further and continuing training at Länder and federal level.

Objective 4:

Higher education institutions will develop modules on ESD for teacher training and ECCE degree programmes and coordinate them with the relevant accreditation bodies (2021).

Measures:

- Higher education institutions with an ECCE degree programme and a degree programme for teachers in social welfare training institutions are encouraged to develop and test accredited modules for ESD with the aid of experts from the field.
- The Expert Forum on Early Childhood Care and Education will consult on the draft modules with experts from relevant bodies (the Federal Working Group on Early Childhood Education and Care (BAG-BEK e. V.) and the German Association of

Schools of Social Work (FBTS) together with its working group on ECCE, Studiengangstag Pädagogik der Kindheit).

- The Expert Forum on Early Childhood Care and Education will publish the draft modules.
- The modules will be presented at a national conference. The approaches and materials will be provided free of charge to all higher education institutions and the relevant accreditation bodies.

Objective 5:

ESD is to be included in training curricula for ECCE professionals.

Measures:

- A working group consisting of experts on ECCE and ESD, the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder (KMK) and Standing Conference of Youth and Family Ministers of the Länder will prepare a draft supplementing the skills-oriented Länder joint framework for training at tertiary-level colleges of social education.
- The draft will be discussed and approved by the Expert Forum on Early Childhood Care and Education and made available to all Länder.
- Training will be provided for ESD consulting services and for further and continuing training educators on the basis of the key issues paper and the continuing training materials (see also Action Area III, Objective 2).

Action Area IV: Supporting ESD as the basis of professional action

Child day-care facilities need support in their transformation into sustainable development learning spaces. This includes aids to nurture a comprehensive understanding of the aims and elements of ESD and the role of ECCE heads and professionals in day-to-day implementation of the ESD education approach. At the same time, there is a need for specific support and networking assistance for the shaping of an educational routine incorporating sustainable development.

Commitment of Bündnis Zukunfts- Bildung/Innowego Forum Bildung & Nachhaltigkeit eG:

With its education policy work, Innowego – Forum Bildung & Nachhaltigkeit eG supports the implementation of the National Action Plan on ESD in the area of ECCE.

Objective 1:

It is to be convincingly demonstrated in the conceptual modules on ESD for child day-care facilities that ESD on the basis of a holistic educational approach contributes to children's personal development (2019).

Commitment of the Haus der kleinen Forscher Foundation:

The target dimensions for ESD at the three levels children, ECCE professionals/ teachers and ECCE heads developed by a multiprofessional expert group in the research

project on the promotion of ESD in ECCE will be integrated in the conceptual modules on ESD for child day-care facilities.

Measures:

- In consultation with the Expert Forum on Early Childhood Care and Education, a multidisciplinary expert group is to be tasked with developing target dimensions and substantive and methodological modules.
- The substantive and methodological modules will be tested, evaluated and further developed in pilot projects. They will be combined with the target dimensions in a draft document.
- The Expert Forum on Early Childhood Care and Education will consult on the draft document and approve it for further use.

Objective 2:

Child day-care facilities are to be provided with specific ESD criteria that will be used in shaping education work and for educational purposes while serving as benchmarks for responsible management and procurement (2019).

Measures:

- In consultation with the Expert Forum on Early Childhood Care and Education, an expert group is to be tasked with preparing examples of the presented practical criteria for the everyday work of child day-care facilities.
- In consultation with the Expert Forum on Early Childhood Care and Education, an expert group is to be tasked with developing criteria for responsible management and procurement (such as guidance on green building and procurement, caterer screening, etc.).
- The two draft documents will be consulted on and combined by the Expert Forum.
- The criteria will be made available for use in quality management systems.

Objective 3:

Support offerings in the form of practical suggestions on ESD are to be prepared by the Expert Forum and made available to ECCE professionals (2019).

Measures:

- The Expert Forum on Early Childhood Care and Education will commission, consult on and adopt a list of criteria for the qualitative assessment of existing support offerings.
- The identified support offerings will be assessed against the list of criteria. Recommendable offerings will be collated and made available in a database.
- Practical examples of ESD will be collated and made available online.
- It is recommended that the Länder and ECCE providers establish consultation ECCE facilities for peer-to-peer dissemination.

Objective 4:

The Federal Government, the Länder and local authorities will agree specific steps and measures for universal establishment of the ESD education approach and to support child day-care facilities in its implementation (2021).

Commitment of the Federal Ministry of Family Affairs, Senior Citizens, Women and Youth (BMFSFJ):

BMFSFJ welcomes the addition of ESD to the work of the Haus der kleinen Forscher Foundation and is committed to ensuring that it is publicised (such as through the www.fruehe-chancen.de ECCE portal) and widely adopted in practice.

Measures:

- The Expert Forum on Early Childhood Care and Education will advise the relevant units in the Federal Ministry of Family Affairs, Senior Citizens, Women and Youth on suitable measures and instruments for the implementation of ESD.

- In collaboration with the Expert Forum on Early Childhood Care and Education, a consultation will be held between the Federal Ministry of Family Affairs, Senior Citizens, Women and Youth and the Federal Ministry of Education and Research.
- Based on the outcomes of this inter-ministerial consultation and on the identified action areas and objectives, the Expert Forum on Early Childhood Care and Education will provide advice in the development of suitable measures and instruments.

Objective 5:

Structures and resources are to be put in place for systematic and practice-oriented exchange at regional and national level (2021).

Measures:

- The Expert Forum on Early Childhood Care and Education will develop a recommendation for local authorities and local authority associations showing how child day-care facilities can be involved in local authority and regional sustainability strategies.
- ESD consulting services, which are a support structure provided by the Länder and local authorities, will provide advice on ESD and take care of regional networking.

Objective 6:

The implementation of ESD is to be ensured by the heads of all child day-care facilities (2030).

Measures:

- The Expert Forum on Early Childhood Care and Education recommends that the Federal Government, the Länder and local authorities launch congresses and regional events as part of the steps and measures agreed for the implementation of Education for Sustainable Development.



Commitment of the Federal Ministry of Education and Research (BMBF):

BMBF promotes networking among ESD stakeholders by organising the annual ESD Agenda Congress through to the end of the UNESCO Global Action Programme (2015–2019). This national event is a forum for expert discussions and new ideas on ESD. The Agenda Congress is directed at active providers, initiatives that wish to get involved and members of the bodies implementing the Global Action Programme on ESD in Germany.

- The Expert Forum on Early Childhood Care and Education recommends that providers should be allocated time budgets for ESD and that ECCE heads should be given the opportunity to take part in further training and evaluations on ESD.

Objective 7:
Childhood education processes around ESD issues are to be shaped and supported by ECCE professionals (2030).

Measures:

- The Expert Forum on Early Childhood Care and Education will prepare a recommendation on how providers can give introductions to ESD in team-centric training at facility level.

Action Area V: Establishing networks with informal and formal education spaces

Local authorities play a special part in establishing networks for ESD as they know the relevant stakeholders at local level. Local authorities should help bring these stakeholders into contact with each other and institutionalise issue-based networking in order to establish ESD as part of the work of child day-care facilities.

Objective 1:

Länder-level and local stakeholders that contribute towards promoting ESD are to be identified and made accessible to multipliers (2019).

Commitment of Bündnis Zukunfts- Bildung/Innowego Forum Bildung & Nachhaltigkeit eG:

Innowego – Forum Bildung & Nachhaltigkeit eG, together with its partner organisations the Youth Association for the Protection of Nature (NAJU im NABU e. V.) and the Lias-Grube environmental station, will establish a national network of 150 child day-care facilities as part of their Klima-Kita-Netzwerk (climate/ECCE network) project and will support them in networking with regional and local entities involved in climate action in the spirit of ESD (2020).



Measures:

- In consultation with the Expert Forum on Early Childhood Care and Education, a call will be announced for a national survey of relevant entities at Länder and local level.
- The survey findings will be made available on www.bne-portal.de and other relevant websites such as that of the Haus der kleinen Forscher Foundation.

Objective 2:

Local authorities are aware of the significance of ESD for Early Childhood Care and Education and initiate issues-based networks (2021).

**Objective 3:**

ESD is to become part of collaborative activities between child day-care facilities and schools (2021).

Measures:

- In collaboration with the Expert Forum on Schools, examples will be identified where ESD is a focus in managing the transition from ECCE to primary education.
- These good practice examples will be compiled in guidelines made available to child day-care facilities and schools.

Measures:

- Regional conferences and other events give local stakeholders the opportunity to actively address ESD and the importance of issue-based networks and their promotion.
- Together with BMBF, BMFSFJ and the German Commission for UNESCO, the Expert Forum on Early Childhood Care and Education will examine whether the award criteria for networks need to be specifically supplemented to include the work of child day-care facilities at local level (2019).

School



School

When it comes to successfully establishing Education for Sustainable Development (ESD) in the education system, school education is particularly important because of its formative influence on individual educational biographies.

Practitioners in the school sector face the challenge of meaningfully and above all effectively integrating the ESD educational approach at various levels (including educational administration, university/ seminars and schools themselves). Greater focus needs to be placed on the key areas of action for this integration process.

The Expert Forum on Schools reckons that the main action areas, priority goals and suitable measures that have been formulated for school education enable targeted implementation of ESD in the school sector. Specifically, the action areas comprise ensuring that the sustainable development concept is understood as a self-evident responsibility of education administration and the education system, incorporating ESD in teacher and educational assistant training and embedding it in curricula and syllabuses, establishing ESD in schools as a learning and social space and, as a complementary implementation tool, ensuring meaningful participation of children, adolescents and civil society in the process. The objectives formulated here apply equally to the general education and vocational sector.

Commitment of the German Federal Environmental Foundation (DBU):

In line with its charter and funding guidelines, DBU will support specific projects in the school, higher education and non-formal education/ youth sectors that implement objectives and measures of the National Action Plan in a model and innovative manner.

Action Area I: ESD as a responsibility of the education system

ESD is an overall responsibility of the education system. All stakeholders are called upon to act here, from Federal and Länder ministries to subordinate agencies involved in education administration and local authorities as stakeholders in educational landscapes. Indicators need to be developed along with quality criteria such as standards for learning outcomes. Establishing ESD involves strengthening structures and networks and mobilising and providing resources.

Objective 1:

Embedding: On the basis of international agreements (the United Nations SDGs, the UNESCO Global Action Programme (GAP) on ESD, Education 2030, etc.), the ESD educational approach is to be embedded in the school sector by 2030. The Länder are to decide under their own responsibility how to implement this objective in ministries, subordinate agencies, seminars and schools.

Commitment of Allgemeiner Schulleitungsverband Deutschland e. V. (ASD):

ASD – the German School Heads Federation – promotes the further development of schools as a learning space in all Länder under the framework of the NAP ESD. The focus here is on Objective 1, curriculum and school development, which is shaped by school heads. This is supported by the following ASD activities:

- Keynote speeches, discussions and position statements at ASD conferences,
- Provision of information about ESD and the NAP ESD to encourage more work on the implementation of the NAP,
- Participation in the jury for the recognition of ESD activities under the UNESCO Global Action Programme on ESD,
- Press releases.

Suitable measures:

- Development of Länder-specific approaches (overall ESD strategies, action plans, etc.);
- Incorporation of ESD in schools legislation and other legal frameworks;
- Establishment of ESD in teacher training (initial, further and continuing training);

Commitment of Bündnis Zukunfts- Bildung/Greenpeace e. V.:

To promote ESD in learning spaces, Greenpeace offers, on the basis of pilot projects, thematic further training and workshops for school and curriculum development in collaboration with teachers/educational assistants and pupils.

- Establishment of ESD in Länder curricula and syllabuses;

Commitment of the Federal Ministry for Economic Cooperation and Development (BMZ):

Through Engagement Global and in collaboration with the UNESCO Mahatma Institute, the BMZ is supporting the compilation of an international guide on embedding ESD in school textbooks and curricula.

- Inclusion of ESD in school and curriculum development;
- Incorporation of ESD in existing funding programmes or, as appropriate, the establishment of new ESD funding programmes;
- Funding of ESD-relevant research projects (among other things on indicators, barriers, success factors and impacts, and special thematic priorities);
- Certification of educational institutions and courses;
- Announcement of new and publication of existing competitions, certifications and awards for schools;

Commitment of the Federal Ministry for Economic Cooperation and Development (BMZ):

Through Engagement Global and via the German President's schools competition on development policy and the song contest, BMZ supports the establishment of ESD at schools, quality improvement, and the promotion of individual ESD skills in pupils.

- Identification and dissemination of good practices;

Commitment of Stiftung Bildung:

In 2017, Stiftung Bildung will confer its 'Verein(t) für gute Schule' award focused on Education for Sustainable Development (ESD) and collaborations, showcasing ESD projects by schools and by parents and friends associations throughout Germany.

- Exploiting the potential of international collaborations for embedding;
- Supporting schools and teacher training institutions that make exemplary use of ESD as a basis of their work in their capacity as ESD multipliers.

Commitment of the Federal Ministry for Economic Cooperation and Development (BMZ):

Through Engagement Global and as part of its schools programme, BMZ supports collaboration with the German Länder and the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder (KMK) with a view to integrating ESD into curricula and syllabuses and into teacher initial, further and continuing training and to incorporating ESD in school and curriculum development. A core element of the programme is an offer of support to the Länder in establishing an ESD coordinator's office within each of the Länder education ministries.

Objective 2:

Collaborations, government and civil society:

By 2030, the educational administration will lay the basis for the implementation of ESD in schools at all levels (federal, Länder and local authorities) and for long-term and reliable collaboration with non-school providers. ESD will be more securely and extensively embedded in local and regional networks and the development of further networks will be promoted. The Federal Government, the Länder, local authorities and civil society, each within the scope of their own remit and in light of existing measures and established instruments, will aid and develop collaboration between schools and civil society.

Commitment of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB):

Under the framework of the National Climate Initiative, and by way of grants to NGOs and other environment and nature conservation groups, BMUB supports educational projects that aim to impart participatory skills in the spirit of ESD and support collaboration between schools and civil society. ESD criteria are binding in project selection. Cross-cutting or thematic education projects can also be supported via the Federal Biological Diversity Programme if they are of particular importance to the implementation of the National Strategy on Biological Diversity.

Suitable measures:

- Länder-specific cooperation or framework agreements with civil society education providers;
- Reliable support for educational activities provided for schools by non-school ESD providers;

Commitment of Klimahaus Bremerhaven:

In its capacity as an education provider, Klimahaus Bremerhaven offers training based on the ESD educational approach.

- Promotion of ESD networking, such as the establishment of local or regional ESD contact points;
- Civil society involvement (such as for non-governmental organisations (NGOs), youth representatives, pupil representatives, parents and friends associations and parents' representatives) in ESD bodies (steering/working groups, round tables, etc.);
- Interlinking of sustainability initiatives at local and regional levels;
- Training of multipliers, notably parents and pupils representatives and parents and friends associations.

Commitment of Bündnis Zukunftsbildung/Greenpeace e. V.:

Greenpeace trains teachers, educators and volunteers in the 'Greenspeakers' internal training programme for educational work in schools and other educational institutions on environmental and climate-related topics in the spirit of ESD. Greenspeakers go on to promote the teaching of ESD in the various types of schools. They also encourage young people to get involved in shaping society.

- Support through ESD funding programmes;
- Announcement of new and publication of existing competitions, certifications and awards for schools;
- Identification and dissemination of good practice.

Objective 3:

ESD strategies: The National Action Plan on ESD is a basic resource for the implementation of ESD in the Länder and, where applicable, of Länder ESD strategies, ESD action plans and similar implementation tools.

Suitable measures:

- Communication and dissemination of the National Action Plan: Government and civil society partners at federal and Länder level should develop communication strategies and measures for dissemination, implementation and revision of the National Action Plan on ESD. This should be achieved by means of a range of media tools, regional conferences, congresses and thematic symposia, platforms and practical information on implementation.



Commitment of Global Goals Curriculum e. V.:

Global Goals Curriculum e. V. supports communication and dissemination of the National Action Plan: (1) with regular regional events and national conferences on implementation issues surrounding innovative ESD (see Global Goals Curriculum 2016: www.ggcberlin.de); (2) with accompanying media communication on the implementation progress, best practices, experience reports, etc.

- Stakeholder coordination and collaboration: Better use should be made of synergies in the implementation of the National Action Plan at federal and Länder level and by government and civil society.
- National Action Plan on ESD (NAP ESD) and Länder activities: The Länder will appraise how they can promote the implementation of ESD within their remit by means of ESD action plans, ESD strategies and similar implementation tools. In the process, they should take their bearings from the National Action Plan on ESD. The ESD educational approach

should also be taken into consideration in other strategy papers that have a bearing on ESD (such as development policy guidelines, sustainability strategies and climate, energy, nature conservation and biodiversity strategies).

- Civil society, private sector and academic involvement: The scientific community, the private sector and civil society should be involved in the development of approaches and strategies for the implementation of ESD (such as in committees, working groups and round tables).

Objective 4:

Civil society, the private sector and the scientific community are all called upon to act: Implementing ESD is a joint task of government and society. In the implementation of ESD, government, civil society, the private sector and the scientific community are called upon to act according to their societal function.

Commitment of the Association of German Foundations (BVDS):

Through its Working Group on the Environment and Network of Foundations and Education, BVDS promotes networking among national and regional foundations involved in sustainable development/ESD. In the same connection, BVDS supports the transfer of knowledge between foundations and liaison with other stakeholders.

Suitable measures:

- Civil society involvement in the development of research projects: The Federal Government, the Länder and the scientific community will examine how civil society can be involved in the development and implementation of ESD research projects.
- Civil society has structures of its own. Civil society and private sector institutions and organisations should make use of their existing structures for the implementation, promotion and onward development of ESD.



Objective 5:

Process support: The ESD implementation process will be continuously monitored within the Global Action Programme by the National Platform. It is to be examined how this process support can continue to be provided beyond 2020.

Suitable measures:

- Activities of the Expert Forums, committee involvement and financial resources: BMBF will support the National Action Plan implementation process by continuing to provide suitable structures for the NAP implementation (the National Platform, Expert Forums, etc.) and will examine to what extent this process support can continue to be provided through to 2030. BMBF will examine the provision of resources for the active involvement of stakeholders, and in particular civil society and volunteer stakeholders.
- Capacity building for relevant stakeholders: The Federal Government, Länder and civil society organisations (such as foundations) will appraise how the capabilities of relevant school stakeholders (pupils, parents, parents and friends associations) can be enhanced with regard to the dissemination of ESD and the implementation of the NAP.

- Public relations: Public events such as the Agenda Congress along with issue-focused and regional conferences can identify progress and contribute to further development of the process.

Commitment of Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ):

GIZ will step up efforts to embed ESD within the organisation and, for example, present the ESD approach at GIZ events such as symposia.

Objective 6:

Quality criteria and indicators: Indicators for the systematic implementation of ESD should be developed in cooperation with the Länder in the implementation of the SDGs (and in particular of SDG 4.7) and in the context of the German Sustainable Development Strategy. The Länder are called upon to develop quality criteria for the implementation of ESD in the school sector. These are to be consistent with the education criteria under the applicable sustainable development strategy and the principles for standards assurance adopted by the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder (KMK).

Suitable measures:

- Educational reporting and other documentation: The KMK and the Federal Government will examine, each within their remit, how ESD quality criteria and indicators can be incorporated in educational reporting and standard-setting documents (such as teacher mission statements).

Objective 7:

Reporting, documentation and transparency: The Federal Government and the Länder will support and document the ESD implementation process and, at regular intervals, publish the implementation status and measures taken.



Suitable measures:

- Documentation of ESD implementation: The Federal Government and the Länder will examine, with academic support, how an indicator-based process can be made available for regular documentation of ESD implementation.
- Federal Government reporting: The documentation of ESD implementation by the Länder can serve as the basis for Federal Government reporting on ESD.
- Internet platform for measures and commitments: The Federal Government will examine how a national information platform can be set up for all relevant stakeholders (government, civil society, the private sector and the scientific community) to publish their measures and commitments in support of the GAP. This would provide transparency and public visibility for the implementation of the GAP at all levels. In addition, it would make it possible to document the status of the implementation process while serving as a basis for academic monitoring and evaluation.

Objective 8:

ESD and sustainability strategies: ESD is firmly established in the Federal Government's Sustainable Development Strategy. It should also be incorporated in a suitable manner in Länder sustainability strategies.

Suitable measures:

- German Sustainable Development Strategy: The Länder education and schools ministries and the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder (KMK) should be involved in a suitable manner in the revision of the German Sustainable Development Strategy. This applies in particular to the selection of future indicators for the education sector.
- Länder sustainability activities: The Länder should incorporate ESD in a suitable manner in their sustainability strategy processes with the involvement of civil society, the scientific community and the private sector.

Action Area II: Teacher and educational assistant training for sustainable development

Teachers, educational assistants, multipliers and those who train them are highly effective change agents. In order to build relevant knowledge, skills and abilities for this purpose, ESD needs to be embedded in initial, further and continuing training. This involves providing the right enabling conditions, setting quality standards and developing suitable support measures.

Objective 1:

Skills building for teachers: A prerequisite for successful implementation of ESD in higher education, teacher training and schools is that future teachers be equipped with the necessary knowledge, skills and abilities. The Federal Government and the Länder will appraise, each within their own remit, the provision of research funding to support skills building for teachers and, where expedient, for parallel academic monitoring and evaluation.

Suitable measures:

- Competency models for teacher training: Within the scope of its remit, the Federal Government will examine to what extent it can support the development of ESD competency models for teacher training (at all levels, including higher education) while making use of approaches that are already established. This should include an academic literature and meta-analysis covering relevant empirical studies.
- Pilot projects: Provision should be made to fund pilot projects on teacher training for sustainable development at all stages and on the interdependencies involved.

Commitment of Bündnis Zukunfts-Bildung/BUND (Friends of the Earth Germany) and BUNDjugend (Young Friends of the Earth Germany):

Friends of the Earth Germany (BUND) and BUNDjugend have, via the McMöhre project, launched sustainable student companies and developed supporting materials in collaboration with teachers, school heads and pupils. In North Rhine-Westphalia, BUNDjugend additionally provides further training on how to integrate sustainability topics into day-to-day teaching. This provides an opportunity to try out methods in practice and appraise them.

Commitment of the Federal Ministry for Economic Cooperation and Development (BMZ):

Through Engagement Global and in cooperation with the Länder, BMZ supports the National Teacher (Further) Training Network for implementation, in the second and third stage of teacher training, of the BMZ/KMK Curriculum Framework: Education for Sustainable Development. The network will hold an annual workshop, among other things to compare approaches and experiences, develop new training formats and organise joint further training courses.

Objective 2:

Teacher training: The Länder and teacher training institutions are committed to establishing ESD in initial and further training for teachers and will implement this on a Länder-specific basis according to their capabilities (such as with frameworks and targets, further training plans/initiatives and incentive systems).

Commitment of the Federal Ministry for Economic Cooperation and Development (BMZ):

Through Engagement Global and the Länder initiatives for the BMZ/KMK Curriculum Framework: Education for Sustainable Development, BMZ supports skills building for teachers, among other things in international exchange.

Suitable measures:

- ESD as a guiding framework: ESD should serve as an operational and educational guiding framework in teacher training. This involves incorporating ESD principles, content and working methods into academic disciplines, teaching methodologies, education sciences and school placement programmes.
- ESD further training courses for lecturers: Academic staff development units are to examine how they can integrate ESD into further training for teacher training lecturers.
- Review: In consultation with the Länder, the Federal Government should fund a review of ESD-related further and continuing training activities. This survey could be repeated in subsequent years to highlight transformation processes in connection with the GAP on ESD and with the SDGs.
- ESD training for teachers: In accordance with their remit and capabilities, government and civil society organisations will offer initial, further and continuing training based on the ESD educational approach. This training can be provided in collaboration with civil society education providers. The Länder and the Federal Government will examine how they can support these activities (such as with national and regional professional conferences).



Commitment of Global Goals Curriculum e. V.:

Global Goals Curriculum e. V. develops training and continuing education formats for teachers and educational multipliers that enable the implementation of ESD in innovative educational settings and the development of transformation skills.

Objective 3:
Standing Conference of the Ministers of Education and Cultural Affairs of the Länder (KMK): The KMK will examine how it can incorporate the establishment of ESD in its future decisions and recommendations.

Suitable measures:

- ESD in KMK documents: The KMK and the Länder will examine to what extent ESD can be incorporated in Länder-specific KMK requirements concerning academic disciplines and teaching methodologies, in KMK standards and in subject profiles for education sciences.

- ESD in frameworks and targets: The Länder will examine how ESD can be incorporated in Länder frameworks and targets for higher education institutions and in Länder frameworks for the second and third stage of teacher training. In the first stage, ESD should be included both in educational theory and in teaching methodology elements of degree courses.

Objective 4:

The non-formal and informal sector:

The possibilities are to be explored, within their remit, for providing the conditions to foster, establish and ensure the involvement of non-school education providers at all stages of teacher training.

Suitable measures:

- Non-school education activities in teacher training: Teacher training institutions will examine how they can integrate ESD in the second stage of teacher training by suitable means into non-school education activities in the field of ESD (knowledge, skills and experience).

Action Area III: Learning spaces/social spaces, collaboration and ESD

Schools have the task of empowering upcoming generations to be able to shape their present with a view to their future. To achieve this, they must make sustainable development something that is experienced, in a participative and inclusive way, both in educational processes and also in everyday life. A successful transformation process requires a whole system approach, where everyone is involved in developing and supporting the ESD vision, plan, strategy and concepts for the learning and teaching environment. It is necessary to develop and establish local and regional educational landscapes. More than ever before, schools need to open up and open out in order to make use of shared ground and scope for working together with non-school stakeholders and providers (for example, parents and friends associations, NGOs, the private sector and learning spaces of relevance to ESD such as school camps and education centres).

Objective 1:

Curriculum and school development: Introduction of ESD educational principles in school contexts, among other things in instruction, school curricula, mission statements and programmes, school and quality development, school partnerships and school projects.

Commitment of the Federal Ministry for Economic Cooperation and Development (BMZ):

Through Engagement Global and in cooperation with the Länder, BMZ supports the Länder initiatives for the BMZ/KMK Curriculum Framework: Education for Sustainable Development, among other things with measures to implement the whole system approach.

Suitable measures:

Schools decide under their own responsibility how to implement ESD in intramural and extramural education and in everyday school life. Suitable means include:

- Curriculum development and implementation of ESD in internal school curricula; compilation of model curricula;
- Implementation in school programmes, mission statements and school organisational culture;
- Implementation of a whole system approach;

Commitment of the German Commission for UNESCO and Global Goals Curriculum e. V.:

At UNESCO project schools, school heads, teachers, pupils, parents and non-school stakeholders and providers work together to develop ESD and climate change action plans for a whole system approach at their school, are provided with continuing training, and engage in international exchange to compare experiences. Starting with twelve German pilot schools in an international UNESCO project, this is to be expanded to 25 German schools from autumn 2017 and ultimately if possible to all German UNESCO project schools. All project guides and learning materials are made publicly available. The project is being implemented in collaboration with the Global Goals Curriculum with academic monitoring and evaluation by Leuphana University of Lüneburg. Autostadt GmbH (Wolfsburg) plans to support the project.

Global Goals Curriculum e. V. is working with the national and international UNESCO project school networks, the Ashoka Changemaker Schools and the schools of the Initiative Schule im Aufbruch to develop a school development process for innovative and practical large-scale implementation of the National Action Plan.

- Support for school projects, initiatives and volunteering;
- Local, regional, national and international partnerships and collaborations;
- Inclusion of school-related (such as school gardens) and non-school learning spaces;
- Pupil exchanges and partnerships, international meet-ups, class and study trips;
- Quality development at schools, including process support, development support and school inspections focused on quality development
- Incentive schemes for the implementation of ESD (such as competitions, certification, Länder campaigns, pilot projects and GAP awards);

Commitment of the Federal Ministry of Education and Research (BMBF):

For the dissemination of ESD good practice examples and for networking among ESD stakeholders, BMBF and the German Commission for UNESCO will jointly fund awards for networks, learning spaces and local authorities that incorporate ESD into their work in an exemplary way.

- Teacher further training and coaching with regard to collaboration with other stakeholders.

Objective 2:

Local authorities and networks: Local authorities will support the establishment and onward development of local and regional educational landscapes with an ESD focus, including with the aid of existing networks and collaborations. Schools can contribute here with their educational activities and collaborations and with approaches of their own. The means and focus of implementation will vary according to local conditions. The Federal Government and the Länder will look into how they can provide appropriate support for this development process.

Suitable measures:

- Participation in external school matters: Schools and local authorities are encouraged, within the scope of the law and their remit, to make greater use of and further develop participative consultation and decision-making opportunities (in relation to matters such as procurement, school meals, transport, access and buildings).
- Pupil participation at local level: Local authorities and relevant networks will examine how they can involve pupils and pupil representations in local government processes.
- Collaboration and networking: The Federal Government, the Länder, local authorities and civil society will examine how they can support networking and collaboration in the establishment of local and regional education landscapes with an ESD focus and also give greater focus to ESD in existing networks.
- Liaison between local authorities and schools: Local authorities and schools should nominate local authority/school liaison officers and establish cooperation management to promote ESD at local authority level. Parents and friends associations should be involved here as an important stakeholder.

Objective 3:

Service learning: Schools and school boards will jointly work to promote service learning in the sustainable development context at schools. The Länder will look into how they can provide suitable support in this regard.

Suitable measures:

- Volunteering and civic engagement: Schools should support volunteering and civic engagement in the context of ESD.

Commitment of Bündnis Zukunftsbildung/Welthungerhilfe e. V.:

Every year, Welthungerhilfe offers several further training courses on the SDGs for teachers/educational assistants and pupils, with a special focus on SDGs 2 and 12 – sustainable food security for all – with a view to implementing the whole system approach.

- Networks and exchange platform: Volunteering and civic engagement should be supported by networks or exchange platforms involving schools and civil society partners. This also involves developing models for replication and bringing together cooperation partners.

Objective 4:

School as a sustainable place of learning:

The aim is a holistic and systemic orientation of school life around thinking and acting in the spirit of sustainable development. Local authorities in their capacity as school boards are committed to supporting schools as sustainable places of learning in application of the whole system approach.



They should make full use of their scope for action to this end. The Länder will examine how schools can be supported in this regard within their regions and beyond. The Federal Government and the Länder will look into whether and how they can provide appropriate support for this transformation process. Civil society actors and practitioners should be involve.

Commitment of the Federal Ministry for Economic Cooperation and Development (BMZ):

Through Engagement Global, BMZ supports the development of materials for school heads on the basis of the BMZ/KMK Cross-Curricular Framework for Global Development Education, which sets out options for practical implementation of the whole system approach.

Suitable measures:

- The school as sustainable development space/ whole system approach: School, as learning and social space, should be understood by stakeholders (school heads, teachers, pupils, parents, school boards, etc.) as a space of sustainable development in application of the whole system approach (including, for example, school meals, school shops, sustainable procurement, buildings, school gardens and the school surroundings).
- School ESD officer: Schools will look into advocating the appointment of an ESD officer.
- Project funding: To disseminate ESD, bottom-up processes in the ESD context should be supported by means of project funding, for example via parents and friends associations.

Objective 5:

Quality assurance of free ESD education and teaching materials: Freely available education and teaching materials on sustainable development support and enrich the work of teachers. It is important that the materials be up to date and of high quality.

Commitment of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB):

BMUB supports this objective with a range of regularly updated teaching materials on the environmental education website www.umwelt-im-unterricht.de. The materials are based on ESD principles and can be used for educational purposes free of charge. With few exceptions, the content is subject to open (creative commons) licences, meaning it can be modified, shared in modified form and published.

Suitable measures:

- Assessment criteria and quality assurance: The Federal Government, the Länder and civil society partners should work together with academic support to agree criteria for the quality assurance of ESD materials. The Federal Government and the Länder should seek agreement on the implementation of a suitable quality assurance process.
- Dissemination: A quality-based selection of ESD education and teaching materials is to be compiled. The Federal Government will look into the provision of an online platform for this purpose. Existing databases, assessment procedures, etc., should be identified and used where available.

Commitment of World University Service, German Committee e. V.:

WUS supports the collation and use of online ESD materials in the area of global development on the website www.globaleslernen.de.

Action Area IV: Embedding of ESD in curricula and syllabuses

Curricula and syllabuses are a key element in the transformation of the education system on the basis of ESD. ESD needs to be embedded both in school subjects and at interdisciplinary level and supporting materials need to be provided.

Objective 1:

Academic review: Building on previous research, an academic review will be conducted to survey the extent to which ESD is embedded in curricula and syllabuses throughout Germany.

Commitment of the Federal Ministry of Education and Research (BMBF):

In the implementation of the NAP, BMBF funds monitoring by Institut Futur (Free University Berlin) in order to assess the extent to which ESD is integrated in the various educational sectors. The monitoring provides the Federal Government and the Länder with science-based and data-based support in the implementation of ESD.

Suitable measures:

- Academic review: In continuation and further development of existing research projects and findings, research should be initiated into the integration of ESD in curricula and syllabuses throughout Germany.
- ESD and subject-based education: Research projects should be launched to investigate the contribution of school subjects to ESD and the contribution of ESD to subject-based education.

Objective 2:

Cross-cutting education goals: Based on a holistic and integrated approach, research is to be conducted by the end of 2019 to investigate how ESD relates to other cross-cutting education goals. This will include academic analysis of the current use and position of ESD in curricula and syllabuses. The outcomes can serve as input for the curriculum development process.

Suitable measures:

- ESD in education goals – review: A research project should be carried out to investigate the current use and position of ESD in cross-cutting education goals in curricula and syllabuses in all school types throughout Germany and in the academic literature.
- ESD in education goals – guideline: The research findings should be used to develop example-based guidelines for the implementation of ESD in the context of cross-cutting education goals (including areas such as democracy, peace, cultural/ intercultural and global development education).

Objective 3:

Implementation aids: By the end of 2025, in addition to the Curriculum Framework: Education for Sustainable Development, further suitable good practice compilations will be available for the implementation of ESD in all subjects and for inter- and transdisciplinary approaches. These will be of use among other things in curriculum and syllabus design. The Federal Government and the Länder will examine whether funding can be provided for projects in which the scientific community works in collaboration with government institutions and/or civil society organisations.

Commitment of Stiftung Bildung:

Stiftung Bildung, working jointly with Karl Schlecht Stiftung, will announce a funding call for projects on Education for Sustainable Development (ESD) and Entrepreneurship Education and will fund projects by parents and friends associations throughout Germany.

Suitable measures:

- Studies on the effectiveness of ESD: Research projects should be launched to investigate the effectiveness of ESD in teaching and learning processes in school education.
- Good practice: Existing good practice models in the fields of school development, further and continuing training for teachers and teaching and learning materials should be identified, revised as appropriate and disseminated in order to support the implementation of ESD.
- Development of teaching approaches: Research should be done into how the implementation of ESD can be aided by developing ESD teaching methodology approaches and recommendations. This should draw upon the expertise of higher education institutions, schools, representatives of government institutions and civil society organisations.

Commitment of Bündnis Zukunftsbildung/Greenpeace e. V.:

In collaboration with teachers and educators, Greenpeace develops free educational materials on current environmental challenges. These communicate the complex issues and challenges in a way that is designed to encourage debate. They also encourage children and teenagers to get involved and take an active part.





- Global development education: The Länder will look into extending global development education to upper secondary level by implementing, updating and revising the Curriculum Framework: Education for Sustainable Development and into the compilation of supporting materials.
- Conferences: Conferences should be funded and held to present the contribution of ESD in education subjects. These could provide key impetus for curriculum development in the Länder.

Action Area V: Participation and ESD

Participation of all social groups is a foundation of sustainable development and is therefore integral to ESD. Children and adolescents must be involved so that the younger generation has an active part in shaping the present and the future. School democracy is pivotal in enabling young people to experience self-efficacy through participation in school and the community. Effective participation of children and adolescents, together with empowerment on the basis of the rights of the child, must be established in the learning and teaching environment. Participation needs to be implemented and enhanced across all social stakeholders in the spirit of the whole system approach – including school heads, teachers, educational assistants, pupils, parents and local government as well as civil society partners such as parents and friends associations, school camps and non-governmental organisations.

Commitment of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB):

Promotion of participatory skills and participative involvement of children and adolescents are among the criteria applied by BMUB in the funding of educational projects.

Objective 1:

Participation and social coexistence: Within their remit, the Länder support the goal of open and democratic schools in which all school stakeholders (pupils, school heads, teachers, educational assistants, parents and friends associations, parents and school boards) are empowered, work

together in a participative manner and actively involve and cooperate with non-school partners (civil society organisations such as clubs and associations, non-governmental organisations, higher education institutions, the private sector, local amenities, etc.).

As social spaces and learning spaces, schools should provide children and adolescents with opportunities for freedom of action and expression in order to gain self-efficacy, skills and recognition in the spirit of ESD. This is not about implementing specific measures, but about fostering a participative culture in schools and society. Rather than on individual projects, the focus is therefore on properly embedding participation in the school learning environment in such a way that everyone has the time needed to participate and the processes are structured to be fully inclusive. The Federal Government and local authorities can support these processes.

Suitable measures:

- Use of participative formats and testing of innovative forms of participation: Schools should make use of existing participation formats for pupils, parents, teachers, local authorities, etc. and test innovative forms of participation, in particular to allow pupils to participate in shaping the sustainable development of the school learning environment. To structure this participation, they should select suitable formats in consultation with the relevant and responsible stakeholders.
- Implementation of own ESD projects: Schools should do more in the context of ESD to give pupils the opportunity – among other things in their capacity as change agents – to take on responsibility themselves and to plan and implement activities themselves both in instruction and in project work. Suitable forms of implementing measures include planning groups, project weeks, working groups, school development processes and school development team activities.
- Advice on opportunities for freedom of action and expression: To make use of opportunities for freedom of action and expression, school stakeholders should be provided with information and advice on matters such as the legal position, pupils' rights, and participation and support options.

The Länder, local authorities and civil society will examine how they can provide support in this regard.

- Training of ESD multipliers: Suitable organisations, foundations and civil society should support the training of multipliers on participation for ESD.

Objective 2:

Participation in learning environments

(instruction): Appropriate teaching and learning strategies should be chosen (such as individual learning pathways, independent learning and collaborative learning) that make use of pupils' diversity as an opportunity and relate to specific problems and challenges in the spirit of ESD. It should be borne in mind in this connection that ESD can help in selecting subject matter and learning methods in a participative process with pupils.

Commitment of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB):

BMUB supports this objective by providing educational materials together with information and networking services for primary, lower secondary and upper secondary education. These are intended for teachers and instructors serving all age groups in both general education and TVET and for multipliers in the non-schools sector.

Suitable measures:

- Participation in lesson design: In the teaching of ESD-related topics, teachers should involve pupils in the selection of subject matter and learning methods; this also includes establishing a suitable feedback culture.

Objective 3:

Collaboration and freedom: Pupils should be involved in the shaping and further development of schools as learning spaces and social spaces, having due regard to local and regional sustainable development challenges. To this end, schools should provide, promote and enhance the opportunities of children and adolescents for freedom of action and expression.

The associated opening-up of schools includes collaboration with local and regional partners with regard to sustainable development. The Länder will examine how reliable conditions can be provided for schools to collaborate with civil society partners. The Federal Government and the Länder will examine further options for action in light of the available opportunities.

Suitable measures:

- Local authority involvement: Schools and their stakeholders play an active part in the life of the community in that they both teach and exercise political responsibility and are involved in joint decision-making. In keeping with their social space orientation, schools should involve the local authority as part of the learning and social space. This could take the form of having an active part in shaping a local sustainability strategy or in local mobility planning and then, in turn, incorporating this into class and school work.
- Real-world experiments and microprojects in schools: In keeping with their educational independence, schools should be supported in advancing the cause of sustainable development with the whole system approach in their immediate school environment. One way could be to use the real-world experiment or living lab approach (school fairtrade cafés, sustainable school enterprises, One World shops, repair cafés, clothing/book/game swap lockers, school gardens, etc.) in order to promote participation and own initiative in the spirit of ESD. Appropriate incentives can be created to encourage such activities.
- Recognition of volunteering for ESD: The Federal Government, the Länder and civil society will examine how ESD can be incorporated into existing practices for recognition of volunteer service.

Objective 4:

Institutional levels and structures: Pupils should be motivated and empowered to get involved in all matters affecting them at school, local authority, Länder and national level. Suitable institutional and informal forms of participation should be used and where necessary further developed to ensure that pupils' knowledge and views are taken into account and that they have an impact.

Suitable measures:

- Involvement of pupils in all matters concerning them: To disseminate and implement ESD, pupils should have access to appropriate forms of participation (such as general assemblies, class councils, etc.) in which they have a say in all matters that affect them and get involved in sustainable development issues of their choosing.
- Training of pupils' representatives: The Federal Government and civil society organisations (such as foundations) will look into the provision and support of ESD further training for pupils' representatives and into expanding such training where it already exists.
- Funding programmes on participation, democracy and ESD: The Federal Government and civil society will look into implementing a funding programme on participation, democracy and ESD.

Technical and Vocational Education and Training



Technical and Vocational Education and Training

Technical and Vocational Education and Training (TVET) in Germany stands out for relevance to practice, close networking between the parties involved and extensive involvement of the social partners (employers' organisations and unions) in the shaping of TVET. Being predominantly based in the workplace, TVET has a special transformative role to play in sustainable development with a view to the Agenda 2030 and the Sustainable Development Goals (SDGs).

The guiding principle of sustainable development relates to the long-term viability of social, economic, and environmental development with its global implications. TVET based on this principle is sustainable. TVET itself is a contribution to sustainable development because it gives young people a head start on the way to an independent and responsible life.

Compiling initial and further training syllabuses in consensus with all relevant stakeholders is key to ensuring acceptance by employers and employees. Nationwide standardisation and state-recognised qualifications amount to a seal of quality. The broad openings provided by occupational qualifications secure mobility for employees served by the TVET system. Technical and Vocational Education and Training for Sustainable Development (TVET for SD) must also be suitably established in the structure of this system. This opens up opportunities for the further development of TVET.

Action Area I: Status review at all levels

A compilation of best practice examples is to be used to screen existing curricula for sustainability aspects in order to identify possible entry points for ESD.

Numerous projects have been implemented to promote TVET for sustainable development in recent years. Further training measures, training curriculum modules, training projects and educational materials have been developed in this connection, but few of these have been taken up outside of the respective project context. Relevant measures have also been implemented in the context of promoting sustainable development without being identified as TVET for SD. Available knowledge and practical experience are to be collated and evaluated for the structural establishment of TVET for SD.

Objective:

The TVET for SD Expert Forum will review the current status to identify action needs.

Measures:

- Compilation of a definition of TVET for SD in consultation with all relevant stakeholders.
- Collation and classification of available good practice examples such as pilot schemes, award-winning UN Decade projects and European projects (such as under the Federal Institute for Vocational Education and Training (BIBB) National Agency Education for Europe and the Build Up Skills Initiative). BIBB will develop selection criteria for the purpose, for example by refining and further elaborating the award criteria for the UN Decade of ESD.
- Sustainability-relevant aspects are already included in some curricula, in some cases under other headings; curricula (such as training regulations and framework curricula) are therefore to be screened for sustainability aspects.
- Potential entry points are to be identified in curricula, for example by expanding learning objectives (among other things, identification and unlocking of potential using the Federal Ministry of Education and Research (BMBF) TVET for SD funding priority).
- Screening and collation of supporting materials for teaching personnel (such the "Ausbildung gestalten" series published by BIBB) with a view to TVET for SD.
- Screening and collation of education materials and arrangements with a view to TVET for SD and collated.
- Collation and review of academic research findings on TVET for SD.

Action Area II: Potential of TVET for ESD

Additional potential for ESD is to be identified in TVET by integrating formal vocational education and training with informal/experience-based education/occupational experience. Innovations from operational practice are to be incorporated more rapidly into TVET, as has already been developed and tested in cross-sectoral pilot schemes. In addition, the attainment of sustainability goals is to be ensured with quality assurance tools in order to safeguard the continuity of TVET for SD.

Objective:

By the end of the UNESCO Global Action Programme (GAP) on ESD (December 2019), available potential for ESD in TVET will be pinpointed by the Expert Forum and exploited by selected stakeholders.

Measures:

The measures to unlock the available potential for TVET for SD relate both to the dissemination of existing approaches and materials (1), to networking between stakeholders (2) and to the development and promotion of potential action options (3).

- Dissemination: Available knowledge and practical experience to be collated and screened in the status review. These have the potential to enhance TVET and are to be made available to TVET practitioners. The following measures are proposed to this end:
 - Available materials, approaches and good practice examples are to be published on a central platform (such as www.bne-portal.de) and linked to existing platforms (such as portals for TVET teachers).
 - Local multipliers (such as chambers of commerce and of craft trades) are to compile and distribute content for further and continuing training together with other assistance for teachers for the promotion of sustainable development.

- TVET for SD enablers from the non-formal sector are to be identified and listed by region and sector.

Commitment of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB):

BMUB supports this measure by regularly communicating free educational materials, conferences and other activities of TVET for SD stakeholders under the heading of sustainability in the workplace.

- Networking: Networking and collaborations between vocational schools, enterprises, and non-formal and non-school enablers will contribute to promoting the transfer of available approaches and materials, practical examples and options. Companies contribute practice-relevant knowledge on implementing sustainability at enterprise level, enabling education providers to improve their educational content. Companies in turn benefit from the professional support of educational institutions when structuring initial and further training to promote sustainability-oriented activities. The basis of these collaborations is that the parties develop a mutual understanding of each other's needs, background conditions and scope for the use of TVET for SD. The following measures are proposed to this end:
 - Enterprise, school and non-school TVET for SD practitioners will link up in a national network and meet at least once a year.
 - Regional networking of stakeholders for TVET for SD will be promoted by TVET committees and local initiatives such as climate alliances.
 - A nationwide Action Week on Technical and Vocational Education and Training for Sustainable Development will be organised by vocational schools, companies and non-school educational institutions (for example via calls for proposals issued by BMBF, the Länder/KMK or the German Council for Sustainable Development).
 - Vocational schools will hold an annual TVET for SD open day.

- With the support of vocational schools, companies will develop and carry out occupation-related sustainability projects such as a sustainability audit by trainees. Vocational schools need to be provided with resources (such as room space) for this purpose.

Commitment of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB):

BMUB supports this measure with targeted networking of stakeholders in the ESF-funded TVET for SD programme.

Commitment of World University Service, German Committee e. V.:

WUS supports the planned nationwide Action Week on Technical and Vocational Education and Training for Sustainable Development and the planned annual TVET for SD Open Day via a project ('Grenzenlos/Across Boundaries – Global Learning in Vocational Education') in the states of Baden-Württemberg, Brandenburg, Hesse, Rhineland-Palatinate and Saarland.⁵

⁵ www.wusgermany.de/de/auslaenderstudium/grenzenlos.

- **Unlocking potential:** There are many ways in which people can contribute to sustainable development in their work. In some cases this is reflected in TVET curricula, but frequently it is implicit and is not highlighted as a sustainability-relevant skills set. In addition, sustainability aspects are taken up differently and in varying breadth and depth according to workplace circumstances and opportunities. This also applies to vocational schools. It therefore makes sense to implement measures both to highlight sustainability in TVET and to systematically unlock hitherto untapped potential by means of jointly agreed standards and guidance. Existing structures and curricula should be made use of for this purpose.
 - Scope for incorporating TVET for SD into occupational profile requirements will be appraised and implemented on the basis of the definition of TVET for SD (see Action Area I) (for example by updating the environment protection occupational profile requirements).
 - TVET for SD is to be incorporated as a quality criterion into existing vocational school quality management systems.
 - Sustainability-relevant aspects of occupational activity are to be integrated into career orientation measures (such as on the basis of piloting under the BMBF career orientation programme).
 - The Steering Committee of the Federal Institute for Vocational Education and Training (BIBB) will give recommendations on the promotion of TVET for SD in collaboration with vocational and general schools.

Commitment of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB):

BMUB supports this measure by funding model projects on non-school, practice-based occupational information provision under the ESF TVET for SD programme. BMUB funds model projects in energy-efficient building refurbishment on a cross-sectoral collaboration basis under the ESF TVET for SD programme.

Action Area III: Establishing workplaces and vocational schools as sustainable learning spaces

Establishing workplaces and schools as sustainable learning spaces requires the development of indicators that can serve as a roadmap. Networking among such sustainable learning spaces needs to be improved with regard to connections and interfaces. To this end, teaching staff need to be provided with the suitable skills and encouraged to make use of further and continuing training.



Commitment of the German Confederation of Skilled Crafts (ZDH) and the Federal Ministry of Education and Research (BMBF):

The aim is to further enhance the potential for sustainable development in the workplace, taking into account the rapidly changing workplace conditions. ZDH will promote the establishment of sustainable development in the workplace on the basis of the whole institution approach (see also the UNESCO Roadmap for Implementing the Global Action Programme on ESD, Action Area II). The Central Agency for Continuing Vocational Education and Training in the Skilled Crafts (ZWH) will therefore, with the support of BMBF, develop and establish corresponding training provision for individuals in leadership positions, primarily in small and medium-sized enterprises.

Objective:

By the end of the GAP ESD, localised potential in Action Area II will be further enhanced in selected workplaces/vocational schools. This will be done having due regard to the rapidly changing conditions of the workplace, such as digitalisation and the increasing need for intra- and interdisciplinary collaboration. Approaches will be appraised against academic findings and policy decisions such as the Planetary Boundaries and the UN SDGs and brought into relation to the issue of structuring the respective learning environment.

Commitment of the Federal Ministry of Education and Research (BMBF):

Action Area III proposes the development of indicators as an important tool for establishing sustainable development in the structure of workplaces and schools. BMBF consequently supports the BIBB funding focus on Vocational Education and Training for Sustainable Development (TVET for SD) 2015–2019. Funding line 2 is dedicated to the creation of sustainable in-company learning spaces on the basis of the whole organisation approach and the development of a related indicator system (compatible with the German Sustainability Code).

Measures:

- Development of indicators for sustainable learning spaces and compilation of an implementation roadmap. Together with other relevant stakeholders, the Federal Republic of Germany and the Länder will:
 - Seek to develop or refine new or existing indicators and sub-indicators for sustainable TVET spaces. These must be compatible with recognised reporting systems such as the German Sustainability Code (DNK);
 - Refine existing quality management approaches in sustainable school development as well as other quality management approaches at TVET spaces (criteria/quality standards and indicators);
 - Support the revision or compilation of guidelines (such as on the German Sustainability Code for Small and Medium-Sized Enterprises, SMEs). These are intended to aid adoption of the whole institutional approach and sustainability reporting. They should also include global perspectives, international partnerships, etc.;
 - Aim to align/combine different indicator models, where comparable and meaningful.



- Networking is also to be improved with regard to connections/interfaces. Federal and Länder ministries aim:
 - To collate examples of flagship sustainable learning spaces and make them publicly available on a suitably established and administered internet platform (such as www.bne-portal.de);
 - To publish the guidelines developed or revised under Measure 1 on the same platform;
 - To hold workshops on selected thematic areas as a dissemination vehicle and to support networking across stakeholders and sustainable learning spaces and across issues that overlap with sustainable learning spaces;
 - Also to provide structural support for network building and management.
- Skills building is to be provided for TVET instructors and educators ('train-the-trainers' programmes). The Federal Republic of Germany, the Länder and other relevant stakeholders will jointly work, each within their respective remit, to establish support for:
 - The development, testing, consolidation and dissemination of skills-building approaches for individuals in leadership positions in the identified learning spaces (vocational schools, companies, inter-company vocational training spaces, vocational retraining centres etc.);
 - Providing individuals in leadership positions and multipliers with training in quality management for the implementation of sustainable school development and sustainable TVET spaces (criteria/quality standards and indicators);
 - Activities for the implementation of the sustainability-oriented training approaches in career advancement training, further training for head teachers, etc.;
 - Approaches for implementing training content in each organisation (employee motivation; top-down approach).

Commitment of the Association of German Chambers of Commerce and Industry (DIHK) and the Federal Ministry of Education and Research (BMBF):

As well as building the appropriate skills in initial and further training, establishing sustainable development in the workplace also requires a whole organisation approach in business enterprises. DIHK will support this. DIHK-Bildungs-GmbH will therefore, with the support of BMBF, develop and establish corresponding training provision for individuals in leadership positions, primarily in small and medium-sized enterprises.

- In order to incentivise further and continuing training:
 - The Länder and school boards will make further efforts to allocate teaching hours for vocational schools in their HR planning. They will support ESD coordinators and ESD teams for curriculum issues in promoting interdisciplinary projects and sustainable school development (whole system approach);
 - The Federal Government and the Länder will support the development of tailored further and continuing training formats meeting the definition of TVET for SD. Tighter integration of formal TVET with non-formal education makes for greater flexibility with a view to the dynamically growing needs in the sustainability activities of business enterprises.



- In order to set in motion a process of organisational development, the Federal Government, the Länder and relevant stakeholders aim, each in their own remit:
 - To examine the establishment of regional coaching centres both for school-based TVET spaces and for companies (for example at chambers – the competent bodies for TVET – in order to pool business advisory services on inclusion, migration, resource efficiency, personnel development, securing skilled labour, etc.);
 - To examine the development of suitable training for coaching staff;
 - To support networking between the coaching centres serving the various TVET spaces.

Action Area IV: Sustainability skills profile

Sustainable employability includes aspects that apply in social and private life as well as in the work setting. It is necessary to define skills needed to implement sustainability in the training and work process.

Objective:

Trainees will be enabled to implement sustainability in occupational learning and work processes. The focus is on acquiring skills for independent action and problem solving in the work, social and individual context. In the process, the individual's local actions are put in a global perspective. Trainees appraise their thinking and actions in value creation and business processes against sustainable development criteria. The measures in the following outline the process for identifying TVET for SD-specific skills.

Commitment of the Federal Ministry of Education and Research (BMBF):

The objective of Action Area IV is to enable trainees to implement sustainability in occupational learning and work processes. BMBF consequently supports the BIBB-financed funding focus on Technical and Vocational Education and Training for Sustainable Development (TVET for SD) 2015–2019. Funding line 1 is dedicated to skills building for trainers and trainees in commercial occupations in the retailing, wholesale, import and export, logistics and haulage sectors.



Measures:

- A category grid is to be developed including criteria for assessing domain-specific and domain-independent skills targets and incorporating all dimensions of sustainability, including the global perspective.
- 'Docking points' for initial and continuing TVET are to be identified on the basis of the lower secondary school skills targets for sustainable and global learning (such as the targets specified in the Curriculum Framework: Education for Sustainable Development) and guidance will be provided on how to build on those docking points.
- A methodology is to be developed for systematic analysis of domain-specific work and business processes in relation to sustainability aspects. This methodology will support the classification work in the identification of TVET for SD-specific skills.

Commitment of the Federal Ministry of Education and Research (BMBF):

Skills building for sustainability in the training and work process must be seen in the context of other major societal and work-related challenges. BMBF will therefore commission BIBB with a study to identify overlaps in relation to sustainability between the TVET for SD-specific skills profile and the skills profile for digitalisation.

- Based on the resulting documents (measures 13), domain-specific sustainability-relevant skills are to be identified for all training occupations. Further pilot schemes will be incorporated for this purpose if needed.
- Relevant TVET skills models are to be reviewed against the dimensions of sustainability-oriented participatory skills and revised as necessary.

**Commitment of the Federal Ministry of Education and Research (BMBF):**

BMBF will promote skills building for trainers and trainees and support BIBB in funding a third funding line for the TVET for SD 2015–2019 funding focus. Funding Line 3 will target skills building for trainers and trainees in additional selected occupations.

- Pilot schemes are to be carried out with academic support to investigate how to deal constructively with dilemmas, conflicts and contradictions between economic, social, environmental and global aspects in working life.



Action Area V: Implementation of TVET for SD in curricula and teaching

Broad-based implementation of TVET for SD is greatly facilitated by establishing sustainability-oriented skills building targets in the structure of TVET. On the basis of the status review, sustainability-oriented skills are to be integrated into curricula and suitable educational resources are to be developed.

Objective:

By the end of the GAP, approaches for implementing TVET for SD in curricula and teaching are to be developed by the social partners, ministries and BIBB. Practitioners in vocational schools and enterprises must be able to produce teaching content on TVET for SD for initial and further training. Starting points include curricula for in-company initial and further training and for instructor training, and materials for practical deployment and dissemination.

Commitment of the Federal Ministry for Economic Cooperation and Development (BMZ):

Through Engagement Global and in cooperation with the Länder, BMZ supports the Länder initiatives for the BMZ/KMK Curriculum Framework: Education for Sustainable Development. Outcomes will include materials for the implementation of TVET for SD in curricula and teaching methodologies.

Measures for implementation in curricula:

- TVET for SD is to be additionally included in proposals for the adoption or amendment of training regulations.
- TVET for SD is to be discussed and taken into account in training regulation proceedings with a view to the specific characteristics and requirements of each occupation.
- The standard occupational profile requirements for environment protection are to be revised and updated.
- An evaluation of the Ordinance on Trainer Aptitude (Ausbilder-Eignungsverordnung/ AEVO) will include a review of whether it is necessary to revise the Ordinance itself or preparatory courses pursuant to it.

Measures for implementation in teaching: development of teaching materials

- Based on the outcomes of the status review (Action Area I), existing supporting material for education and training and for instructor training is to be revised and supplemented as necessary on the basis of the definition of TVET for SD.
- For TVET educators, a list of criteria is to be developed for the structuring of teaching and learning situations in relation to TVET for SD.

Measures for implementation in teaching: dissemination

- To ensure broad-based dissemination, the existing and new materials are to be distributed using established communication channels favoured by practitioners.
- The materials are to be added to existing dissemination channels such as the foraus.de teaching portal and the "Ausbildung gestalten" series published by BIBB.
- Further dissemination options are to be opened up for non-formal education providers (see Action Area II).

Higher Education



Higher Education

As institutions of research and education, higher education institutions (HEIs) are central to sustainable development. Through research and teaching, HEIs produce and impart knowledge, skills and values and educate multipliers and future leaders.

With a view to Priority Action Area 3 of the UNESCO Global Action Programme (GAP) on ESD (building capacities of educators and trainers), the role of higher education institutions (HEIs) in training educators also makes them a key driver of social change towards sustainability. Through their research activities, HEIs generate the knowledge and innovation needed to shape sustainable development. Not least, socially responsible science means that HEIs provide the orientation knowledge necessary for social transformation. Higher Education for Sustainable Development (HESD) is also closely bound up with the orientation towards sustainability permeating all core higher education activities – including operation, research, teaching and transfer – and in regional and global commitments. Institutions of higher education thus face the enormous challenge of a systematic organisational transformation to integrate sustainable development.

To a large degree, HEIs can accomplish this without requiring additional resources. The goals adopted and needed for implementing sustainable development in higher education can only be partly achieved in this way, however. Many measures for implementing the objectives proposed here require changes in the law and additional human and financial resources. These changes must first be approved by the legislature and

resourced in the budgets of the Federal Government, the Länder and HEIs. They also have to be budgeted for in calls for proposals from endowments and foundations.

Given that the GAP ends at the end of 2019, rapid action is needed by all involved. The objectives set out in the following have to be attained by 2030 at the latest. And as they involve long-term transformation processes, work needs to begin soon. The broad political support for Agenda 2030 should also be reflected in the legal framework and lead to reliable budget funding. For the duration of the Agenda 2030, a regular monitoring and evaluation process should be established in which the transformation to a sustainable higher education system is tracked using accepted indicators.

UN Decade and flagships: Significant progress in integrating sustainability into higher education was already made in the UN Decade 2005 to 2014. For example, six of Germany's sixteen Länder incorporated Education for Sustainable Development (ESD) or environmental education or environmental protection in their higher education legislation, and five added ESD to higher education contracts. Seven Länder incorporated ESD in performance agreements with HEIs. A milestone was the Memorandum

on Higher Education and Sustainability adopted by the German Rectors' Conference (HRK) and German Commission for UNESCO (DUK 2010). The Sustainability in Science Initiative (SISI), an agenda process launched by BMBF in 2012, also further advanced the transformation of the higher education system in Germany. A number of Länder have issued calls for proposals for sustainability research and support their HEIs in reorienting towards sustainability.

The work of the UN Decade Partner Network on Higher Education has made a notable contribution in promoting networking among higher education institutions and in this way has further advanced the process of implementing HESD. The recommendations of the Expert Forum on Higher Education aim to ensure that ESD and sustainability are supported with additional resources and structurally established at HEIs so that they are successfully implemented and put into practice.

Commitment of the Federal Ministry of Education and Research (BMBF):

BMBF will publish a funding directive for the development of ESD indicators so that these can, among other things, be integrated into the National Sustainability Strategy and be used by the Länder and local authorities.

Action Area I: Aligning higher education funding and incentive systems with substantive and structural sustainability and ESD

To enhance the sustainability profile of HEIs, funding and incentive systems are to be developed and used in order to initiate and structurally establish change and to promote a sustainability culture in science. The following instruments are available for the implementation: revision of Länder higher education acts; incorporation of ESD and sustainability in future contracts and target agreements between the Länder and HEIs; sustainability-related success criteria for budgeting; calls for proposals for competitive and non-competitive funding; incorporation of sustainability as a funding criterion in calls for proposals.

Objective 1:

The societal role of HEIs is defined in Länder higher education acts. The Länder will examine how they can take greater account of ESD/sustainability in their higher education acts.

Commitment of the University for Sustainable Development Eberswalde (HNEE):

HNEE will advocate the incorporation of ESD and sustainability in the Brandenburg Higher Education Act. On the basis of its own research on the topic of sustainability in higher education legislation, it will initiate and drive forward an exchange of views between all Brandenburg higher education institutions.



**Objective 2:**

Target and performance agreements are a central management tool in higher education policy. The Länder and HEIs are asked to include ESD and sustainability as a higher education objective in their target agreements for the upcoming period.

Objective 3:

Professorships featuring ESD/sustainability in their title are an institutionalised expression of the subject's importance to a higher education institution. All HEIs are called upon to permanently establish such professorships in the course of their profile development process.

Commitment of the University for Sustainable Development Eberswalde (HNEE):

The title of the existing Professorship in Environmental Education is to be amended to Environmental Education/Education for Sustainable Development. Social conditions and the expectations placed on education and science have evolved since the Department of Environmental Education was established in the 1990s. The amended title reflects these changes.

Objective 4:

A sustainability award lends visibility to the work of pioneers in the higher education system and rewards special accomplishment in this field. Suitable stakeholders such as the Federal Government, Länder, endowments and NGOs are invited to establish such an award with a range of categories.

Commitment of World University Service, German Committee e. V.:

WUS will establish an ESD sustainability award for student theses (bachelors and masters).

Objective 5:

The possibility is to be explored of including interdisciplinary skills building in accreditation processes. The Länder and the German Accreditation Council are called upon to clarify how ESD/sustainability can be included in accreditation procedures.

Suitable measures for implementation of the objectives in Action Area I:

- The responsible Länder ministries will prepare a report by 2019 on whether and how sustainability can be incorporated into higher education law.
- At the initiative of the Expert Forum on Higher Education, workshops will be held in 2017 and 2018 with Federal and Länder policymakers and administration staff to explore the potential of funding and incentive systems for the integration of sustainability in HEIs.
- The Länder aim to include higher education in their sustainability strategies and in target and performance agreements with higher education institutions as part of the next upcoming review by the competent ministries.
- The Länder science ministries will examine the possibility of establishing ESD commissioners and cooperation between them.
- The Länder will determine the number of professorships featuring sustainability in their title by 2019 and will report on changes in the number of such professorships every two years.
- The Expert Forum on Higher Education will initiate a study of academic career options with interdisciplinary and transdisciplinary profiles. The findings will be used to derive recommendations for the further development of such profiles at HEIs.
- The Expert Forum on Higher Education will prepare a proposal for a sustainability award with potential sponsors by the end of 2017. The award ought to be conferred for the first time in 2019.
- In 2018, at the initiative of the Expert Forum on Higher Education, an expert discussion will be held on the inclusion of ESD/sustainability in the accreditation process with the German Accreditation Council and the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder (KMK) Higher Education Committee. The panel will discuss among other things whether and how ESD skills building models can be included in the system accreditation process.

Action Area II: Systematically linking research and ESD using quality criteria

Research for sustainability in general as well as research for ESD and educational arrangements in HEIs proceed mostly in parallel. Ways need to be found for incorporating national and international research outcomes more rapidly into teaching and for developing science-based quality criteria for research-oriented HESD. Such quality criteria should be based on current educational science and educational psychology findings. This requires the development of systematic further and continuing training for HE educators and the development of a specific sustainability education culture.

Commitment of netzwerk n e. V.:

With its 'Wandercoaching' peripatetic coaches programme, netzwerk n e. V. has acquired substantial experience in recent years with structured capacity building for ESD/sustainability in the higher education context. netzwerk n e. V. will continue this work and, in addition to students, will also target other groups at higher education institutions. netzwerk n e. V. will continue to add good practices to those documented so far and communicate them through a variety of media.

Commitment of the Heidelberg University of Education:

To implement the University's ESD profile, its new structure and development plan 2017 to 2021 provides for the establishment of a University-wide ESD Centre based on the ESD profile of the former Interdisciplinary Institute of Science, Technology and Society (NTG). The GNI Center will contribute to the implementation of the goals under the Global Action Programme on ESD and of the UN SDGs in the University's research, teaching, governance, operation and transfer activities.

Objective 1:

The sustainable development of HEIs is an organisational development process involving new knowledge for all concerned. This requires ongoing advice and training. The Federal Government, the Länder and endowments will examine how this can be effectively organised and funded.

Commitment of the Federal Ministry of Education and Research (BMBF):

In order for HEIs to become more sustainable in all areas – research, teaching, operation and governance – they need valid and actionable information on the steps with which they can succeed in this endeavour. In the HOCH^N project, BMBF supports a network of eleven universities from eight Länder that, in exchange with higher education institutions of all types that are willing to cooperate, will develop handouts and information on reporting in the areas referred to.

Objective 2:

It is part of the responsibility of every HE educator to address sustainability and ESD. Higher education institution management is expected to include regular participation in an ESD further training programme in letters of appointment, especially for young lecturers. Incentives should be created for early career researchers and all teaching staff to take part in such training.

Commitment of the University for Sustainable Development Eberswalde (HNEE):

HNEE supports the training of educators in ESD, such as in the Working Group on Teaching and Learning Sustainability.

Commitment of the Heidelberg University of Education:

The University is committed to implementing ESD as an integral component of teaching. To this end, it is committed in particular to ensuring that educators at all faculty, institute and department levels have the opportunity to receive initial and further training in the context of ESD, as this is one of the most important and effective tools for integrating current ESD-related research outcomes and methodologies in higher education.

Objective 3:

The provision of good practice examples leads to faster dissemination of innovative solutions, especially in new fields of activity. Based on quality criteria, good practice examples relating to interdisciplinary and transdisciplinary teaching and learning formats on ESD are to be disseminated using suitable platforms (such as on www.bne-portal.de).

Commitment of Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ):

GIZ will make available good practice examples on ESD higher education from emerging and developing countries.

Commitment of the University of Hamburg:

Conference on Good Practice in Teaching Sustainability: The Sustainability in Education team at the Center for a Sustainable University will hold a conference in 2017/18, on the basis of which quality criteria for ESD can be developed and refined based on good practice examples in ESD using current (higher education-related) educational science and educational psychology findings.

Objective 4:

Research funding can provide key impetus for jump-starting new solutions to relevant social topics. The Federal Government, the Länder and endowments are called upon to establish research programmes on ESD in order to safeguard and stimulate, in all education systems, the development processes for the implementation of the GAP by the end of 2019 and for the implementation of the Agenda 2030.

Commitment of the University for Sustainable Development Eberswalde (HNEE):

HNEE will increasingly integrate sustainability knowledge into teaching: Transferring sustainability knowledge into teaching embeds teaching in a practice setting. These are holistic teaching-learning approaches involving exchange between HEIs and practice. The transferred knowledge is oriented to ESD, thus imparting transdisciplinary participatory skills for sustainable development. In this connection, exploratory learning is a core element of transdisciplinary teaching. Students acquire participatory skills in the context of sustainability that are not taught and learned from textbooks but result from hands-on exposure to professional practice.

Commitment of the Heidelberg University of Education:

The University provides key support in attracting fellowships for the funding of ESD-relevant research projects or profiles for students.

Objective 5:

The rapid incorporation of new ESD/sustainability research findings into teaching accelerates the penetration of sustainability knowledge in the education system. With regard to research projects under the Federal Government's Research for Sustainable Development (FONA) funding programme and to other sustainability-relevant research projects under other Federal Government and Länder funding calls, BMBF and Länder education ministries are called on to develop standalone processes for the direct transfer of research outcomes to education.





Commitment of the Federal Ministry of Education and Research (BMBF):

Linking research and ESD can help transfer the latest findings and outcomes to ESD and hence into practice, and also to make ESD more attractive. BMBF undertakes to examine, in all calls under the FONA³ Research for Sustainable Development framework programme, whether and to what extent it is possible for education activities to qualify for funding.

Commitment of the Virtual Academy of Sustainability:

In collaboration with various research projects, the BMBF-funded Virtual Academy of Sustainability supports the rapid incorporation of new ESD/sustainability research findings into teaching by quickly translating findings into a range of educational video formats and making them freely available for higher education use.

Suitable measures for implementation of the objectives in Action Area II:

- By 2019, on the basis of a status review and needs analysis, the Expert Forum on Higher Education will initiate the development of advice and further training for the integration of sustainability in HEIs, making provision for the various addressees involved (higher education management, professors, academic staff, lecturers, etc.).
- HEIs, the Länder and the Federal Government are to coordinate and build capacity on an ongoing basis to ensure the long-term provision and quality assurance of corresponding advisory and further education services so that advice and further training can be made available for the various addressees (higher education management, professors, academic staff, lecturers, etc.) through suitable structures and entities such as higher education teaching and learning centres.
- HEI networks in the field of ESD are to be used to pool the necessary expertise for the conceptualisation and implementation of advice and further training and to promote its dissemination.
- By 2019, the German Rectors' Conference (HRK) should draw up recommendations on how commitment to sustainability can be incorporated into job advertisements and letters of appointment in higher education and how corresponding incentives can be created for all members of higher education institutions.
- With the involvement of interested stakeholders, the Expert Forum on Higher Education will develop quality criteria for the implementation of ESD/ sustainability in research, teaching, governance, operation and transfer by 2019.
- By 2019 or as soon as possible, funding institutions will develop and implement a procedure, to be used in all sustainability-related research projects, for examining the possibility of including ESD activities.
- HE educators and others involved in research at HEIs (such as early career researchers) should explore how they can better integrate students and civil society stakeholder groups in research projects.
- The Federal Government and the Länder will examine how they can promote research on ESD in HEIs and the development of indicators on ESD.
- The National Platform on ESD, in collaboration with the Expert Forums, will collate and prioritise research needs on ESD according to their societal relevance.

Commitment of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB):

BMUB supports the measure by promoting the Alexander von Humboldt Foundation's International Climate Protection Fellowship programme and by funding the UNEP/UNESCO/BMUB postgraduate courses at TU Dresden on environmental management in developing and emerging countries.

- Universities are to increasingly develop strategies for transferring sustainability-relevant research outcomes to applications in society.

Action Area III: Supporting a diversified higher education system with a range of ESD paths, ESD pioneers and second followers

Sustainability in HEIs thrives on different approaches in research, teaching and operation. In a sustainable higher education system, HEIs are free to follow the paths that suit them, try new approaches and adopt proven approaches from other national and international HEIs. Minimum standards for higher education and operation ensure quality ideas from pioneers and second followers, for example in green campus management, in reporting, in systematic further and continuing training for lecturers and management and administrative staff, and in basic provision with ESD course content for all study programmes.

Commitment of Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ):

GIZ will provide ESD stakeholders with a platform to present the German ESD approach at an international event.

Objective 1:

Indicators are an effective tool for tracking desired progress and setting minimum standards. An indicator set tracking the implementation of ESD/sustainability in higher education research, teaching, governance, operation and transfer needs to be developed in the near future. The Expert Forum on Higher Education calls on the Federal Government and the Länder to facilitate and support this development process.

Objective 2:

Sustainability reports demonstrate the seriousness of HEIs' commitment to strategically integrating ESD/sustainability. The Expert Forum on Higher Education calls on the German Rectors' Conference to recognise the publication of a sustainability report as good practice and ensure universal implementation.

Commitment of the German Council for Sustainable Development (RNE):

RNE promotes sustainability reporting by higher education institutions by developing a sustainability reporting standard, the Sustainability Code for Higher Education Institutions.

Objective 3:

Green campus is an international approach that aligns the operation of a higher education institution to sustainability. HEI management is called upon to implement climate-neutral campus operation as well as sustainable material cycles and to transform the campus into a place and education space for sustainability.

Commitment of the University of Hamburg:

Piloting sustainability-specific organisational development and training measures: The Center for a Sustainable University (KNU) and a KNU-coordinated, BMBF-funded joint project, 'Sustainability at Higher Education Institutions: Develop – Network – Report (HOCH^N)', provide for the conceptualisation and piloting of science-based sustainability-related HR, organisational development and further training measures. Examples include innovation circles for sustainability topics, interactive workshops on interpretation of the concept of sustainability from different perspectives, and training and coaching measures on participatory skills and values.

Objective 4:

The UN Decade of ESD, the GAP and the Agenda 2030 are based on global development towards more ESD/sustainability. HEIs are called upon, wherever it is in accordance with their own profile, to network with countries of the Global South in order to enable joint research and teaching on ESD/sustainability.

Commitment of the Federal Ministry for Economic Cooperation and Development (BMZ):

BMZ, in cooperation with the Länder, supports networking of higher education institutions and other entities from Germany and from countries of the Global South in order to facilitate joint research and teaching on ESD/sustainability, among other things by funding the Engagement Global ASA programme.

Suitable measures for implementation of the objectives in Action Area III:

- By 2019, a guideline on sustainability reporting is to be compiled with the involvement of all relevant stakeholder groups. This work will be funded by the Federal Government.
- For reporting and for monitoring implementation of the GAP, an indicator set is to be developed to measure and observe sustainability in higher education research, teaching, governance, operation and transfer. This work will be funded by the Federal Government.
- HEIs will examine, on the basis of the completed guideline and indicator set, how to establish or modify reporting in order to permit comparability between activities.
- HEI management, together with all stakeholder groups, should use the reports, under the framework of their mission statement, primarily as a tool to communicate and evaluate a change process towards sustainability in higher education.

Objective 5:

Digitalisation makes it possible to provide teaching/learning arrangements for ESD and sustainability without the constraints of time and space. This opens tremendous scope for offering ESD and sustainability courses for all HEIs. Networking and cooperation between the respective providers enables qualitative enhancement.



- By 2019, with funding from BMBF, a green campus guideline will be developed that goes beyond an indicator set and, in particular, addresses the question of how the higher education campus can be made socially compatible and attractive. Interested stakeholders will be invited to participate.
- Within the green campus framework and in order to make the best possible use of synergies, HEIs will collaborate with local authorities on issues such as sustainable mobility, fair procurement and climate action.
- The Federal Government and the Länder should include HEIs and their considerable building stock, if they do not already do so, in their climate action plans, strategies, funds and similar instruments.
- ESD/sustainability projects addressing research subjects in other countries will be prepared and carried out on an equal footing with partner universities in the regions concerned. To this end, the Expert Forum on Higher Education will launch an exchange of experience between interested stakeholders and international science institutions.
- HEIs are called upon to actively promote ESD/sustainability in their internationalisation strategies, especially with the countries of the Global South.
- The Expert Forum on Higher Education will initiate a process in which virtual universities, open universities, and providers of virtual education resources network their expertise to develop high-quality virtual modules and degree programmes on sustainability topics for use by HEIs in their study programmes. The Federal Government, the Länder and endowments are called upon to support this process in order to enable the production of further open educational resources.

Commitment of the Federal Ministry of Education and Research (BMBF):

Issues, concepts, approaches, instruments and other aspects of sustainability need to be integrated into the curricula of all courses of study if the graduates and decision-makers of the future are to act in a more sustainable manner. Online resources are particularly well suited to achieving this as quickly as possible. In addition, they make for very efficient dissemination and are easily updated. In the Virtual Academy of Sustainability, BMBF supports a project that provides and continues to develop massive open online courses (MOOCs) as ECTS units on a growing number of topics in cooperation with a large number of HEIs.

Commitment of Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ):

Via the Expert Forum on Higher Education, GIZ actively supports networking between German higher education and research institutions with higher education and research institutions of the Global South for exchange of experience on ESD and for the initiation of joint ESD-relevant research projects.



Action Area IV: Encouraging, supporting and enabling real participation of students and graduates as key architects of sustainable development

The 2.8 million students at Germany's approximately 400 higher education institutions are a treasure trove for bottom-up ESD initiatives in higher education and beyond, and for shaping sustainability processes together with others involved in higher education. There are already many examples of how students, as pioneers of change, are transforming the structure of their higher education institution. In doing so, they cut across institutional structures, logic and communication rules, confidently and progressively giving substantive impetus and bringing together key stakeholders to establish sustainability processes at their institutions. Nevertheless, student ESD activities are still a niche phenomenon. It is therefore important to back up student engagement for sustainability and ESD with structural support and to secure student participation in relevant committees. The goal is to broaden student engagement for ESD.

Commitment of the Federal Ministry of Education and Research (BMBF):

As change agents, students are particularly important for sustainable higher education institutions. At the same time, student engagement is particularly effective in helping to develop ESD-relevant competencies.

In the 'Wandercoaching' project, BMBF supports the network n student initiative, in which peripatetic student coaches mentor student initiatives in developing and putting into practice their contribution to sustainability at their institution. It is planned for funding to continue beyond the current funding period.

Commitment of netzwerk n e. V.:

netzwerk n e. V. promotes the establishment and professionalisation of sustainable student initiatives and their projects nationwide through various event and programme formats as part of the project 'Zukunftsfähige Hochschulen gestalten' ('Shaping Sustainable Universities', including conferences, the 'Wandercoaching' peripatetic coaches programme and conceptual workshops) and additionally through its activities as an organisation (including network meetings, perspektive n and a multipliers pool). By networking with stakeholders and providing a wealth of knowledge and experience, further target groups are addressed and motivated to engage in similar activities.

Objective 1:

ESD/sustainability is fully integrated into curricula when students of all study programmes can acquire the necessary participatory skills in subject-related and interdisciplinary courses. The Expert Forum on Higher Education calls on HEIs, and in particular faculties and study programme directors, to revise their curricula with substantive integration of ESD/sustainability.



Commitment of the Heidelberg University of Education:

The University has established ESD as one of its substantive profile elements in the new structure and development plan 2017 to 2021. In addition, the Faculty for Natural and Sociological Sciences has explicitly included ESD in its structure and development plan as one of four overarching priorities that will be further expanded during the development period.

Objective 2:

Learning and skills building take place not only in formal curricula settings, but also in issues-based engagement such as in sustainability groups. The Expert Forum on Higher Education calls on the Federal Government, the Länder, HEIs and the student body to promote non-formal learning in higher education student groups, for example through continuing education programmes, networking, incentives and formal recognition in examination regulations.

Objective 3:

Students are numerically the largest group at HEIs that need to be enlisted for engagement in sustainability. Student involvement and participation in the sustainability process is therefore essential. The Expert Forum on Higher Education calls on HEIs to involve students and

student organisations in sustainability governance and to ensure that they are properly represented, in particular in advisory councils, green offices, commissions, committees/senates and consultation processes.

Objective 4:

Students are only able to collaborate properly in ESD/sustainability at their own higher education institution with ongoing substantive support from the institution itself. The Expert Forum on Higher Education calls on HEIs to promote student engagement in sustainability with infrastructure, resources, latitude and staff support and to legitimise that engagement with mandated posts.

Commitment of rootAbility gUG:

By developing a guide, online portal and online course with financial support from the German Federal Environmental Foundation (DBU), rootAbility and the UNESCO Chair 'Higher Education for Sustainable Development' at Leuphana University are promoting the establishment of more student-run and student/staff-run green offices at German higher education institutions.

Objective 5:

The implementation of ESD/sustainability projects by students can be facilitated with financial support. The Expert Forum on Higher Education therefore calls on ministries, HEIs, the student body, endowments and foundations to enhance the visibility of available funding lines and to consider establishing new funding lines. These should both fund small-scale projects at short notice and with minimum red tape and also provide for longer-term capacity building measures.

Commitment of the University of Hamburg:

The Center for a Sustainable University funds small-scale student sustainability projects (announcing a call for up to €1,000 every six months). It funds students' teaching and study reform projects in which ESD can be addressed (the call procedures are still to be finalised). The University of Hamburg AStA (Student Council) frequently supports student sustainability initiatives (mostly approximately €300 per semester). The University of Hamburg Alumni Association offers support for financing student projects through networking. By 2018, the University of Hamburg will examine the possibility of developing a long-term funding line for structural measures.

Suitable measures for implementation of the objectives in Action Area III:

- To enable all students to acquire participatory skills, it is recommended that HEIs introduce inter- and transdisciplinary introductory modules on ESD/sustainability universally by 2030 and to offer interdisciplinary supplementary certificates on ESD/sustainability. It is recommended that departments and faculties incorporate open elective modules in all study programmes so that students can also take sustainability-related courses from other programmes and have them credited.

Commitment of the Virtual Academy of Sustainability:

The Virtual Academy of Sustainability provides free online courses providing basic knowledge of ESD/sustainability in higher education designed so that all higher education institutions can easily incorporate them in elective/general studies courses. In addition, the Virtual Academy's newly developed teaching/learning formats on exploratory learning enable students to actively engage with research processes, exchange ideas and make their own research outcomes available to the community.

- Departments and interfaculty institutes continue to add to their range of theories and methods in order to integrate sustainability issues, for example through research-oriented, inter- and transdisciplinary project work, further training, practice-oriented service learning and internships.
- The Federal Government, the Länder, endowments, foundations and HEIs are called on to increasingly promote voluntary student engagement for sustainability during study, both by developing effective incentives such as ECTS credits, awards or fellowships, as well as by the removal of barriers.
- At Länder and Federal level there is a need for additional inter-institutional capacity building activities such as summer schools, issue workshops, peer-to-peer further training programmes and seminars on ESD/sustainability.

Commitment of Bündnis Zukunftsbildung/Greenpeace e. V.:

Greenpeace offers events, advice and workshops in higher education.

- The Federal Government and the Länder will examine the scope for supporting sustainability networks at regional and trans-regional level, for example by organising an online platform or conferences.
- Student groups and HEIs will seek to promote and facilitate the involvement of international students, refugees, students with children, and students with disabilities in student engagement for sustainability.

Commitment of the Federal Ministry of Education and Research (BMBF):

BMBF supports the implementation of the National Action Plan on ESD by the long-term integration at HEIs of refugees who are able to study. The successful package of measures for the integration of refugees who are able to study is planned to be continued beyond 2019 and expanded with approximately €30 million annually. The measures will be continuously readjusted in light of further developments in the refugee situation. Consideration will thus be given to expanding the package with measures to close funding gaps and improve graduates' transition into employment.

- HEIs are called on to trial and establish various participation formats in order to promote a culture of participation for the integration of ESD/ sustainability.
- The Expert Forum on Higher Education will launch a study to which extent a student vice-president or a prorector can strengthen students in actively shaping sustainable development at HEIs.

Commitment of the University for Sustainable Development Eberswalde (HNEE):

The Student Vice President at HNEE represents the interests of students in shaping sustainable development at the University. The University will examine to what extent the Student Vice President can strengthen the University's profile in the direction of sustainability. HNEE was the first higher education institution to appoint a Student Vice President in 1998 and will continue to promote student involvement and participation in the process through this office.

- All organised student bodies are to establish sustainability units in their own structures and provide substantive support for sustainability projects and processes.

Commitment of the Federal Ministry of Education and Research (BMBF):

The ESD goal of providing inclusive and equitable quality education and life-long learning for all has long been embedded in BMBF funding for student groups in higher education and continues to be open for related applications. Student groups in higher education are able to apply for financial support from BMBF for eligible projects, which are projects involving the organisation and conduct of seminars and workshops with a clear trans-regional character and unequivocal higher education relevance for sustainable development under the programme for the funding of higher education-related central activities of student associations and other organisations.



- HEIs will examine what new measures and arrangements are needed in order to promote student engagement in sustainability with infrastructure, resources, learning space and staff support and to legitimise that engagement with mandated posts.
- HEIs and the organised student body will actively communicate available funding opportunities for ESD/sustainability through measures such as campaigns, information flyers and their website, and set up their own funding lines if necessary.

Action Area V: Developing transformative metaphors and narratives

Sustainability competes as an issue with many others, such as the notion that excellent research and teaching can only take place to the exclusion of non-academic stakeholders. Societal stakeholders such as foundations, NGOs and environmental organisations bring additional issues into the transformation debate, such as the 'third mission' of higher education. There are numerous dedicated approaches and initiatives out there, but they remain a long way from universal adoption and visible change. The relevance of ESD must therefore acquire emotional appeal and be embedded in the narrative of a larger national and international development context. Collective societal narratives on sustainability research and teaching must be able to link in with current social issues and concerns (such as freedom and security). They can lend the issue of sustainability a deeper meaning and orientational power and can move people to use already available options to change their thinking and actions: Socially responsible, excellent research and teaching can be organised transdisciplinarily with non-academic stakeholders, such as in living labs, and in the process can aid the scientific community itself in the direction of embedding science in society.

Objective 1:

All change is accompanied by conscious and unconscious narratives about its meaning and potential. By 2019, the Expert Forum on Higher Education will analyse current dominant narratives about the nature and goals of the science system and enhancing its orientation towards sustainability and will link them into the 'third mission' debate.

Objective 2:

New narratives are born in arenas where the framers of a transformation meet time and again to exchange ideas and opinions. From there, the narratives are carried elsewhere and have the potential to inspire others. The objective is to provide stakeholders in the science system with such discourse arenas/narrative workshops for new, visionary narratives around a sustainable higher education system.

Commitment of freier zusammenschluss von studentInnenschaften (fzs) e. V.:

freier zusammenschluss von studentInnenschaften (fzs) provides discourse arenas for new, visionary narratives around a socially and environmentally responsible higher education system and an equitable social and economic system as part of the various facets (such as seminars and education materials) of education policy work. It contributes to the shaping of dominant narratives, primarily in the student milieu, on enhancing the science system's orientation towards sustainability, in particular in relation to the question of the extent to which science can and should be political. This takes place on a continuous basis, for example through seminars, talks, resolutions and publications.

Objective 3:

The visualisation of complex phenomena such as discourse arenas/narrative workshops and their content is an important trend in science. The Expert Forum on Higher Education will use media to visualise narratives around the science system and make them available to all interested parties.

Objective 4:

Narratives imbue transformation with meaning. The Expert Forum on Higher Education calls on the science community to explore its impact on narratives. This should be done in the context of the general sustainability discourse.

Suitable measures for implementation of the objectives in Action Area V:

- The Expert Forum on Higher Education will launch a study in 2017 to identify the current dominant narratives in science and policy about the nature and goals of the science system and its orientation towards sustainability.
- The Expert Forum on Higher Education will initiate a workshop with experts from science, policy-making and civil society to consider and discuss the development and emergence of transformative narratives in the direction of sustainability.
- The Expert Forum on Higher Education will collate potential formats for discourse arenas by mid-2018.
- Changes in the narrative around a sustainable higher education system will be discussed at the Agenda Congress.
- By 2019, the Expert Forum on Higher Education will initiate the production of suitable audiovisual materials to mobilise higher education students and staff in favour of more sustainable development.

Non-Formal and Informal Learning/ Youth



Non-Formal and Informal Learning/Youth

The Non-Formal and Informal Learning/Youth sector is becoming increasingly important in the context of lifelong learning for the necessary transformation of society in line with the SDGs. Non-formal and informal learning comprises all educational activities – for the greatest conceivable variety of target groups – outside of the formal education system. The increasingly important field of adult education also comes under this sector.

The stakeholders and organisations involved in non-formal and informal learning/youth are characterised by variety, creativity, diversity and independence. This means they have huge innovative potential for the implementation of ESD. In contrast to formal education, non-formal and informal learning is neither institutionally structured nor systematically funded and faces special challenges as a result. Non-school learning spaces are key partners in the development of local educational landscapes. Non-formal and informal learning makes it possible to win vital new stakeholder groups for ESD, in fields such as the arts and culture, the media and the digital sector.

Over 60% of the officially recognised UN Decade projects relate to non-formal and informal learning. This shows the importance of the work of the Expert Forum on Non-Formal and Informal Learning/Youth, as is also reflected in the action areas and objectives set out in the following. A broad spectrum of learning spaces, thematic areas and methods provide a wide variety of educational and practical experience in the context of sustainable development for learners and educators alike.

Five different Partner Networks provide the Expert Forum on Non-Formal and Informal Learning/Youth with a broad thematic compass. Elsewhere in Europe and internationally, formal educational structures are more closely integrated with non-formal and informal educational activities than they are in Germany. There is some catching up to be done here.

In part, the transformation in the non-formal and informal education sector can be accomplished with measures that do not require additional resources. The goals adopted and needed for implementing sustainable development will only be partly achieved in this way, however. Many measures for implementing the objectives proposed here require changes in the law and additional human and financial resources. These changes must first be approved by the legislature and allocated with resources in the budgets of the Federal Government and the Länder. They must also be budgeted for in calls for proposals from endowments and foundations. Given that the GAP ends at the end of 2019, rapid action is needed by all involved. The objectives set out in the following have to be attained by 2030 at the latest.

Commitment of the German Adult Education Association (DVV):

DVV recommends that adult education centres incorporate sustainable development in their mission statements and programmes on the basis of the Sustainable Development Goals (SDGs). For this purpose, DVV will compile information material on the National Action Plan and develop modules for adult education centres to implement in their own work.

Action Area I: Effective participation of young people

The involvement of young people is essential when it comes to shaping the future and transformation. They must be involved in ESD in an age-appropriate manner, with effective participation and a proper say. Only then will new ways of doing things emerge where everyone participates.

Commitment of the Federal Ministry of Education and Research (BMBF):

BMBF is committed to increasing direct youth participation in the implementation of the National Action Plan. To this end, BMBF supports an independent Youth Forum. Members of the Youth Forum take part in the work of the Expert Forums. One voting delegate and one deputy are nominated for the National Platform. BMBF is setting up an office to provide organisational support for youth participation and to offer coaching and training. An annual youth congress and regional events are held jointly with the Youth Forum. BMBF also provides ongoing support for the implementation of 'projects of the month' by the Youth Forum, thus providing an additional opportunity for young people to take part at local level in the implementation of the National Action Plan on ESD.



Objective 1:

From summer 2017, the entire process of implementing the National Action Plan is to be extended to include effective youth participation. To this end, a framework developed by young people themselves in a youth participation project will enable them to participate in the implementation work of the Expert Forums and the National Platform with their own initiatives and

complementary formats and processes, thus integrating the perspective of young people into the implementation of the NAP from the outset.

Commitment of the Media Partner Network/Expert Forum on Non-Formal and Informal Learning/Youth and the Collegium for the Management and Design of Sustainable Development (KMGNE):

An alliance comprising members of the Media Partner Network will develop a blended mentoring programme for a young leadership programme and implement it from 2018. The young leadership programme will foster the development of transformative literacy and of transformation and participatory skills in young leaders and change agents. In the IT-supported programme, mentors from transformation labs will provide young leaders with support in their projects and initiatives. This will be paralleled by modular leadership training.

Measures:

- A separate Youth Forum will be established to provide an age-appropriate setting for participation on self-selected issues. Its resolutions will be presented in and taken into account by the National Platform.
- Three places in each Expert Forum will be reserved for young people and one voting delegate and one deputy nominated for the National Platform.
- A dedicated office will be set up to provide organisational support for youth participation and to offer coaching and training.
- A separate Youth Congress will be held each year.
- By 2019, young people will be provided with the opportunity to participate in local implementation, and thus to provide key impetus in their own surroundings, with microprojects that they themselves develop and are in charge of.

Commitment of Klimahaus Bremerhaven:

Klimahaus Bremerhaven will provide technical and logistical support for the implementation of a local microproject by young people in Bremerhaven until 2019.

Objective 2:

From 2017, openness and the knowledge, skills and abilities for effective youth participation are to be established and developed across all stakeholders involved in the implementation of the National Action Plan. This reflects the fact that learning spaces, networks and local authorities are three areas that, alongside the family, represent key settings in the lives of young people where youth participation can be put into action and experienced. Greater use is therefore made here of existing good practice examples and ESD stakeholders are encouraged to embrace and actively shape youth participation.

Commitment of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB):

BMUB pursues a long-term approach of involving adolescents and young adults in its policy areas. A range of formats is used to encourage young people to actively contribute their ideas, wishes and solutions for sustainable development.

Measures:

- The various approaches and forms of youth participation featured in UN Decade of ESD official projects and in the learning spaces, networks and local authorities now nominated will be selected for a study. The best approaches and methods of youth participation will be collated and publicised as good practice examples. The study findings will be used to develop an up-to-date guideline for each of the three areas of learning spaces, networks and local authorities.

Commitment of Arbeitsgemeinschaft Natur- und Umweltbildung Bundesverband e. V. (ANU):

ANU will compile best practice examples of youth participation in ESD and make them publicly available. ANU will take part in the development of a guideline for learning spaces and networks. This will be used to design further training to be provided by ANU.

- Based on the above, the possibility will be explored of providing personal advice and training in the area of youth participation for (adult) key players in learning spaces, networks and local authorities.

Commitment of the German Federal Youth Council (DBJR):

DBJR has many years of experience in participation processes. It commits to contributing the advice and networking potential available from its projects *jugend. beteiligen.jetzt* and *Werkstatt MitWirkung*. In addition, the projects develop effective online participation tools that can also be made available.

Action Area II: Diversity and inclusion

All learners must be able actively and structurally to participate in ESD; obstacles to access must be removed. The opportunities of non-formal and informal learning for decision-making and structuring processes must be exploited in order to eliminate exclusion.

Objective 1:

By the end of 2019, on an annual basis if appropriate, at least ten ESD learning spaces in the non-formal or informal learning sector are to be selected on account of their inclusive and/or diversity-aware focus in ESD for high-profile public mention and possibly for award by the provider organisations with the support of the communication channels for the GAP in Germany.

Measures:

- Studies, guides and good practice examples for integrating ESD into non-formal and informal learning and into inclusive and intersectional education will be made available in various languages (including easy-to-read language and sign language) in text, audio and video form. Above all, these will address the opportunities for making activities in the context of ESD inclusive by exploiting the unique characteristics of non-formal and informal learning.



Commitment of Bündnis Zukunfts-Bildung/Youth Association for the Protection of Nature (NAJU im NABU e. V.):

NAJU will carry out an internal follow-up study focusing on ESD. A quantitative section will consist of a questionnaire survey of NABU groups and youth leaders. These findings will be supplemented with field interviews with group and youth leaders. The results will subsequently be presented and discussed in three to four regional workshops for active members of NABU and NAJU. The outcomes of the regional workshops will be collated in a final workshop and goals for the association's development laid down by a project advisory council.

- A symposium will be held with award winners for professional exchange on learning activities to which experts and learners of various backgrounds/identities have access. The focus will be on diversity of perspectives on the educational approaches and assumptions used, on the role of language and on the time

factor, together with critical reflection on effective everyday role models (including specific role attribution on account of gender, age, physical or mental condition and experience of migration and/or racism).

Objective 2:

By the end of 2019, associations, educational amenities, foundations and/or interest groups will establish regular networking events for provider organisations and educators both in ESD and in inclusive and intersectional education. The approaches, concepts and social impact spaces of non-formal and informal learning and of (international) youth education work offer numerous entry points for establishing inclusion structurally, substantively and methodologically in ESD.

Measure:

- Experts in intersectional education will critically examine and revise methods and approaches of ESD. In this way:
 - The pool of ESD experts will be expanded to include experts in inclusion and intersectionality;
 - The range of formats and methods around ESD will be usefully extended and harnessed;
 - Awareness will be raised as to the need for empowerment training.

Commitment of the Federal Ministry of Family Affairs, Senior Citizens, Women and Youth (BMFSFJ):

BMFSFJ supports the establishment of ESD and inclusion in (international) youth work. A starting point in this regard is provided by a concept paper on implementing ESD in international youth work prepared by the ESD working group of the International Youth Service of the Federal Republic of Germany (IJAB).



Objective 3:

By 2019, associations, educational amenities, foundations and/or interest groups will implement awareness building and training programmes on empowerment with at least 80 currently active ESD practitioners and experts.

Commitment of the NatLab schools lab of the Department of Biology, Chemistry and Pharmacy, Free University Berlin:

The Free University Berlin Department of Biology, Chemistry and Pharmacy supports the Agenda 2030 Sustainable Development Goals. In this connection, the NatLab schools lab will advertise a part-time (50%) two-year position in 2017 to help NatLab educators in integrating aspects relating to diversity, ESD and other Agenda 2030 Sustainable Development Goals into their education work.

Measure:

- Programmes and information will be developed both for training and for empowerment measures (including anti-racism training and empowerment for people who experience racism).

Commitment of the Federal Ministry of Family Affairs, Senior Citizens, Women and Youth (BMFSFJ):

In ongoing collaboration with national providers and provider groups under the Federal Government's Child and Youth Plan (KJP), BMFSFJ will promote the implementation of more awareness and training measures around ESD, for example under the youth strategy Taking Action for a Youth-Appropriate Society 2015–2018.

Objective 4:

By the end of 2019, four basic measures are to be implemented for embedding an inclusive perspective in non-formal and informal learning in ESD. The state GAP implementing structures in Germany will look into providing support with an academic evaluation (see Objectives 2 and 3) and the establishment of new funding and implementation criteria.

Measures:

- Regular evaluations of ESD activities in non-formal and informal learning by interdisciplinary teams enrich and enhance annual professional exchange between educators and practitioners in ESD and in inclusive, intersectional education.
- The compilation, for all providers, of innovative funding and implementation criteria for ESD projects and activities lowers barriers to access and enhances the transparency of decision-making structures. This broadens the parameters (enabling conditions, activities, measures, etc.) for the development of projects in which all learners and/or their representatives can make a responsible contribution. The possibility will be explored of formulating a communication strategy that places the focus on actively addressing previously unreached target groups.

Objective 5:

By the end of 2018, the National Platform will launch a dialogue on incorporating an 'inclusion' category in the award scheme under the successor to the GAP.

Action Area III: Promoting and recognising change agents and multipliers

SDG 4.7 seeks to ensure by 2030 that all learners acquire the knowledge and skills needed to promote sustainable development. In order to achieve this target, it is necessary to promote and recognise change agents and multipliers. Change agents are people who follow the guiding principles of sustainable development, serve as promoters of social innovations, create new incentives and provide others with impetus for the transformation towards sustainable development. Multipliers are people who acquire the knowledge and skills to promote sustainable development and then pass it on to educators and learners. Change agents and multipliers of ESD in non-formal and informal education comprise a very heterogeneous field. They include educational speakers from federations and associations, freelance operators who launch education projects, student initiatives driving change in their higher education institutions and local communities, and young volunteers who lead youth groups. Transformation cannot happen without them. Appreciation, training and recognition are needed as well as incentive and funding arrangements in order to promote and support these people in their work and to continuously attract other dedicated individuals to join them. By the end of 2030, volunteers, freelancers and employees are to be engaged as change agents and multipliers on an ongoing and permanent basis to contribute towards the implementation of SDG 4.7 with their programmes and projects. Arrangements for training and recognition are to be established by 2030 for this purpose.

Commitment of the German Commission for UNESCO:

All German sites recognised by UNESCO (world heritage sites, biosphere reserves and global geoparks) will develop into exemplary places of learning for sustainable development and openness to the world. The German Commission for UNESCO works together with the German UNESCO Chairs and UNESCO Clubs with a similar goal of promoting them in their capacity as ESD multipliers. Internationally, the German Commission for UNESCO is committed to further strengthening the policy base for ESD in central and programme bodies of UNESCO and the United Nations. The German Commission for UNESCO likewise organises workshops and further training to support other UNESCO National Commissions, most of all in Europe and Africa, in recognising the importance of ESD and in supporting it nationally and internationally.

Objective 1:

By 2019, national and Länder-level initial, further and continuing training programmes suitable for the implementation of SDG 4.7 are to be identified by civil society stakeholders in non-formal and informal education (environmental organisations, youth associations, sustainability-related networks, etc.) and publicised with the aid of the German Commission for UNESCO. By 2030, these initial, further and continuing training programmes are to be further developed and permanently established. The Länder will look into setting up ESD coordinating offices to support, link up and help establish the initial, further and continuing training programmes.

Commitment of LernortLabor – Bundesverband der Schülerlabore e. V.:

On behalf of LernortLabor – Bundesverband der Schülerlabore (the national association of schools labs) and GenaU (a regional student laboratory network of schools labs at research and higher education institutions in Berlin and Brandenburg), Geco-Lab (the Centre of Competence for Geo-ecological Space Exploration of the Department of Geography at the Heidelberg University of Education) is devising a workshop on ESD for schools lab operators and staff.

The aim is to jointly draw up recommendations on how to integrate ESD into institutions' own schools lab programmes and in this way to strengthen multipliers in their role. Geco-Lab will hold the workshop on three occasions together with practitioners in the field: (1) At the 2018 LeLa annual conference in Kiel (northern Germany); (2) at a network partner of GenaU in Berlin (eastern Germany); (3) at Geco-Lab, Department of Geography, the Heidelberg University of Education (southern Germany).

Measures:

- By 2019, a platform will be set up (for example on the ESD portal, www.bne-portal.de) to present national and Länder-level ESD initial, further and continuing training programmes. On the basis of indicators, these will showcase best practice examples of communicating ESD. The programmes will cover the subject matter of the SDGs, such as the diversity of civil society movements, the importance of the planetary boundaries, awareness of power asymmetries, the post-growth debate and youth participation.

Commitment of Arbeitsgemeinschaft Natur- und Umweltbildung Bundesverband e. V. (ANU):

ANU will make the website www.umweltbildung.de available for the platform.

Commitment of netzwerk n e. V.:

In its 'Wandercoaching' peripatetic coaches programme and conceptual workshops, netzwerk n e. V. provides capacity building for change agents and multipliers. In addition, netzwerk n e. V. operates an online collaboration platform that provides sustainability advocates with a complete toolkit for data protection-certified virtual collaboration, networking and presentation and has the capacity to become the national and international forum for virtual exchange in the ESD community.

- The options will be explored for identifying, by 2019, national and Länder-level initial, further and continuing training programmes into which issues, elements, formats and methods of ESD are to be incorporated.
- The options will be explored for developing an approach for the incorporation of innovative/current ESD elements and methods (such as participation; opportunities for freedom of action and expression; narratives) into existing programmes for multipliers at federal and Länder level by 2019 and for implementing it by 2030. A focus will be placed on heterogeneity and diversity when recruiting multipliers. Further training based on a peer-to-peer approach is to be given special emphasis.
- The options will be explored regarding whether and how a national training programme can be developed by 2019 in which 30 multipliers are trained annually by 2030.





- By 2019, the Länder should look into the possibility of identifying and arranging funding for at least one ESD coordinating office as a supporting structure for multipliers (see also Action Area VII, Objective 3). According to size and population, the Länder should look into the possibility of providing the ESD coordinating office with between one and five promoters. These should start work by 2030 at the latest. They will assess support needs for multipliers and providing measures for exchange of experience and training. The thematic areas include collaboration with formal education (schools and higher education institutions), quality assurance/quality development, marketing, fundraising (sponsorship) and innovative ESD processes.

Commitment of Arbeitsgemeinschaft Natur- und Umweltbildung Bundesverband e. V. (ANU):

In cooperation with a consortium of providers, ANU has operated an ESD training programme for 20 years in which 25 multipliers are trained over a two-year period. ANU will expand this programme to train 30 multipliers a year and will look into sources of funding. ANU will develop an approach for integrating innovative/current elements and methods of ESD for this training programme by 2019.

Objective 2:

By 2030, in a further development of federal and Länder programmes – such as the Federal Volunteer Service (BFD) and JuLeiCa further training programmes for youth group leaders – civil society stakeholders in non-formal and informal education will recruit and promote as change agents and multipliers for ESD, in particular, dedicated young people who, for example, volunteer as youth group leaders or drive transformation in their higher education institutions and local communities. For recognition of this volunteering commitment, the Länder education and/or youth ministries will look into adding ESD as a criterion for the concession cards issued to volunteers.

Commitment of the German Commission for UNESCO:

All kulturweit volunteers will address ESD and sustainability concepts to a greater extent in the seminars accompanying their volunteering service and will be given incentives to promote sustainability in a practical way with self-conceived projects at the places where they are deployed. On an even more closely targeted basis, kulturweit will also offer in-depth seminars for former volunteers to train as ESD multipliers for non-formal education in Germany ('ESD teamers').

Measure:

- By 2019, federal and Länder-level programmes for multipliers will be identified in which issues, elements, formats and methods of ESD are to be incorporated to a greater extent than before. The

options will be explored for developing an approach for the incorporation of ESD elements and methods into existing multipliers programmes for young people, youth organisations and associations at federal and Länder level (voluntary environmental year programmes, the Federal Volunteer Service and JuLeiCa further training programmes for youth group leaders) and for implementing them in ten such programmes by 2030.

Commitment of the Federal Ministry of Family Affairs, Senior Citizens, Women and Youth (BMFSFJ):

BMFSFJ supports ESD as a standard and as an objective of accompanying educational work in the Federal Voluntary Service, incorporating insights from the approaches tested in the ESD in Voluntary Services project.



Objective 3:

For multipliers and change agents in non-formal and informal ESD, the German Commission for UNESCO and BMBF, in consultation with civil society actors in non-formal and informal education, will, by 2019, look into the development and implementation of awards and certifications to foster a universal culture of recognition and appreciation by 2030.

Commitment of the German Council for Sustainable Development (RNE):

RNE plans a youth competition to publicise and promote new ideas and approaches to communication, publicity and dissemination of the Sustainable Development Goals in the mainstream education sector. This commitment contributes to the implementation of SDG 4 and in particular target 4.7.

Measures:

- By 2019, BMBF and the German Commission for UNESCO are to look into whether the awards can be extended to multipliers and change agents, conferred upon 20 multipliers and change agents, permanently established by 2030 and endowed with €2,000 per award.
- The options will be explored for developing a proposal by 2019 for nationwide certification of multipliers and their work. By 2030, 50 people will receive this certification each year.

Objective 4:

Discussions will be launched by the end of 2019 on sustainable funding models and instruments both for the development and dissemination of suitable initial, further and continuing training programmes and for the work of multipliers with the bodies involved.

Measures:

- By 2019, the Federal Government and the Länder will look into developing funding structures that establish participation in disseminator programmes as a positive criterion for the granting of Länder-level and federal funding (see also Action Area VII, Objective 3).
- By 2019, the Länder, together with the Federal Government, will look into whether the promotion of capacity building measures (such as summer academies, conceptual workshops, peripatetic coaching and workshops for multipliers) and virtual collaboration platforms can be incorporated into existing funding guidelines. The possibilities should also be explored here for establishing institutionalised dialogue for exchange on Länder-level and federal initiatives (see also Action Area VII, Objective 3).

Action Area IV: Establishing ESD-focused educational landscapes

Educational landscapes aim to bring together formal, non-formal and informal learning and educational opportunities at different levels. Educational landscapes incorporating ESD also aim, along the length of individual educational biographies, to contribute to social transformation towards sustainable development. Spanning all available educational opportunities, they comprise an open and permeable educational space that makes it possible to acquire knowledge, skills and abilities needed to live a good, independent life and to participate in social and economic development.

ESD-focused educational landscapes require long-term collaboration and networking. They bring together formal education institutions (ECCE, school, higher education, and initial and further training) with other learning spaces and providers of educational input from the private sector, local authorities, civil society institutions and private initiatives. A basis for a practical common understanding of ESD can be provided by the Erfurt criteria.⁶

ESD-focused educational landscapes contribute to greater educational equity and enable lifelong learning. Existing structures at all levels therefore need to be strengthened, expanded, and permanently established with innovative organisational arrangements.

Commitment of the German Council for Sustainable Development (RNE):

Through four Regional Hubs for Sustainability Strategies (RENNs), RNE promotes commitment to civil society action for sustainability and better coordination with policy across Länder borders.

Objective 1:

By the end of 2019, guidelines are developed on the implementation of ESD-focused educational landscapes and adopted by the National Platform. This will bring together learning spaces and elements along the length of people's educational biographies that illustrate systematic, practical inclusion of non-school learning spaces in ECCE and school education.

Measures:

- The possibility will be explored of entering into Länder/local authority-specific cooperation or framework agreements with educational landscapes.
- Local and regional ESD providers will explore the possibility of establishing reliable funding structures for integrating non-formal educational activities into educational landscapes.
- The possibility will be explored of setting up local or regional ESD coordinating offices. These could serve the following tasks:
 - Promoting educational landscapes for sustainable development;
 - Maintaining and expanding existing networks;
 - Establishing new networks as necessary to foster exchange between local authority, private-sector and civil society stakeholders and enable their educational activities to be incorporated into the educational landscape.
- The possibility will be explored of providing support for networking between the various partners within educational landscapes with specific ESD funding programmes.

⁶ www.uni-erfurt.de/fileadmin/public-docs/InnovationsnetzwerkBNE/QuaSi-BNE-Kriterien.pdf.

- A guideline will be developed setting out the learning spaces and elements along a people's educational biography that serve the purpose of a systematic, practical inclusion of non-school learning spaces in ECCE and school education.
- The possibility will be explored of creating competitions, certifications and awards for ESD educational landscapes or of adding them to existing competitions.
- Good practice examples will be collected and disseminated.

Objective 2:

By 2030, the guidelines are to be expanded to cover people's entire educational biography in line with the concept of lifelong learning, incorporated as a cross-cutting subject in higher education institutions and colleges, and implemented in all Länder.

Measures:

- New working groups, comprising members of the Expert Forum on Non-Formal and Informal Learning/Youth and the Expert Forums on Higher Education and TVET, will be set up for the purpose of extending the Curriculum Framework: Education for Sustainable Development and its inclusion in higher education.
- The possibility will be explored of appointing policy officers for ESD educational landscapes in competent authorities and institutions at the various levels.
- The possibility will be explored of entering into federal and Länder-specific cooperation or framework agreements for the support of educational landscapes along the length of the education chain and educational biography.
- The options will be explored for involving practitioners from existing and successful ESD educational landscapes in the structural and substantive onward development of research, training and practice (such as in a National Platform for Education Landscapes – see Objective 5).

Objective 3:

By the end of 2019, the options are to be explored for promoting multipliers for ESD management structures in educational landscapes.

Commitment of LernortLabor – Bundesverband der Schülerlabore e. V.:

To support networking between local non-formal and informal educational amenities, LernortLabor – Bundesverband der Schülerlabore e. V. will supplement the 'Lab Tour' presentations on schools labs at its annual congress with information about the educational landscapes that they are part of.

Measures:

- Elements of a training and multipliers programme will be developed for the management of educational landscapes.
- The possibility will be explored of a pilot project in five Länder for feasibility testing the specific thematic areas of the Expert Forum on Non-Formal and Informal Learning/Youth (narrative, inclusion and diversity, youth participation, etc.).
- Training and multipliers programmes will be evaluated and reviewed.
- Education modules for the working platform will be developed in the form of digital handouts.
- The Länder will explore the possibility of providing a training and multipliers' programme in all Länder (for example via existing service agencies).
- The options will be explored for establishing reliable funding structures for regionally organised implementation of the multipliers' programme.

Objective 4:

By the end of 2019, a national platform is to be established for regular professional exchange, quality assurance and the conceptual further development of ESD-focused educational landscapes.

Measure:

- The possibility will be explored of setting up a national coordinating office (for substantive and operational steering of all measures and for evaluation).

Objective 5:

A similar international exchange forum is to be established by 2030.

Measures:

- Collaborations with international educational landscapes will take place annually with varying thematic focus.
- Representatives and heads of ESD educational landscapes from the non-formal and informal learning/youth sector will regularly take part in international education conferences (UN, UNESCO, OECD, etc.).

Objective 6:

The target is for 150 local and regional ESD-focused educational landscapes to be promoted throughout Germany from 2017. For a potential successor to the UNESCO Global Action Programme (GAP) on ESD, the options are to be explored of establishing and arranging substantial prize money for a competition for the recognition of educational landscapes relating to ESD.

Measure:

- The training and multipliers programme is to be expanded into a virtual academy on ESD education landscapes.

Action Area V: Developing transformative metaphors and narratives

The culture of a society reveals itself in metaphors and narratives. These shape individual and collective action and form the basis of informal educational processes. The transformation of our society calls for new narratives in order to outline future scenarios and visions to which ESD aspires. This makes it possible to break ingrained patterns and open new avenues for a different, sustainable trajectory. Powerful metaphors and narratives are key to unleashing the transformative social impact potential of ESD.

Objective 1:

Metaphors and narratives are to become a fundamental dimension of sustainability for the majority of ESD practitioners by the end of 2019. Transformative metaphors and narratives create new visions that follow from a possible future and engender sustainable conduct.

Commitment of the Media Partner Network/Expert Forum on Non-Formal and Informal Learning/Youth and the Collegium for the Management and Design of Sustainable Development (KMGNE):

KMGNE, the Collegium for the Management and Design of Sustainable Development, in collaboration with the Media Partners Network and with the support of further partners, will prepare and organise a series of annual conferences from 2017 to 2020 on storytelling and forms of narrative in ESD.





The subject matter of the conference series will be (a) (re)discovering and developing forms of (media) narrative in ESD (fairy tales, old documentaries, new good practice examples, etc.), (b) audiovisual and digital formats for storytelling around sustainable development (such as web series) and (c) narratives of sustainable development (such as positive futures) versus narratives of non-sustainable development.

Measures:

- Inclusion of this cultural dimension of ESD will influence decisions in calls for tenders and awards around all ESD-related issues.
- ESD practitioners will enrich reason and fact-based discourse with metaphors and narratives embodying emotion and intuition. In this way, the discourse will gain greater impact.

- Metaphors and narratives are the basis of informal learning. The options will be explored for assessing and accounting for informally acquired knowledge, skills and abilities in connection with the German Qualification Framework (DQR).
- By 2018, an international literature and web study will be carried out to collate the available knowledge and experience on the generation, communication and transmission of metaphors and narratives by the media and to harness them for ESD. The outcomes will be compiled in a manual by 2019.
- Media communication is regarded as an important cultural technique and as a (potential) essential action area for sustainable development/transformation/climate culture. One research area will investigate how transmedial and transdisciplinary communication can be made an important element of ESD. The findings should be incorporated into relevant training.

Objective 2:

By the end of 2019, essential new stakeholders are to be engaged for ESD, primarily from the arts, culture and the media. These will help shape transformative metaphors and narrative, support their dissemination, and make use of metaphors and narratives to connect with other areas of informal education.

Measures:

- Metaphors and narratives will be used as a bridge to other areas of non-formal and informal learning and to other policy areas, such as Initiative Ästhetik und Nachhaltigkeit (the Aesthetics and Sustainability Initiative), Bundesverband Innovative Bildungsprogramme (the Federal Association of Innovative Educational Programmes) and Bundesvereinigung Kulturelle Kinder- und Jugendbildung (BKJ, the Federation for Arts Education and Cultural Learning).
- Places that operate at the interface between aesthetics, the media and participation in the arts and culture – such as libraries – are to be identified, brought on board and harnessed for ESD.

Objective 3:

By the end of 2019, the innovative and creative social impact potential of metaphors and narratives for ESD is to be investigated, experimented with and endorsed by practitioners and researchers. The existing social impact mechanisms and indicator systems around ESD are to be supplemented with this social impact potential of informal educational processes.

Measures:

- The social impact pathways and interdependencies will be analysed and harnessed by experts in social impact measurement working jointly with practitioners.
- The social impact pathways and interdependencies will be integrated into existing indicator systems and social impact mechanisms around ESD.
- Consulting and networking provision on the social impact of metaphors and narratives will be developed and made available to ESD stakeholders.

Objective 4:

By the end of 2019, ESD stakeholders are to develop the skills to make critical use of the potential of digital communication of metaphors and narratives. Sufficient consulting and training provision is to be made available.

Measures:

- Consulting and training on the opportunities and risks of digital communication media will be developed for ESD stakeholders. Acquiring and being taught media literacy will enable ESD stakeholders to recognise, assess and harness the form, content and background of sustainable development-related media communication (both in conventional print and broadcasting media and in online social media and platforms). They will take part in media discourse in order to introduce ESD-related concerns, subject matter and campaigns in the various communication media.

Commitment of Codewalk ICT Consulting (Sustainable Development Communication Agency):

Codewalk ICT Consulting will contribute its expertise in the discourse surrounding critical sustainable development communication using digital media in order to help attain the objectives under the National Action Plan.

- The options will be explored for incorporating ESD as a key action area in digital education events and projects funded by BMBF and other ministries (such as re:publica and Digital Transformation).
- A conference series will be established on issues related to narration in the context of sustainable development communication, primarily for journalists, science communicators and the public relations staff of associations, federations and business enterprises.

Action Area VI: Opportunities for freedom of action and expression

Providing sufficient opportunities for freedom of action and expression within education processes gives young people the opportunity for self-experience. Opportunities for freedom of action and expression enable young people to take part in decision-making processes, develop creative solutions and have an impact.

Objective 1:

By 2019, in relevant further training on teaching methods, decision-makers in formal and non-formal education structures are to be trained regarding the potential of opportunities for freedom of action and expression in relation to the implementation of ESD.

Measures:

- The necessity of creating opportunities for freedom of action and expression will be embedded (in the organisational structure) and communicated and disseminated via various communication channels and through training courses for decision-makers.
- The creation of opportunities for freedom of action and expression will be presented with the aid of educational tools and reflected in an educational approach featuring appropriate activities and methods.
- The professionals provided with this training will have educational skills, be trained in teaching methodologies in relation to the creation of opportunities for freedom of action and expression and put such opportunities into action.
- The need to create opportunities for freedom of action and expression will be reflected in organisations' mission statements or educational concept, objectives or approach. The potential of such opportunities will be highlighted.
- The options will be explored for providing and carrying out initial, further and/or continuing training for decision-makers on teaching methodologies in relation to the creation of opportunities for freedom of action and expression.

- The potential of opportunities for freedom of action and expression will be demonstrated with academic research findings.

Objective 2:

By 2019, associations, education amenities, foundations and/or interest groups are to strengthen young people's participation and codetermination with opportunities for freedom of action and expression.

Measures:

- The provision of sufficient creative opportunities for freedom of action and expression and of informal learning arrangements fosters self-reflection and creates a wide variety of possibilities for actively and creatively engaging with other people, nature and culture.
- Overly formalistic structures need to be relaxed as they can have the effect of a straitjacket on individual development.
- Sufficient opportunities will be made available to develop participatory skills, thus paving the way to full participation, independent learning and creativity.
- All education amenities will adopt a shared understanding that opportunities for freedom of action and expression are a key element of education and the development of personality. Awareness needs to be raised with regard to the fact that (for example) youth work in relation to ESD should be shaped and structured not on behalf of but with the involvement of the young people it targets. Codetermination and participation can only be made possible with the creation of opportunities for freedom of action and expression. Providing opportunities for self-organisation takes space and time.

Objective 3:

By 2030, teaching and learning processes in all educational settings are to be de-formalised and associations, education amenities, foundations and/or interest groups are to extend such processes with embedded opportunities for freedom of action and expression. Opportunities for freedom of action and expression promote participatory skills.

Measures:

- Unpurposed opportunities for freedom of action and expression ('free spaces') will be put to use and structurally embedded. They will contribute to an increase in social, political or voluntary engagement. This is essential to participation and shaping the future.
- All education processes will feature sufficient opportunities for freedom of action and expression in which subject matter and content can be worked on independently.

Objective 4:

By 2030, decision-makers in formal education structures are to create free educational opportunities in order to promote self-efficacy among young people and enable their participation in the selection and shaping of future-related issues. Opportunities for freedom of action and expression are to be firmly embedded in formal education structures but should enable young people to learn and experience subject matter of their own choosing.

Measures:

- Sufficient opportunities for freedom of action and expression in the educational process provide scope for self-experience and enable young people to take part in decision-making processes, develop creative solutions and have an impact.
- Activities and projects to this end require participation by the target audience in order to succeed. Important factors in this regard are relevance to practical experience, an attractive learning environment/stimulating learning opportunities and use of appropriate methods.
- Alongside the communication of knowledge, the focus is on hands-on experience and action together with practical self-experience.

Action Area VII: Developing viable funding models and instruments

Further support systems are needed that accompany the process from project to structure so that it is made permanent and can further evolve. These are to be secured with long-term funding instruments that cut across all thematic areas and sectors. Existing ESD funding is to be reviewed and revised.

Objective 1:

By the end of the GAP, quality criteria for the non-formal and informal sector are to be sufficiently well-defined, standardised and accepted to serve as criteria for funding instruments..

Commitment of Arbeitsgemeinschaft Natur- und Umweltbildung Bundes- verband e. V. (ANU):

ANU will contribute to a study that will develop quality criteria by the end of 2018 to serve as the basis for viable new funding instruments.

Measure:

- These quality criteria will be determined in a study by the end of 2018. They will be based among other things on the existing Länder funding criteria (such as those of the North German Partnership for ESD, "NUN Länder") and the German Commission for UNESCO's award criteria for learning spaces, networks and local authorities under both the GAP and the UN Decade.



Objective 2:

From 2017, the funding providers in the National Platform on ESD and its associated committees (local authorities, the Länder, the Federal Government, foundations, the private sector, etc.) will consult on a suitable allocation of responsibilities for the provision of resources for non-formal and informal ESD. It is important to ensure transparency in this regard.

Measures:

- The options will be explored for developing funding guidelines for the non-school ESD sector based on the quality criteria formulated under Objective 1.
- The options will be explored for establishing a structure for funding providers by:
 - An agency for ESD networking and for networking among funding providers;

- Analysis of the stakeholders and the development of conceptual frameworks for the funding of non-school, non-formal and informal ESD

Objective 3:

By the end of the GAP in 2019, support systems are to be developed to enable high-quality non-formal and informal ESD to move from project to structure.

Measures:

- The options will be explored for funding capacity building in the non-formal and informal sector by:
 - Transfer of good practice projects and replication elsewhere – the establishment of good practice projects for a substantial period (5–10 years) by 2019;
 - Low-threshold (micro) funding for capacity building, for groups such as young people (see Bremerhaven foundations and Youth Climate Council/Hesse sustainable development councils) (see also Action Area I, Objective 5).
 - Partial staff and monetary budget resource allocation for non-formal and informal education amenities as partners to formal education institutions within the educational landscape (on the model of the Lower Saxony Environmental Education Centre for ESD (RUZ), biological stations in North Rhine-Westphalia in liaising on nature conservation between government and environmental organisations; payment of fees for environmental centres to provide consulting for schools, such as in Hesse, etc.);
 - Incorporation of educational activities into sustainability programmes and activities with corresponding budget resource allocations.
- Establishment of support agencies:
 - At local level, for example as coordinating offices for educational landscapes (cooperation with the formal education sector);
 - The options will be explored how, similar to BMZ coordinators at Länder and federal level, ESD coordinators can take up work by 2030 and connect with the Regional Hubs for Sustainability Strategies (RENNs). Tasks: Quality assurance/ quality development, exchange of experience and training in fundraising (sponsorship) and, for example, cooperation with the formal education sector.



Local Authorities



Local Authorities

The transformation to sustainable development will only succeed if sustainability is established and implemented at local level. A large number of local authorities already recognise sustainability as a location factor and a key issue for the future. Numerous local authorities already show the way, including the 21 Official Local Authorities of the UN Decade that have amassed expertise and built networks on ESD over many years, the 50-plus ESD local authorities that took part in the BMBF City of the Future competition launched in 2015, and the local authorities that BMBF and the German Commission for UNESCO recognise each year at the ESD Agenda Congress for their outstanding work for ESD. As these good examples show, local authorities play an important part in implementing successful Education for Sustainable Development (ESD).

UNESCO highlighted “accelerating sustainable solutions at local level” as one of five priority action areas in its roadmap for the implementation of the GAP for the years 2015–2019. UNESCO regards ESD in cities, towns, administrative districts and local communities as a key supporting factor in successful sustainable development. It lists important milestones as including the integration of ESD programmes and ESD perspectives into the planning and decision-making processes of the community, the strengthening of ESD networks and the active involvement of public decision-makers.

The Sustainable Development Goals (Agenda 2030) are to be achieved internationally by 2030. The Federal Government and the Länder have committed to this. The GAP provides the opportunity and framework to take up the SDGs at local level and to address and advance them conceptually and with specific action by implementing ESD.

The action areas and objectives below outline how local authorities that are open to more ESD can go about embedding ESD in the community. They provide examples of steps on the road to the implementation of ESD at local level. The nature of this road is determined by what has been done so far and by the capacity of each and every city, town and community for action with the involvement of local education stakeholders. The recommendations contained in the following aim to help local authorities in systematically attaining their goals for sustainable development by deploying ESD as a tool and getting as many stakeholders as possible on board in a participative process.

Cross-cutting measures:

- The Federal Government and the Länder will look into the use of suitable structures to support and promote the further development of local authorities aiming to implement ESD at local level. For this purpose, the Expert Forum on Local Authorities has developed the idea of one or more ESD competence centres. The objectives

and tasks of an ESD competence centre are based on the action areas and objectives of the National Action Plan on ESD and in particular those of the Expert Forum on Local Authorities. This leads to the following potential work modules for ESD competence centres:

- Presenting information on best practice in establishing ESD in local authorities;
 - Process-related advice and support in implementing ESD projects, networks and structures in local authorities (for example compiling and publishing model documents and model local council resolutions in order to provide local authorities with strategic support and information about the tools available);
 - Support for knowledge transfer; horizontal networking (with other local authorities and within the region) and vertical networking (with the Länder, the Federal Government and at international level).
 - Public relations.
- The members of the Expert Forum on Local Authorities will promote the implementation of the National Action Plan on ESD in their professional structures, networks and committees.

Commitment of the Federal Ministry for Economic Cooperation and Development (BMZ):

Through Engagement Global's Service Agency Communities in One World (SKEW), BMZ funds support services for local authorities in the field of local development policy. SKEW provides various forms of support for local authorities, including a small projects fund and personal support from coordinators for local development policy; aspects relating to the promotion of ESD can be taken into account in the application process. There are also numerous overlaps with one of SKEW's own areas of activity, Local Sustainable Development; this is reflected in the measures set out in the following.

Action Area I: ESD as a location factor

ESD activities can be a location factor if local leaders publicise and promote them. This begins with featuring ESD in local authority reporting (such as in education reports) and making reference to ESD in local authority publicity material (for example with a special ESD news section or by using the GAP logo).

The local authority website should provide an overview of learning opportunities or links for local government staff and the public to obtain further and continuing training on ESD and acquire ESD knowledge and skills. This raises the visibility and potential of ESD for enhancing the attractiveness of the community. District councillors and mayors can highlight particularly successful ESD projects and activities at public relations events.

Commitment of the German Association of Local Utilities (VKU):

The German Association of Local Utilities supports its member utilities in delivering on their commitment to ESD. To create lasting environmental awareness, local public utilities start with the very youngest – on topics such as avoiding and separating waste.

Objective 1:

The highest representatives of ESD local authorities are to lead by example and demonstrate the importance they attach to ESD and the GAP, for example by personally taking part in related educational opportunities (such as discussions, event openings and local campaigns).

Measures:

- Local authority associations will show that they attach similar importance to ESD and will make a corresponding recommendation to local authorities.

Objective 2:

ESD is to become an integral part of local authority press relations. Releases on educational or specialist topics are also to highlight links to ESD.

Objective 3:

ESD local authorities are to publish a local education report relating to ESD or a GAP report, where possible looking ahead as far as 2030.

Measures:

- The Expert Forum on Local Authorities and the Local Authorities Partner Network, working in consultation with BMBF, will develop substantive recommendations and guidance on how ESD can be incorporated into local and regional education reporting.
- Local authority associations will issue a corresponding recommendation for local authorities to incorporate ESD in their local/ regional education reporting or as a subject in reporting on other issues.

Objective 4:

Each ESD local authority will publish and regularly update an online list of ESD learning spaces and stakeholders. Previously unrepresented target groups are to be addressed to an increasing extent and brought on board where possible.

Objective 5:

Local authorities are to spearhead ongoing public relations for ESD in their decision-making bodies, associations and networks.



Action Area II: ESD skills building in policy-making, civil society and administration

Sustainable development must be taken into account to a greater extent in local authority activity areas and processes. Accordingly, local authorities should step up corresponding education and communication activities with maximum civil society participation. Sustainable development should be established as a guiding principle in all administrative departments.

Further and continuing training needs should be identified on the basis of the existing knowledge and abilities of local government staff and a continuous process should be engineered to ensure cross-departmental discussion and the integration of local sustainability goals into administrative practice. In addition, ESD activities need to be promoted in civil society and policy-making and it is necessary to develop criteria and indicators so that local authorities can better monitor and assess the quality of local ESD work.

Cross-cutting measures in Action Area II:

- The Federal Government, the Länder and local authorities will look into the provision of ongoing training.
- Development of local authority e-participation/ smart city platforms promoting the establishment of ESD.

Commitment of the Federal Ministry for Economic Cooperation and Development (BMZ):

The Service Agency Communities in One World (SKEW) contributes to awareness raising about sustainable development issues and their establishment at local level with symposia and conferences on the Agenda 2030.

Objective 1:

Local authorities wishing to implement ESD are to launch an inter-departmental Sustainable Community project (working title) and provide staff with ongoing training in sustainable development/ the SDGs and ESD. They will present regular reports with further proposals.

Objective 2:

By 2019, a local resolution is to be adopted for the use of education and communication as instruments of ESD in all important local authority development and planning projects.

Objective 3:

By the end of 2019, all local authority-funded education institutions are to be called upon, in a target-setting agreement with the local authority, to incorporate sustainable development on the basis of the SDGs in their mission statement.

Objective 4:

ESD local authorities are to support – where applicable on the basis of existing structures – the establishment of ESD-focused educational landscapes in order to advance specific sustainability issues relating to the SDGs. Education facilities, charities, the private sector and local civil society are to be involved in the process. A conceptual framework is to be developed for this purpose by the end of 2017 and a report presented in 2019.

Measure:

- The Federal Government, the Länder and local authorities will explore the options for integrating ESD on a permanent basis in education regions/ education networks/educational landscapes and similar structures.

Commitment of Bündnis Zukunfts-Bildung/BUND (Friends of the Earth Germany) and BUNDjugend (Young Friends of the Earth Germany):

BUND and BUNDjugend support the establishment and development of education regions/education networks/educational landscapes. In many Länder, there are BUND-supported environmental education centres and/or networking points that, with their contacts, knowledge and activities, constitute or have the potential to become an important local partner.

Measure:

- The Expert Forum on Local Authorities will address the work outcomes of the German Conference of Environment Ministers working group on quality development for the purposes of Education for Sustainable Development.

Objective 5:

ESD local authorities are to launch an ESD quality drive, for example with an ESD award process for education facilities and individuals. By 2019, they will lay down quality criteria for the non-school (non-formal) sector that are based on the ESD quality development processes of the respective Länder and on Federal Government award criteria.

Commitment of the Free and Hanseatic City of Hamburg:

The Free and Hanseatic City of Hamburg will implement and further develop NUN (North German Partnership for the Support of the UN Decade of ESD) certification in Hamburg and so contribute to quality development in non-school ESD.

Action Area III: ESD incentives and permanently establishing ESD in all local authorities

Using a 'positive list' drawn up by ESD local authorities, local authorities that have not yet incorporated ESD in their portfolio are to be persuaded of the necessity and feasibility of establishing ESD as a cross-cutting responsibility. Local authority associations will back up local authorities with a joint declaration. ESD skills will be incorporated in the job descriptions of local authority employees.

Cross-cutting measures in Action Area III:

The ESD portal (www.bne-portal.de) is to be revised and expanded to improve networking, both vertical (internationally and with the Federal Government and the Länder) and horizontal (with other local authorities and regionally). In particular, examples for replication will be incorporated from local authorities and regions. The continuously updated resources on the portal include:

- The voluntary commitment of ESD local authorities to the GAP;
- Good practice examples accessible using a targeted search function by thematic area and region;
- Links to local authority documentation;
- Local authority liaison officers.

Objective 1:

Local authority associations are to consult in their decision-making bodies on how they can underscore the relevance of ESD for the development of member local authorities.

Measure:

- The Expert Forum on Local Authorities will provide the local authority associations with substantive support.



Objective 2:

The ESD activities of local authorities are to be incorporated and supported in Federal Government and Länder sustainable development strategies.

Measure:

- Local authority activities are to be collated in a report for the Federal Chancellery and the German Conference of Environment Ministers for revision of the German Sustainable Development Strategy in 2018 and of the Länder sustainable development strategies.

**Objective 3:**

By 2022, local authorities are to be enabled to provide advice and support on the implementation and development of ESD. For this purpose, regional or trans-regional supporting structures are to be established, tested and further developed by the end of the GAP (2019).

Objective 4:

In relevant fields, ESD is to be incorporated as a skill in job descriptions and employee assessment processes.

Measure:

- The Länder and local authorities will look into whether and how ESD can be incorporated into the content of further and continuing training provided by local authorities and universities of applied administrative sciences.

Objective 5:

By the end of 2017, in collaboration with local authorities, a 'positive list' is to be drawn up showing the benefits for local authorities of incorporating ESD in their mission statements.

Commitment der Codewalk ICT Consulting (Sustainable Development Communication Agency):

Codewalk ICT Consulting supports collaboration between ESD local authorities with its expertise from the UN Decade in Bad Honnef to produce a positive list of arguments for incorporating ESD in local authority mission statements and highlighting the positive impact of ESD on local communities.

Measures:

- The Local Authorities Partner Network will develop a positive list for this purpose, including the positive impacts of ESD for local communities.

Action Area IV: Networking and participation

An inventory of examples of good ESD practice is to be compiled and continuously updated in order to enable networking among local authorities and so that the various ESD initiatives, civil society, policy-making, administrative and local utility stakeholders within local authorities can join forces to establish ESD-focused educational landscapes. In addition, ESD activities are to be stepped up and a range of means are to be used for promoting the participation of all groups of the population in ESD.

Objective 1:

By 2019, good practice examples of ESD in local authorities are to be compiled in quantitative and qualitative documentation.

Commitment of the German Association of Local Utilities (VKU):

The German Association of Local Utilities is able to provide specific good practice examples from Local Utilities on the basis of its evaluation of the European Week for Waste Reduction and Let's Clean Up Europe.

Measures:

- With the support of BMBF, the Local Authorities Partner Network will compile a list of good practice examples of ESD in local authorities.
- The Federal Government will look into awarding a research contract, in collaboration with the Expert Forum on Local Authorities and the Local Authorities Partner Network, for the development of the documentation concerned.

Objective 2:

By 2019, the documented good practice local authorities are to have developed established and publicly known networks with other local authorities in which they implement joint projects.

Objective 3:

Collaborations among local authorities on ESD are to be documented by 2019.

Measure:

- The German Commission for UNESCO will appraise the documentation of collaborations among local authorities (such as national and international twinings) and development of a suitable report format.

Objective 4:

By 2019, a list of criteria is to be developed and tested for use after the end of the GAP for ongoing monitoring of local authority education activities on a voluntary basis or for local authority self-evaluation.

Objective 5:

By 2019, in connection with the inventory of local authority good ESD practice (see Objectives 1, 3 and 4 in this Action Area) and in collaboration with ESD local authorities, the various participation formats and the participation rates for the various groups of the population involved are to be determined and suitable action is to be taken to improve them.

Measures:

- Local authorities will designate a local liaison officer for ESD or, according to regional circumstances, a central liaison officer for a regional grouping of local authorities.
- Local authorities will support ESD management in the local/regional educational landscape, for example in the form of an education advisory board or a round table of all education providers (local and regional) or a local council on Education for Sustainable Development. Existing structures can be used for this purpose where available.

Action Area V: Developing a local authority sustainable development code

Local authorities are to adopt ESD as part of their development strategy. Local authorities' highest representatives (such as mayors, district administrators and district councils) are to declare their commitment to implementing the GAP. A local/district council resolution and an action plan are to be adopted for the binding establishment of ESD in local authority processes and communication. The further development and communication of good practice requires networking among local authorities. To ensure the permanent establishment of ESD, it is to be established as a functional responsibility in local administration.

Objective 1:

Local authorities are to give a voluntary commitment to implement the GAP and any successor programme.

Objective 2:

Local authorities are to prepare local programmes and, for this purpose, adopt action plans of their own with targets for the future by 2019 and by 2030.

Commitment of the Free and Hanseatic City of Hamburg:

The Hamburg Senate has commissioned an ESD initiative, 'Hamburg lernt Nachhaltigkeit', to develop an ESD action plan ('master plan') for Hamburg and to submit a report by the end of the GAP in 2019.

Measures:

- The Expert Forum on Local Authorities and the Local Authorities Partner Network will compile good practice examples for the ESD portal, www.bne-portal.de.
- The local authorities will look into how ESD can be established as the basis and driver of sustainable development in local authority sustainable development strategies for the implementation of the Agenda 2030.
- The possibility will be explored of making use of indicators developed by local authorities in the implementation of Agenda 21 for status reviews and progress reports on the subject.

Objective 3:

Local authorities and their representatives are to contribute on an ongoing basis to the establishment of networks, both vertical (internationally and with the Federal Government and the Länder) and horizontal (with other local authorities and regionally).

Objective 4:

By 2019, local authorities will designate a liaison officer for ESD as a cross-cutting responsibility.

Measure:

- The Federal Government and the Länder will explore how local authorities can be supported, taking into account their respective circumstances, with funding programmes for the coordination of ESD in individual local authorities.

Objective 5:

ESD is to be embedded in administration in such a way as to enable direct communication with top management.

A group of diverse children, including a girl with blonde hair, a boy with dark skin, and a girl with long dark hair, are reaching up with their hands to touch a large, colorful globe of the Earth. The globe is positioned at the top of the frame, and the children are looking up at it with interest. The globe shows various continents in different colors: North America in red, South America in yellow, Africa in orange, Europe in green, and Asia in blue. The children are wearing colorful clothing, and the background is a plain white wall.

2. Education for Sustainable Development until 2030 – Conceptual and Policy Framework

Education for Sustainable Development (ESD) fosters dialogue, orientation knowledge, creative and critical thinking, as well as holistic learning with due regard to religious orientation and cultural values. It targets the will to take responsibility for one's own actions, to deal with uncertainties and contradictions, to solve problems and to participate in shaping a democratic and culturally diverse society. Churches and religious communities can make an important contribution in this regard and bring wide-ranging experience into the process.

ESD creates scope for experimentation and creativity around sustainability solutions and social innovations. It operates here at two levels: at the level of knowledge and at the level of ability, of skills and competencies. On the one hand, it imparts fundamental knowledge for addressing key societal problems. On the other hand, ESD aims to enable students to recognise challenges and find their own approaches and solutions – in other words, to acquire skills to shape their future (Bund-Länder-Commission for Educational Planning and Research Promotion 1999, p. 62). This is based on the OECD Competency Framework (2005).

ESD draws on historical links to environmental education, global education, peace education, consumer education, intercultural education and democratic education.

ESD learning spaces

Confrontation with global challenges takes place in the parental home, in preschool, at school and in higher education, in clubs and societies and in the workplace, and thus in places of formal, non-formal and informal learning. Everyone should know what, and how, they can contribute to their community. This entails critically questioning values and developing personal engagement. ESD also provides the wherewithal for proper present and future discourse in the private and professional sphere, as well as in political contexts indispensable to sustainable development. To facilitate this learning experience, ESD needs a space – a learning space for sustainable development. Learning spaces can achieve their full innovative capacity when they operate holistically, meaning when a school, an organisation, a business enterprise or a local government administration bases learning processes and methods as well as management around the principles of sustainability, having due regard to skills building for students,

multipliers and employees alike. Fostering learning spaces that operate holistically in this way is therefore the focus of the Global Action Programme on ESD, in what UNESCO refers to as the whole institution approach.

Good ESD

Since the UN Decade of ESD 2005 to 2014, Germany has been internationally regarded as a pioneer in ESD. The Federal Ministry of Education and Research and the German Commission for UNESCO have jointly recognised nearly 2,000 projects, 49 specific measures and 21 local authorities for good practice. The task now is to move on from the broad sweep of projects and individual activities to long-term implementation, with enduring networks, established structures and flagship projects that have widespread impact. So what constitutes good ESD and how can we improve what is already there? The Federal Ministry of Education and Research and the German Commission for UNESCO are in the process of taking the next step under the Global Action Programme: Since 2016, they have conferred awards on learning spaces, networks and local authorities for structural implementation of ESD. In this way, Germany is meeting its own aim, following the UN Decade, of making the step “from project to structure”.⁷

The establishment of an agenda process with the National Platform, Expert Forums, Partner Networks and the annual Agenda Congress likewise serves the purpose of better and more permanent structural implementation of ESD throughout Germany. This agenda process spearheaded by the Federal Ministry of Education and Research is unique worldwide. It implements one of the five priority action areas under the Global Action Programme.

To enable strategic focus and foster stakeholder commitment, the GAP identifies five priority action areas to advance the ESD agenda.

⁷ German Commission for UNESCO (2014).

Priority Action Area I

Advancing policy: Mainstream ESD into both education and sustainable development policies, to create an enabling environment for ESD and to bring about systemic change.

Policy framework

The UNESCO Global Action Programme on Education for Sustainable Development (2015-2019) serves to implement Target 4.7 of the UN Sustainable Development Goals:

The GAP deploys a two-fold approach:

- “To reorient education and learning so that everyone has the opportunity to acquire the knowledge, skills, values and attitudes that empower them to contribute to sustainable development”
- “To strengthen education and learning in all agendas, programmes and activities that promote sustainable development”⁸

To this end, the UNESCO Roadmap for implementing the Global Action Programme identifies five priority action areas:

1. Advancing policy,
2. Transforming learning and training environments,
3. Building capacities of educators and trainers,
4. Empowering and mobilising youth,
5. Accelerating sustainable solutions at local level.⁹

In order to achieve these goals and explicitly advance ESD more effectively in the five priority action areas, UNESCO collaborates in the international implementation of the GAP with approximately 100 **international key partners**, which form Partner Networks on each of the five areas. In 2015, BMBF became one of the first partners to give its commitment in this regard. Some 400 international actors met, including the German members of the international Partner Networks, during the UNESCO Week for Peace and Sustainable Development from 6 to 10 March 2017. At this first international conference, BMBF, together with the Japanese Ministry of Education and the Kenya Ministry of Education, organised a workshop in which partners discussed various policy options to advance the practical implementation of ESD.

This and similar events provide key publicity for ESD as a core element of sustainable development. Moreover, ESD is visibly gaining significance at both international and national level. All 17 SDGs underscore the importance of education to their attainment. The essential role of education was also emphasised at the 2015 UN Climate Change Conference (COP 21) in Paris. The importance of education in raising awareness for climate change is recognised in Articles 11 and 12 of the Paris Agreement.

⁸ UNESCO (2014). UNESCO Roadmap for Implementing the Global Action Programme on Education for Sustainable Development.

⁹ UNESCO (2014), p. 15

The Federal Government shares this view and has assigned a special role to ESD. The revised German Sustainable Development Strategy refers to the need for ESD to be made accessible as an overarching concept that allows people to acquire social, cognitive and emotional skills.¹⁰

Central cross-cutting issues for achievement of the GAP priorities

In furtherance of the aim of moving from project to structure, the National Action Plan (NAP) contains recommendations for the education sectors of ECCE, school, higher education, and TVET. These are supplemented with two cross-cutting areas: non-formal and informal learning and youth, and ESD in local authorities.

There are also overarching issues that are central to all areas for the implementation of ESD. These provide key entry points for the implementation of ESD and are referred to cross-cutting issues in the National Action Plan. The cross-cutting issues in the National Plan of Action are as follows:

- **ESD as a cross-cutting responsibility of the entire education system**

Federal and Länder ministries and subordinate authorities in education administration are called on to implement ESD as a cross-cutting responsibility. Local authorities have special responsibility with regard to starting networks for ESD as they are able to bring together relevant stakeholders at local level.
- **Integrating ESD into curricula and syllabuses**

The Länder have already integrated ESD into curricula and syllabuses in a wide variety of ways in recent years. It is necessary to examine in what areas the National Action Plan on ESD identifies further developments and what recommendations can be made for the incorporation of ESD in curricula. Building on this, strategies and approaches need to be developed for enhanced implementation of ESD in educational practice.
- **Integrating ESD into initial and further training of educators and trainers**

Educators and trainers are key stakeholders in the implementation of ESD. In order to build relevant knowledge, skills and competencies, ESD needs to be structurally established in initial, further and continuing training. The enabling framework, quality standards and support measures are to be developed within the relevant areas of responsibility.
- **Quality assurance in ESD**

Quality criteria and indicators are to be developed in order to assure and improve the quality of ESD. The quality criteria are to be based on current educational science and educational psychology findings. Existing indicators such as those provided in the German Sustainability Code are to be included and revised for the purpose.
- **Transformation of learning and training environments**

An important aspect with regard to sustainability in organisational and human resources development is the structural implementation of ESD. Participation is a key element in the transformation of learning and training environments. This includes heads of education institutions, educators, students, parents, local authorities and civil society stakeholders. The participation of young people in particular is underscored as an objective in this regard.

¹⁰ Federal Government (2016), p. 95.



3. Implementation of the UNESCO Global Action Programme on Education for Sustainable Development in Germany

Following completion of the UN Decade (2005–2014), the concluding document to the UN Decade in Germany called for Education for Sustainable Development (ESD) to move on “from project to structure”¹¹. Germany has adopted this as its guiding principle in the implementation of the UNESCO Global Action Programme on Education for Sustainable Development (GAP ESD 2015–2019). Achieving it requires the participation of policymakers, the scientific community, the private sector and civil society. All stakeholders in the various committees have worked on developing the National Action Plan on ESD. As the commitments in the National Action Plan show, numerous activities have already been launched for its implementation in a large number of formal and non-formal educational institutions and business enterprises. The following bodies and activities serve the implementation of the GAP ESD in Germany:

The National Platform on Education for Sustainable Development

The National Platform on ESD is the central decision-making body for the national implementation of the Global Action Programme. It was established by the Federal Minister of Education and Research Prof. Dr. Johanna Wanka on 29 September 2015. Chaired by State Secretary Cornelia Quennet-Thielen, 37 decision-makers from policy-making, the scientific community, the private sector and civil society developed the National Action Plan in five sessions.

Youth participation in the national implementation process has been increased in line with GAP Priority Action Area 4. Representatives of leading youth associations, such as the German Federal Youth Council (DBJR) and Youth Association for the Protection of Nature (NAJU), are thus active both in the National Platform and the Expert Forums. From the summer of 2017, a separate Youth Forum will additionally contribute to implementing the National Action Plan. The members of the Youth Forum will serve as change agents to further motivate young people for ESD.

The Expert Forums

Six Expert Forums support the National Platform as central working and expert groups:

- Early Childhood Care and Education;
- School;
- Technical and Vocational Education and Training;
- Higher Education;
- Non-Formal and Informal Learning/Youth;
- Local Authorities.

Appointed by the National Platform, the members of the Expert Forums developed the main draft of the National Action Plan on ESD. They will also support the implementation of the Action Plan in the second national implementation phase of the UNESCO Global Action Programme, for example by monitoring the implementation progress and preparing expert reports. The various Expert Forums meet on average five to six times a year and convene at an annual meeting of all Expert Forums. The Expert Forums include education experts for the various education sectors from policy-making, the private sector, the scientific community and civil society (see Appendix: Members of the Expert Forums).

The Partner Networks

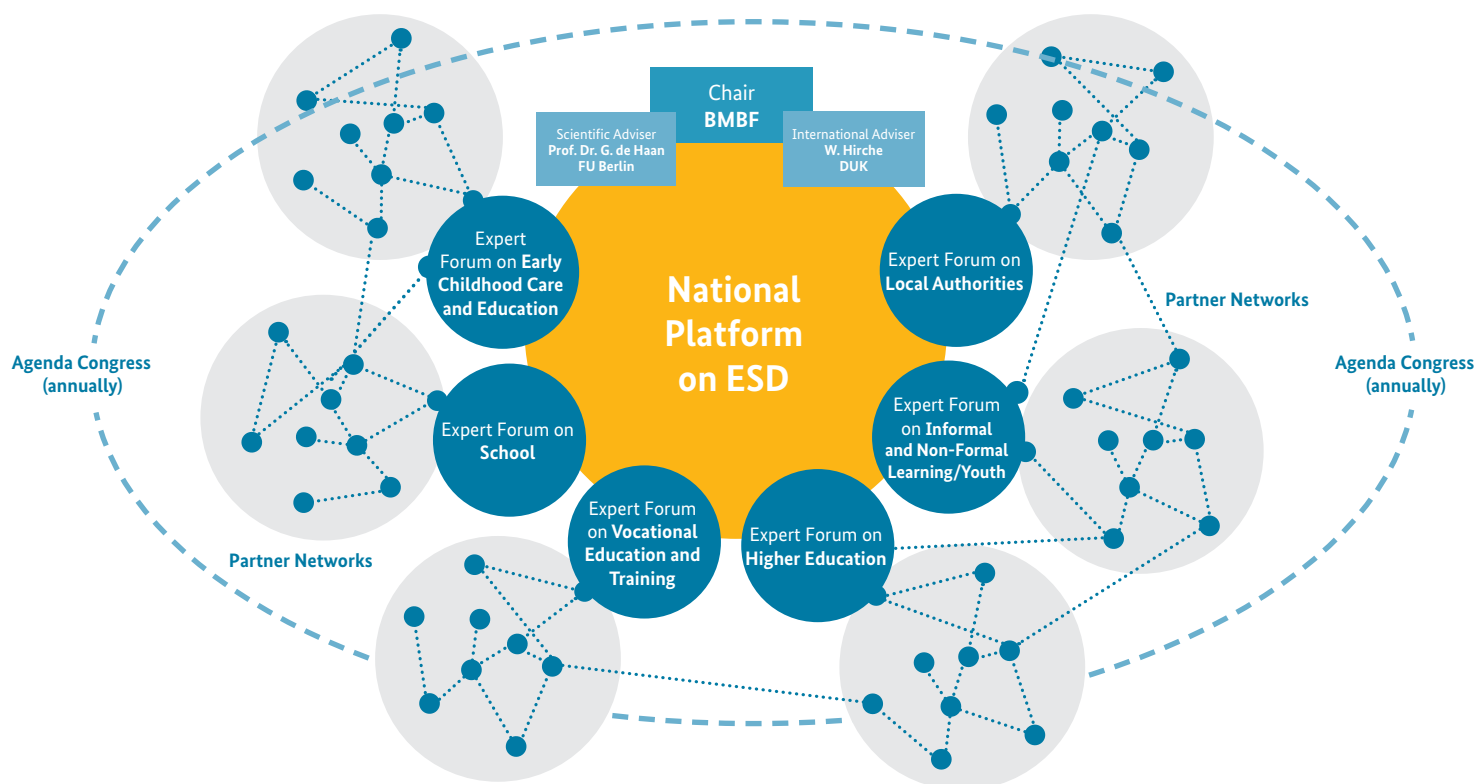
Ten Partner Networks contribute to the networking of stakeholders in educational practice and provide key impetus in the implementation of ESD on the ground. The networks also perform the important task of initiating good practice examples. They contribute extensive expertise gained in the working groups of the UN Decade of ESD to the UNESCO Global Action Programme process.

The ten Partner Networks are as follows: Non-formal Education and Informal Learning, Local Authorities, Media, School Education, Higher Education, Economy and Consumption, Biological Diversity, Initial and Continuing Vocational Training, Early Childhood Care and Education, and Cultural Education and Cultural Policy.

The National Platform is advised in scientific matters by Professor Dr. Gerhard de Haan of Free University Berlin and in international matters by Minister (ret.) Walter Hirche, former President of the German Commission for UNESCO.

¹¹ German Commission for UNESCO (Eds.) (2015). UN Decade with Impact: 10 Years of Education for Sustainable Development in Germany.

Implementation structure under the UNESCO Global Action Programme on Education for Sustainable Development



Key instruments during the implementation phase: The annual Agenda Congress

Organised by the Federal Ministry of Education and Research, the Agenda Congress takes place once a year. This national event is a forum for expert discussions and new ideas on ESD. It is directed at active practitioners and all interested members of the public. The participants have the opportunity to exchange ideas, network and work together on advancing the implementation of ESD.

The first Agenda Congress attracted over 650 participants and was held in Berlin on 11 and 12 July 2016. Discussions centred on topics such as youth participation in the GAP, ESD strategies for local authorities and long-term education partnerships, ESD as an engine for integration, and sustainability in higher education. The second Agenda Congress will take place in Berlin on 27 and 28 November 2017.

Awards for ESD: Networks, local authorities and learning spaces

Good practice examples serve as models and achieve widespread impact by showing how ESD can successfully move on from project to structure. The German Commission for UNESCO already awarded numerous projects, activities and local authorities with great success during the UN Decade. The award criteria have been fully revised in the NAP ESD. Since 2016, BMBF and the German Commission for UNESCO have conferred awards in the three categories Learning Spaces, Networks and Local Authorities. Their hallmark is a particularly successful and long-term implementation of ESD. Some 65 local authorities, learning spaces and networks were selected for award at the 2016 Agenda Congress. The award winners make an outstanding contribution in implementing the United Nations Agenda 2030 and the GAP ESD in Germany.

The German ESD portal

Set up by the German Commission for UNESCO and funded by BMBF, the German ESD portal (www.bne-portal.de) has become established as the central German information site on ESD. The portal provides introductory information on ESD. It also presents all relevant information about the ESD awards and insights into the work of existing award laureates. This information is supplemented with training materials on implementing ESD. The platform is also intended to improve networking among stakeholders who implement ESD. Institutions and organisations can thus enter themselves on a map in the portal and exchange information on activities.

The commitments under the National Action Plan are published on the German ESD portal and can be updated there on an ongoing basis.

National monitoring for ESD

The office of the Scientific Adviser on the Global Action Programme, Prof. Gerhard de Haan, performs monitoring to track ESD in the German education system. This is done with the aim of reviewing the quality of ESD activities in all education sectors and of drawing a systematic and detailed picture of ESD implementation.

A further aim is to identify the leverage points that are expected to be found in the education system and have the potential to be particularly effective in promoting broad implementation of quality ESD in all education sectors.

The results and progress of the monitoring are regularly documented and prepared in the form of progress reports for the bodies involved in the national implementation of the GAP.

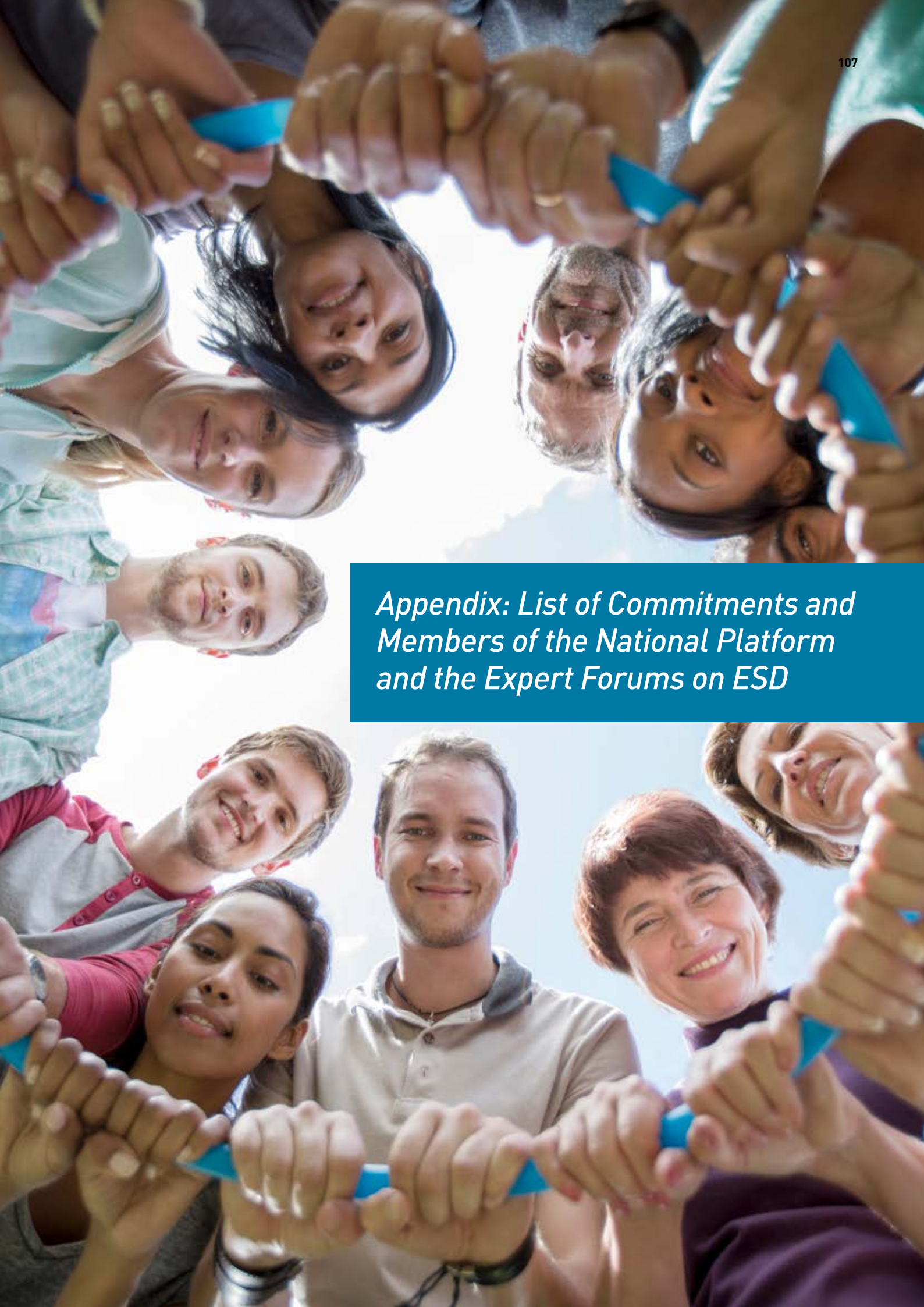
Outlook

The National Action Plan is intended as a frame of reference. It shows how ESD in Germany can be structurally implemented for the long term and improved in quality. It is our expectation as the members of the National Platform that the measures proposed in the National Action Plan will be implemented in full. At the start of the implementation phase, the expert forums undertook to make their expertise available and provide guidance, recommendations and support.

Following the end of the UNESCO Global Action Programme in 2019, Germany is under international obligation to present an evaluation covering the implementation of the National Action Plan and the previous process. With a view to the long-term goal of Agenda 2030, priorities in 2019 will be:

- 1) To review target attainment;
- 2) To adjust and if necessary revise the objectives;
- 3) If applicable, to add new objectives with a view to the overarching Target 4.7 under the SDGs.

The National Action Plan is an important step towards the widespread implementation of ESD. It is now crucial to breathe life into the National Action Plan in order to progress from 'plan' to 'action'. The National Action Plan is an important milestone, but not an end in itself. It will continue to be developed with the existing and new commitments – by the members of the various national GAP bodies, meaning the National Platform, the Expert Forums and the Partner Networks, as well as by other stakeholders in the national education system.



Appendix: List of Commitments and Members of the National Platform and the Expert Forums on ESD

List of all commitments¹²

Cross-cutting commitments



Federal Ministry of Education and Research (BMBF)

- For the development of the National Action Plan on ESD, BMBF launched a comprehensive participative process involving other ministries, the Länder and local authorities as well as stakeholders from the scientific community, the private sector, civil society and education. BMBF will continue to support and coordinate the participative multi-stakeholder process in the implementation of the National Action Plan through to the end of the UNESCO Global Action Programme on ESD (2015-2019).
- BMBF promotes networking among ESD stakeholders by organising the annual ESD Agenda Congress through to the end of the UNESCO Global Action Programme (2015-2019). This national event is a forum for expert discussions and new ideas on ESD. The Agenda Congress is directed at active providers, initiatives that wish to get involved and members of the bodies implementing the Global Action Programme on ESD in Germany.
- In the implementation of the NAP, BMBF funds monitoring by Institut Futur (Free University Berlin) in order to assess the extent to which ESD is integrated in the various educational sectors.

- The monitoring provides the Federal Government and the Länder with science-based and data-based support in the implementation of ESD.
- BMBF will publish a funding directive for the development of ESD indicators so that the resulting indicators or indicator sets can, among other things, be integrated into the National Sustainable Development Strategy and also into Länder sustainable development strategies.
- For the dissemination of ESD good practice examples and for networking among ESD stakeholders, BMBF will fund awards for networks, learning spaces and local authorities that incorporate ESD into their work in an exemplary way.

Association of German Foundations (BVDS)

- Through its Working Group on the Environment and Network of Foundations and Education, BVDS promotes networking among national and regional foundations involved in sustainable development/ESD. In the same connection, BVDS supports the transfer of knowledge between foundations and liaison with other stakeholders.

German Federal Environmental Foundation (DBU)

- In line with its charter and funding guidelines, DBU will support specific projects in the school, higher education and non-formal education/youth sectors that implement objectives and measures of the National Action Plan in a model and innovative manner.

Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ)

- GIZ will step up efforts to embed ESD within the organisation and, for example, present the ESD approach at GIZ events such as symposia.

German Commission for UNESCO (DUK)

- All German sites recognised by UNESCO (world heritage sites, biosphere reserves and global geoparks) will develop into exemplary places of learning for sustainable development and openness to the world. The German Commission for UNESCO works together with the German UNESCO Chairs and UNESCO Clubs with a similar goal of promoting them in their capacity

¹² Commitments submitted by 20 June 2017

as ESD multipliers. Internationally, the German Commission for UNESCO is committed to further strengthening the policy base for ESD in central and programme bodies of UNESCO and the United Nations. The German Commission for UNESCO likewise organises workshops and further training to support other UNESCO National Commissions, most of all in Europe and Africa, in recognising the importance of ESD and in supporting it nationally and internationally.

German Adult Education Association (DVV)

- DVV recommends that adult education centres incorporate sustainable development in their mission statements and programmes on the basis of the Sustainable Development Goals (SDGs). For this purpose, DVV will compile information material on the National Action Plan and develop modules for adult education centres to implement in their own work.

German Council for Sustainable Development (RNE)

- Through four Regional Hubs for Sustainability Strategies (RENNs), RNE promotes commitment to civil society action for sustainability and better coordination with policy across Länder borders.

Expert Forum on Early Childhood Care and Education



Federal Ministry of Education and Research (BMBF)

- BMBF will fund the Haus der kleinen Forscher ('Little Scientists') Foundation with a focus on ESD through to the end of the UNESCO Global Action Programme (2015–2019). *(cross-cutting)*

Federal Ministry of Family Affairs, Senior Citizens, Women and Youth (BMFSFJ)

- Working with other stakeholders within the framework of existing formats and ongoing processes, BMFSFJ aims to further establish ESD in Early Childhood Care and Education. *(AA III, Objective 2)*
- BMFSFJ welcomes the addition of ESD to the work of the Haus der kleinen Forscher Foundation and is committed to ensuring that it is publicised (such as through the www.fruehe-chancen.de ECCE portal) and widely adopted in practice. *(AA IV, Objective 4)*
- Together with other stakeholders, BMFSFJ is pursuing the implementation of the quality objectives from the interim report "Developing and Financially Ensuring Early Education" jointly adopted with the Länder in November 2016 together with the further establishment of ESD in Early Childhood Care and Education.

Bündnis ZukunftsBildung/Innowego Forum Bildung & Nachhaltigkeit eG

- With its education policy work, Innowego – Forum Bildung & Nachhaltigkeit eG supports the implementation of the National Action Plan on ESD in the area of ECCE.
- Innowego – Forum Bildung & Nachhaltigkeit eG, together with its partner organisations the Youth Association for the Protection of Nature (NAJU im NABU e. V.) and the Lias-Grube environmental station, will create a good practice model for continuing training on ESD as part of their Klima-Kita-Netzwerk (climate/ECCE network) project, with the thematic focus on climate action and resource conservation for further and continuing training of ECCE professionals in line with the National Action Plan on ESD (to 2020). *(AA III, Objective 2)*
- Innowego – Forum Bildung & Nachhaltigkeit eG, together with its partner organisations the Youth Association for the Protection of Nature (NAJU im NABU e. V.) and the Lias-Grube environmental station, will establish a national network of 150 child day-care facilities as part of their Klima-Kita-Netzwerk (climate/ECCE network) project and will support them in networking with regional and local entities involved in climate action in the spirit of ESD (2020). *(AA V, Objective 1)*

Haus der kleinen Forscher Foundation

- Outcomes of research on promoting Education for Sustainable Development (ESD) in Early Childhood Care and Education – a review on embedding ESD in curricula and syllabuses; target dimensions for ESD at the three levels children, ECCE professionals/teachers and ECCE heads – will be used to develop core values, a substantive and conceptual framework of ECCE for SD, and Länder-specific cross matrices. *(AA I, Objectives 1, 2 and 3)*
- In collaboration with the Expert Forum on Early Childhood Care and Education and associations of ECCE providers, the Haus der kleinen Forscher Foundation will hold a national conference on ESD. *(AA I, Objective 6)*
- The target dimensions for ESD at the three levels children, ECCE professionals/teachers and ECCE heads developed by a multiprofessional expert group in the research project on the promotion of ESD in ECCE will be integrated in the conceptual modules on ESD for child day-care facilities. *(AA IV, Objective 1)*

Expert Forum on Schools



Allgemeiner Schulleitungsverband Deutschland e. V. (ASD)

- ASD – the German School Heads Federation – promotes the onward development of the school learning space in all Länder under the framework of the NAP ESD. The focus here is on Objective 1, curriculum and school development, which is shaped by school heads. This is supported by the following ASD activities:
 - Keynote speeches, discussions and position statements at ASD conferences,
 - Provision of information about ESD and the NAP ESD to encourage more work on the implementation of the NAP,
 - Participation in the jury for recognition of ESD activities under the UNESCO Global Action Programme on ESD,
 - Press releases.

Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB)

- Under the framework of the National Climate Initiative, and by way of grants to NGOs and other environment and nature conservation groups, BMUB supports educational projects that aim to impart participatory skills in the spirit of ESD and support collaboration between schools and civil society. ESD criteria are binding in project selection. Cross-cutting or thematic education projects can also be supported via the Federal Biological Diversity Programme if they are of particularly importance to the implementation of the National Strategy on Biological Diversity. (AA I, Objective 2)

- BMUB supports this objective with a range of regularly updated teaching materials on the environmental education website www.umwelt-im-unterricht.de. The materials are based on ESD principles and can be used for educational purposes free of charge. With few exceptions, the content is subject to open (creative commons) licences, meaning it can be modified, shared in modified form and published. (AA III, Objective 5)
- Promotion of participatory skills and participative involvement of children and adolescents are among the criteria applied by BMUB in the funding of educational projects. (AA V)
- BMUB supports this objective by providing educational materials together with information and networking services for primary, lower secondary and upper secondary education. These are intended for educators serving all age groups in both general education and TVET and for multipliers in the non-schools sector. (AA V, Objective 2)
- BMUB is continuing central national and international participation processes of an informal nature, such as monitoring of the Climate Action Plan 2050, ProgRes III and the upcoming COP 23 UN climate change conference. In addition, new participation processes are being incorporated in relevant decision-making processes (such as the National Programme on Sustainable Consumption) and other regulatory frameworks in the BMUB ministerial portfolio. (AA V, Objective 4)

Federal Ministry for Economic Cooperation and Development (BMZ)

- Through Engagement Global and as part of its schools programme, BMZ supports collaboration with the German Länder and the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder (KMK) with a view to integrating ESD into curricula and syllabuses and into teacher initial, further and continuing training and to incorporating ESD in school and curriculum development. A core element of the programme is an offer of support to the Länder in establishing an ESD coordinator's office within each of the Länder education ministries. (AA I, Objective 1)
- Through Engagement Global, through the German President's schools competition on development policy and the song contest, BMZ supports the establishment of ESD at schools, quality

improvement, and the promotion of individual ESD skills in pupils. *(AA I, Objective 1)*

- Through Engagement Global, BMZ supports the training of ESD multipliers from government and civil society, among other things under the framework of the ESD expert network (Germany, India, South Africa and Mexico). *(AA I, Objective 1)*
- Through Engagement Global and in collaboration with the UNESCO Mahatma Gandhi Institute, the BMZ is supporting the development of an international manual on embedding ESD in school textbooks and curricula. *(AA I, Objective 1)*
- Through Engagement Global, as a key partner to UNESCO Paris in the Youth priority action area of the Global Action Programme on ESD, BMZ supports training on mentoring for ESD leadership programmes for stakeholders from Germany, South Africa, India and Mexico. *(AA I, Objective 1)*
- Through Engagement Global, BMZ supports educational activities by civil society stakeholders via the Development Policy Education (FEB) and Action Group Programme (AGB) funding programmes. *(AA I, Objective 2)*
- Through Engagement Global, BMZ organises an annual professional conference on the implementation and revision of the BMZ/KMK Curriculum Framework: Education for Sustainable Development. The conference is jointly organised with the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder (KMK). *(AA I, Objective 5)*
- Through Engagement Global and the Länder initiatives for the BMZ/KMK Curriculum Framework: Education for Sustainable Development, BMZ supports skills building for teachers, among other things in the context of international exchange. *(AA II, Objective 2)*
- Through Engagement Global and in cooperation with the Länder, BMZ supports the National Teacher (Further) Training Network for implementation, in the second and third stage of teacher training, of the BMZ/KMK Curriculum Framework: Education for Sustainable Development. The network will hold an annual workshop, among other things to compare approaches and experiences, develop new training formats and organise joint further training courses. *(AA II, Objective 2)*
- Through Engagement Global, BMZ supports the implementation, updating and further development of the BMZ/KMK Curriculum Framework: Education for Sustainable Development, including through to upper secondary level. The KMK Education in the Digital World is incorporated in this work. *(AA III, Objective 1)*
- Through Engagement Global and in cooperation with the Länder, BMZ supports the Länder initiatives for the BMZ/KMK Curriculum Framework: Education for Sustainable Development, among other things with measures to implement the whole system approach. *(AA III, Objective 1)*
- Through Engagement Global, BMZ supports international school partnerships with the Global South, primarily via the ENSA programme. *(AA III, Objective 1)*
- Through Engagement Global and via various programmes, BMZ supports encounters with counterparts from the Global South for stakeholders in the school system, such as encounters between teachers, school heads, trainee teachers and training instructors. *(AA III, Objective 1)*
- Through Engagement Global, via its Education Meets Development (BtE) programme, BMZ supports the incorporation of experience from the Global South (development cooperation returnees) in school instruction and education. *(AA III, Objective 1)*
- Through Engagement Global, BMZ supports the development of materials for school heads on the basis of the BMZ/KMK Curriculum Framework: Education for Sustainable Development, which sets out options for the practical implementation of the whole system approach. *(AA III, Objective 4)*
- Through Engagement Global and in collaboration with publishers, teaching experts and civil society representatives, BMZ supports the development of education materials on the basis of the BMZ/KMK Curriculum Framework: Education for Sustainable Development and develops quality criteria for this purpose with the stakeholders involved. This work also includes the use of open education resources in line with the KMK strategy on Education in the Digital World. *(AA III, Objective 5)*
- Through Engagement Global, BMZ supports the collation, on the One World Internet Conference (EWIK) platform, of online ESD materials on the BMZ/KMK Curriculum Framework: Education for Sustainable Development. *(AA III, Objective 5)*

- Through Engagement Global, BMZ supports the implementation, updating and further development of the BMZ/KMK Curriculum Framework: Education for Sustainable Development, including through to upper secondary level and including the development of accompanying educational materials. *(AA IV, Objective 3)*
- Through Engagement Global and in cooperation with the Länder, BMZ supports the Länder initiatives and projects for the implementation of the BMZ/KMK Curriculum Framework: Education for Sustainable Development. *(AA IV, Objective 3)*
- Through Engagement Global, BMZ supports the training of ESD multipliers from government and civil society, among other things under the framework of the ESD expert network (Germany, India, South Africa and Mexico), ENSA, the German President's schools competition, BtE, FEB and other programmes. *(AA V, Objective 1)*

Bündnis Zukunftsbildung/BUND (Friends of the Earth Germany) and BUNDjugend (Young Friends of the Earth Germany):

- BUND and BUNDjugend have, via the McMöhre project, launched sustainable student companies and developed supporting materials in collaboration with teachers, school heads and pupils. In North Rhine-Westphalia, BUNDjugend additionally provides further training on how to integrate sustainability topics into day-to-day teaching. This provides an opportunity to try out methods in practice and appraise them. *(AA II, Objective 1)*

Bündnis Zukunftsbildung/Greenpeace e. V.

- To promote ESD in learning spaces, Greenpeace offers – on the basis of pilot projects – thematic further training and workshops for school and curriculum development in collaboration with teachers/educational assistants and pupils. *(AA I, Objective 1, AA II, Objective 1)*
- Greenpeace trains teachers, educators and volunteers in the 'Greenspeakers' internal training programme for educational work in schools and other educational institutions on environmental and climate-related topics in the spirit of ESD. Greenspeakers go on to promote the teaching of ESD in the various types of schools. They also encourage young people to get involved in shaping society. *(AA I, Objective 2; AA I, Objective 4; AA III, Objective 3; AA 5, Objective 1)*

- In collaboration with teachers and educators, Greenpeace develops free educational materials on current environmental challenges. These communicate the complex issues and challenges in a way that is designed to encourage debate. They also encourage children and teenagers to get involved and take an active part. *(AA I, Objective 4; AA III, Objective 5; AA IV, Objective 3)*
- Greenpeace contributes on a case-to-case basis in the development of Länder ESD plans. *(AA I, Objective 1)*
- Greenpeace supports the ESD policy process in its implementation under the framework of the GAP. *(AA I, Objective 4)*

Bündnis Zukunftsbildung/Welthungerhilfe e. V.

- Every year, Welthungerhilfe offers several further training courses on the SDGs for teachers/educational assistants and pupils, with a special focus on SDGs 2 and 12 – sustainable food security for all – with a view to implementing the whole system approach. *(AA I, Objective 1; AA II, Objective 1; AA II, Objective 2; AA III, Objective 3)*
- Welthungerhilfe provides high-quality educational material in line with the BMZ/KMK Curriculum Framework: Education for Sustainable Development and continually improves it in close collaboration with teachers, education stakeholders and pupils. *(AA III, Objective 5)*

German Commission for UNESCO (DUK)

- At UNESCO project schools, school heads, teachers, pupils, parents and non-school stakeholders and providers work together to develop ESD and climate change action plans for a whole system approach at their school, are provided with continuing training, and engage in international exchange to compare experiences. Starting with twelve German pilot schools in an international UNESCO project, this is to be expanded to 25 German schools from autumn 2017 and ultimately if possible to all German UNESCO project schools. All project guides and learning materials are made publicly available. The project is being implemented in collaboration with the Global Goals Curriculum with academic monitoring and evaluation by Leuphana University of Lüneburg. Autostadt GmbH (Wolfsburg) plans to support the project. *(AA I, Objective 1; AA II, Objective 2; AA II, Objective 1; AA III, Objective 1)*

German Federal Youth Council (DBJR)

- Involvement of young people and self-organisation are key elements of youth work. Youth associations are spaces for free action and expression where young people have the say. They apply their experience, as experts in their own needs, in shaping and developing school as a learning and social space. Participation is power to transform. Where young people get involved, their contribution must have an impact. That is what the DBJR fights for. *(AA V, Objective 3)*

Global Goals Curriculum e. V.

- Global Goals Curriculum e. V. (www.ggc2030.org) supports communication and dissemination of the National Action Plan: (1) with regular regional events and national conferences on implementation issues surrounding innovative ESD (see Global Goals Curriculum 2016: www.ggcberlin.de); (2) with accompanying media communication on the implementation progress, best practices, experience reports, etc. *(AA I, Objective 3)*
- Global Goals Curriculum e. V. develops training and continuing education formats for teachers and educational multipliers that enable the implementation of ESD in innovative educational settings and the development of transformation skills. *(AA II, Objective 2)*
- Global Goals Curriculum e. V. is working with the national and international UNESCO project school networks, the Ashoka Changemaker Schools and the schools of the Initiative Schule im Aufbruch to develop a school development process for innovative and practical large-scale implementation of the National Action Plan. *(AA III, Objective 1)*
- Global Goals Curriculum e. V. always seeks to develop its programme and activities with formal and informal pupil participation. To this end, Global Goals Curriculum e. V. works with youth organisations, the Youth Forum in the Global Action Programme, and pupils from our partner schools networks (such as Changemaker Jam GGC 2016, Changemaker SchülerInnenkongress Frankfurt 2017). *(AA V, Objective 1)*

Klimahaus Bremerhaven

- Klimahaus Bremerhaven, as an extramural competence centre for the implementation of ESD, commits to take part in national, regional and local ESD bodies and as provider of a range of educational activities for schools. *(AA I, Objective 2)*
- In its capacity as an education provider, Klimahaus Bremerhaven offers training based on the ESD educational approach. *(AA I, Objective 2)*

Stiftung Bildung

- Stiftung Bildung will confer its 'Verein(t) für gute schule' award focused on ESD and collaborations in 2017, showcasing ESD projects by schools and by parents and friends associations throughout Germany.
- Stiftung Bildung, working jointly with Karl Schlecht Stiftung, will announce a funding call for projects on ESD and Entrepreneurship Education and will fund projects by parents and friends associations throughout Germany.

World University Service, German Committee e. V.

- WUS supports the collation and use of online ESD materials in the area of global development on the website www.globaleslernen.de *(AA III, Objective 5)*

Expert Forum on Technical and Vocational Education and Training



Federal Ministry of Education and Research (BMBF)

- Action Area III proposes the development of indicators as an important tool for establishing sustainable development in the structure of workplaces and schools. BMBF consequently supports the Federal Institute for Vocational Education and Training (BIBB) funding focus on Vocational Education and Training for Sustainable Development (VET for SD) 2015–2019. Funding line 2 is dedicated to the creation of sustainable in-company learning spaces on the basis of the whole organisation approach and the development of a related indicator system (compatible with the German Sustainability Code). *(AA III)*
 - The objective of Action Area IV is to enable trainees to implement sustainability in occupational learning and work processes. BMBF consequently supports the BIBB funding focus on VET for SD 2015–2019. Funding line 1 is dedicated to skills building for trainers and trainees in commercial occupations in the retailing, wholesale, import and export, logistics and haulage sectors. *(AA IV)*
 - The BMBF will promote skills building for trainers and trainees and support BIBB in funding a third funding line for the VET for SD 2015–2019 funding focus. Funding Line 3 will target skills building for trainers and trainees in additional selected occupations. *(AA IV)*
- Skills building for sustainability in the training and work process must be seen in the context of other major societal and work-related challenges. The BMBF will therefore commission BIBB to carry out a study to identify overlaps in relation to sustainability between the VET for SD-specific skills profile and the skills profile for digitalisation. *(AA IV)*

Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB)

- BMUB supports this measure by regularly publicising free educational materials, conferences and activities by professional ESD stakeholders under the heading of sustainable working. *(AA II)*
- The BMUB supports this measure with targeted networking of stakeholders in the ESF-funded Vocational Education and Training for Sustainable Development (VET for SD) programme. *(AA II, Objective)*
- The BMUB supports this measure by funding model projects on non-school, practice-based occupational information provision under the ESF VET for SD programme. *(AA II, Objective)*
- The BMUB supports this measure under the ESF VET for SD programme by funding model projects in energy-efficient building refurbishment on a cross-sectoral collaboration basis. *(AA II, Objective)*

Federal Ministry for Economic Cooperation and Development (BMZ)

- On behalf of BMZ, the Development Policy Education (FEB) programme funds development policy work projects by civil society providers. FEB supports projects in Germany that pursue the concept of sustainable development, provide practical and accessible information on development policy issues and reflect development policy commitment. One of the many target groups for FEB are young people in TVET. A number of projects involve the preparation of educational materials on global issues in TVET, thus contributing to the implementation Objective 1e, Action Area I of Expert Forum on TVET for SD. *(AA I)*

- Through Engagement Global and in some cases in collaboration with the Länder, BMZ supports direct participation of young people in TVET or with TVET qualifications in the implementation of the National Action Plan on ESD, among other things by funding the ASA and ENSA programmes¹³. Both of these are programmes that have developed non-formal education activities for the above-mentioned target group in collaboration with the private sector and vocational schools in Germany and the Global South. (AA III)
- Through Engagement Global and in cooperation with the Länder, BMZ supports the Länder initiatives for the BMZ/KMK Curriculum Framework: Education for Sustainable Development. Outcomes will include materials for the implementation of VET for SD in curricula and teaching methodologies. (AA V)

Association of German Chambers of Commerce and Industry (DIHK) and Federal Ministry of Education and Research (BMBF)

- As well as building the appropriate skills in initial and further training, establishing sustainable development in the workplace requires a whole organisation approach in business enterprises. DIHK will support this. DIHK-Bildungs-GmbH will therefore, with the support of BMBF, develop and establish corresponding training provision for individuals in leadership positions, primarily in small and medium-sized enterprises.

World University Service, German Committee e. V.

- WUS supports the planned nationwide Action Weeks on Technical and Vocational Education and Training for Sustainable Development and the planned annual VET for SD Open Day via a project ('Grenzenlos/Across Boundaries – Global Learning in Vocational Education') in the states of Baden-Württemberg, Brandenburg, Hesse, Rhineland-Palatinate and Saarland.¹⁴ (AA II)

German Confederation of Skilled Crafts (ZDH) and Federal Ministry of Education and Research (BMBF)

- The aim is to further enhance the potential for sustainable development in the workplace, taking into account the rapidly changing conditions of the workplace. ZDH will promote the establishment of sustainable development in the workplace on the basis of the whole institution approach (see also the UNESCO Roadmap for Implementing the Global Action Programme on ESD, Action Area II). The Central Agency for Continuing Vocational Education and Training in the Skilled Crafts (ZWH) will therefore, with the support of BMBF, develop and establish corresponding training provision for individuals in leadership positions, primarily in small and medium-sized enterprises.

¹³ ASA: Arbeits- und Studienaufenthalte (work and study placements), ENSA: Entwicklungspolitischer Schulaustausch (development policy school exchanges).

¹⁴ <https://www.wusgermany.de/en/international-students/grenzenlos-across-boundaries-global-learning-vocational-education>.

Expert Forum on Higher Education



Federal Ministry of Education and Research (BMBF)

- BMBF supports the implementation of the National Action Plan on ESD by the long-term integration at HEIs of refugees who are able to study. It is currently planned for the successful package of measures for the integration of refugees who are able to study to be continued beyond 2019 and expanded with approximately €30 million annually. The measures will be continuously readjusted in light of further developments in the refugee situation. Consideration will thus be given to expanding the package with measures to close funding gaps and improve graduates' transition into employment. *(AA IV, Objective 3)*
- The ESD goal of providing inclusive and equitable quality education and life-long learning for all has long been embedded in BMBF funding for student groups in higher education and continues to be open for related applications. Student groups in higher education are able to apply for financial support from BMBF for eligible projects, which are projects involving the organisation and conduct of seminars and workshops with a clear trans-regional character and unequivocal higher education relevance for sustainable development under the programme for the funding of higher education-related central activities of student associations and other organisations. *(AA IV, Objective 3)*
- Linking research and ESD can help transfer the latest findings and outcomes to ESD and hence into practice, and also to make ESD more attractive. BMBF undertakes to examine, in all calls under the FONA³ Research for Sustainable Development framework programme, whether and to what extent it is possible for education activities to qualify for funding. *(AA II, Objective 5)*
- Issues, concepts, approaches, instruments and other aspects of sustainability need to be integrated into the curricula of all courses of study if the graduates and decision-makers of the future are to act in a more sustainable manner. Online resources are particularly well suited to achieving this as quickly as possible. In addition, they make for very efficient dissemination and are easily updated. In the Virtual Academy of Sustainability, BMBF supports a project that provides and continues to develop massive open online courses (MOOCs) as ECTS units on a growing number of topics in cooperation with a large number of HEIs. *(AA II, Objective 5)*
- In order for HEIs to become more sustainable in all areas – research, teaching, operation and governance – they need valid and actionable information on the steps with which they can succeed in this endeavour. In the HOCH^N project, BMBF is supporting a network of eleven universities from eight Länder that, in exchange with higher education institutions of all types that are willing to cooperate, will develop handouts and information on reporting in the areas referred to. *(AA II, Objective 1 und AA III, Objective 1 and 2)*
- As change agents, students are particularly important for sustainable higher education institutions. At the same time, student engagement is particularly effective in helping to develop ESD-relevant competencies. In the 'Wandercoaching' project, BMBF supports the netzwerk n student initiative, in which peripatetic student coaches mentor student initiatives in developing and putting into practice their contribution to sustainability at their institution. It is planned for funding to continue beyond the current funding period. *(AA IV, Objective 2)*

Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB)

- BMUB supports the measure by promoting the Alexander von Humboldt Foundation's International Climate Protection Fellowship programme and by funding the UNEP/UNESCO/ BMUB postgraduate courses at TU Dresden on environmental management in developing and emerging countries. *(AA III)*

Federal Ministry for Economic Cooperation and Development (BMZ)

- On behalf of BMZ, the Development Policy Education (FEB) funding programme funds projects for education policy work by civil society providers. FEB supports projects in Germany that pursue the concept of sustainable development, provide practical and accessible information on development policy issues and reflect development policy commitment. In addition to the general public, development policy education primarily targets higher education institutions that apply for funding for projects around sustainable development and its implementation. *(AA III, Objective IV)*
- BMZ, in cooperation with the Länder, supports networking between higher education institutions and other entities from Germany and from countries of the Global South in order to facilitate joint research and teaching on ESD/sustainability, among other things by funding the Engagement Global ASA programme. *(AA III, Objective IV)*

Bündnis ZukunftsBildung/Greenpeace e. V.

- Greenpeace offers events, advice and workshops in higher education. *(AA II, AA IV, AA III)*
- Greenpeace contributes on a case-by-case basis in higher education development initiatives and bodies, involving both students and faculty. *(AA III, AA II)*

Der freie Zusammenschluss von studentInnenschaften (fzs) e. V.

- fzs advocates dialogue with national student subject conferences, student subject societies and Länder students' associations on how ESD/sustainability can be integrated into the respective curricula. Strategies are to be developed on the scope for inter-/transdisciplinary collaboration (in

the sense of working together instead of in parallel) to support student stakeholders within independent student bodies. In a first step, in consultation with all pool organisations (student subject conferences and Länder students' associations), training seminars for student assessors are to be reconceptualised by the student accreditation pool to highlight participatory skills for incorporating sustainable development/ESD in curricula across the educational, methodological, substantive and structural dimensions. *(AA IV)*

- fzs provides discourse arenas for new, visionary narratives around a socially and environmentally responsible higher education system and an equitable social and economic system as part of the various facets (such as seminars and education materials) of education policy work. It jointly shapes dominant narratives, primarily in the student milieu, on enhancing the science system's orientation towards sustainability, in particular in relation to the question of how political science can be and should be. This takes place on a continuous basis, for example through seminars, talks, resolutions and publications. *(AA V)*

Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ)

- Via the Expert Forum on Higher Education, GIZ actively supports networking between German higher education and research institutions with higher education and research institutions of the Global South for exchange of experience on ESD and for the initiation of joint ESD-relevant research projects. *(AA II; AA III)*
- In consultation with partners, GIZ provides undergraduates and postgraduates with access to case studies from development cooperation practice in the Global South for academic theses on ESD. *(AA II und III)*
- GIZ will make available good practice examples on ESD higher education from emerging and developing countries. *(AA II, Objective 3)*
- GIZ will provide ESD stakeholders with a platform to present the German ESD approach at an international event. *(AA III)*
- GIZ will compile proceedings of a BMZ expert panel on Agenda 2030 in higher education and research with practical examples from development cooperation (for example on SDG 4.7). *(AA III, Objective 3)*

University for Sustainable Development Eberswalde (HNEE)

- HNEE will advocate the incorporation of ESD and sustainability in the Brandenburg Higher Education Act. On the basis of its own research on the topic of sustainability in higher education legislation, it will initiate and drive forward an exchange of views between all Brandenburg higher education institutions. *(AA I, Objective 1)*
- The title of the existing Professorship in Environmental Education is to be amended to Environmental Education/Education for Sustainable Development. Social conditions and the expectations placed on education and science have evolved since the Department of Environmental Education was established in the 1990s. The amended title reflects these changes. *(AA I, Objective 3)*
- In cooperation with local and regional stakeholders and initiatives, HNEE will develop a sustainability award. Eberswalder Hochschulgesellschaft (the HNEE alumni and friends society) recognises the commitment of students who do special service in the cause of the Sustainable Development Goals. *(AA I, Objective 4)*
- HNEE supports the training of educators in ESD, such as in the Working Group on Teaching and Learning Sustainability. *(AA II, Objective 2)*
- HNEE will increasingly integrate sustainability knowledge into teaching: Transferring sustainability knowledge into teaching embeds teaching in a practice setting. These are holistic teaching-learning approaches involving exchange between HEIs and practice. The transferred knowledge is oriented to the ESD concept, thus imparting transdisciplinary participatory skills for sustainable development. In this connection, exploratory learning is a core element of transdisciplinary teaching. Students acquire participatory skills in the context of sustainability that are not taught and learned from textbooks but result from hands-on exposure to professional practice. *(AA II, Objective 5)*
- HNEE supports innovative education forms that help further integrate ESD into teaching. Successful activities include an interdisciplinary lecture series providing an introduction to sustainable development for all new students and a series of project workshops.
- HNEE researchers share their expertise in a textbook on sustainable development. *(AA III)*
- An interdisciplinary lecture series for master students is being developed in the field of citizen science. *(AA III)*
- HNEE has compiled sustainability reports since 2012. The sustainability reports are published and are therefore accessible to everyone associated with HNEE and to the general public. The structure of the sustainability report is subject to continuous improvement and is kept in line with the German Sustainability Code. *(AA III, Objective 2)*
- HNEE is a pioneer in green campus management. The European Commission recognised HNEE's environmental management in 2017 with the EMAS Award in the Public Sector Organisation category. The climate-neutral university makes its expertise in environmental management available to other universities and institutions. *(AA III, Objective 3)*
- HNEE students can help shape and influence the sustainability process. All students can participate in the HNEE Sustainability Round Table. *(AA IV, Objective 3)*
- The Student Vice President at HNEE represents the interests of students in shaping of sustainable development at the University. The University will examine to what extent the Student Vice President can strengthen the University's profile in the direction of sustainability. HNEE was the first higher education institution to appoint a Student Vice President in 1998 and will continue to promote student involvement and participation in the process through this office. *(AA IV)*

netzwerk n e. V.

- netzwerk n e. V. contributes intensively and promotes debate on how ESD/sustainability can be incorporated in Länder higher education legislation and target/performance agreements. netzwerk n e. V. also informs and mobilises the members of the student accreditation pool with a view to incorporating ESD/sustainability in accreditation procedures. In addition, netzwerk n. e. V. will provide further training for this specific student group. *(AA I)*
- With its 'Wandercoaching' peripatetic coaches programme, netzwerk n e. V. has acquired substantial experience in recent years with structured capacity building for ESD/sustainability in the higher education context. netzwerk n e. V. will continue this work and, in addition to students,

will also target other groups at higher education institutions. netzwerk n e. V. will continue to add good practices to those documented so far and communicate them through a variety of media. (AA II)

- netzwerk n e. V. promotes the establishment and professionalisation of sustainable student initiatives and their projects nationwide through various event and programme formats as part of the project 'Zukunftsfähige Hochschulen gestalten' ('Shaping Sustainable Universities', including conferences, the 'Wandercoaching' peripatetic coaches programme and conceptual workshops) and additionally through its activities as an organisation (including network meetings, perspektive n and a multipliers pool). By networking with stakeholders and providing a wealth of knowledge and experience, further target groups are addressed and motivated to engage in similar activities. (AA IV)
- netzwerk n e. V. will continue to support and strengthen student sustainability initiatives and individuals in active advocacy for ESD/ sustainability at HEIs and in embedding ESD/ sustainability with the aid of plans and projects. To this end, netzwerk n e. V. undertakes capacity building (including the 'Wandercoaching' peripatetic coaches programmes and conceptual workshops), links up with stakeholders locally, regionally and nationally via conferences (konferenz n conferences on reconceptualising higher education) and via our interactive online platform, and promotes local debate on ESD/sustainability with events such as the perspektive n debate series. (AA IV)
- netzwerk n e. V. will ensure that students at all policy levels of the science system (higher education institutions, Länder and the Federal Government) can contribute to corresponding opinion forming and decision-making processes in relation to ESD/sustainability in higher education. netzwerk n e. V. will step up activities to promote recognition of the transformative capabilities of students and early career researchers. To this end, netzwerk n e. V. will increasingly call on the Länder, the Federal Government and foundations to provide the infrastructure, resources, scope and support for student involvement. (AA IV)
- netzwerk n e. V. does its part in disseminating stories of sustainable and good living. Publicising best practice examples is an important step here,

as sustainable development projects in higher education have the capacity to disseminate ideas in society. Going forward, the next steps for netzwerk n include reflection on the societal role of higher education institutions and how to communicate and transfer findings to civil society. (AA V)

Heidelberg University of Education Higher education

- To implement the University's ESD profile, the new structure and development plan 2017 to 2021 provides for the establishment of a University-wide ESD Centre based on the ESD profile of the former Interdisciplinary Institute of Science, Technology and Society (NTG). The GNI Center will contribute to the implementation of the goals under the Global Action Programme on ESD and of the UN SDGs in the University's research, teaching, governance, operation and transfer activities. (AA II, Objective 1, 2)
- The University is committed to implementing ESD as an integral component of teaching. To this end, it is committed in particular to ensuring that educators at all faculty, institute and department levels have the opportunity to receive initial and further training in the context of ESD, as this is one of the most important and effective tools for integrating current ESD-related research outcomes and methodologies in higher education. (AA II, Objective 2)
- The University supports the dissemination of selected research outcomes and educational materials that can be used as representative best practice examples for the implementation of ESD in formal and informal educational contexts. To this end, it will provide reporting via internal and external communication channels in order to transfer acquired knowledge to society at large. (AA II, Objective 3)
- The University provides key support in attracting fellowships for the funding of ESD-relevant research projects or profiles for students. (AA II, Objective 4)
- The University aims to make a substantive contribution in implementing the Global Action Programme on ESD and the UN Sustainable Development Goals, in particular by supporting the UNESCO Chair on World Heritage and Biosphere Reserve Observation and Education together with related objectives in consultation with UNESCO. In the context of the University's internationalisation

strategy, this also promotes networking in research and education in the context of ESD with higher education locations in the Global South. *(AA III, Objective 4)*

- The University has established ESD as one of its substantive profile elements in the new structure and development plan 2017 to 2021. In addition, the Faculty for Natural and Sociological Sciences has explicitly included ESD in its structure and development plan as one of four overarching priorities that will be further expanded during the development period. *(AA IV, Objective 1)*
- In the interdisciplinary studies part of their degree programme, teacher training students at the University develop interdisciplinary skills – independently of their teacher training orientation and choice of subjects – in preparation for the wide-ranging requirements placed on teachers and other educational professions. The University supports ESD by incorporating it in electives for Module 4 of interdisciplinary studies, which teach fundamentals of sustainable development and introduces examples of problem areas. *(AA IV, Objective 1)*

Faculty of Education

- The Chair of Education Science, with its primary focus on school and vocation education, offers lectures on the perception of nature in the discourse on sustainability. The lectures foster reflection on and critical appraisal of the present-day perception of nature in society and thus, in this spirit of critical appraisal of the sustainability discourse and ESD, open up new prospects for nature-aware education that is intended to contribute to resolution of the societal nature crisis. *(AA IV, Objective 1; School: AA II, Objective 1)*
- Under the Chair of Educational Sciences for School and Vocational Education, the 'Naturbildung im Beruf' (NaBiBer – 'Nature Education at Work') research project investigates apprentices' perception of nature and their perspective on the relationship between nature and work. This research serves as the basis for the further evolution of existing concepts, such as 'sustainable TVET', which contribute to sustainable development in work processes. *(AA V, Objective 1)*
- The Chair of Educational Sciences for School and Vocational Education contributes, by means of lectures and other formats, to critical appraisal

of the sustainability discourse and, within this educational and discourse process, to the advancement of ESD. To this end, the Chair contributes to the lectures provided as part of the electives for Module 4 of interdisciplinary studies at the Heidelberg University of Education and aims among other things to continue developing joint education approaches and education events such as ESD project events and ESD lecture series. *(AA IV, Objective 1)*

Faculty of Cultural Studies, Arts and Humanities

- The Department of Philosophy/Ethics contributes to the promotion of ESD with lectures on nature concepts, responsibility, technological ethics and relevant applied ethics issues and contributes to interdisciplinary education approaches and events (such as the ESD lecture series). *(AA IV, Objective 1; School: AA II, Objective 1)*

Faculty of Natural and Sociological Sciences

- The Department of Biology contributes with various education formats and contexts to the advancement of ESD. To this end, the Chair contributes to the lectures provided as part of the electives for Module 4 of interdisciplinary studies at the Heidelberg University of Education and aims among other things to continue developing joint education approaches and education events such as ESD project events and ESD lecture series. *(AA IV, Objective 1; School: AA II, Objective 1)*
- The Department of Biology offers basic and applied seminars in cooperation, among others, with Heidelberg School of Education (HSE) for the promotion of academic research on ESD with accompanying qualification of early career researchers, further development of the system comprising tutors as change agents in this educational process and in the University's eco-garden. A guiding vision here is the promotion of social participation and the mitigation of social disadvantage with language-sensitive instruction and outdoor education in the spirit of ESD and participatory skills in relation to the natural environment and biodiversity. *(AA IV, Objective 1)*
- To enable people with different starting conditions to participate in societal discourses and to develop participatory skills in relation to biodiversity conservation, the course structure in the Department

of Biology includes firmly established, science-based courses with classes bringing together heterogeneous groups of pupils, students and teachers at out-of-school learning locations (outdoor education). A special focus, embodied in the profile of the University, is on respectful use of natural resources as reflected in the eco-garden, large-scale excursions and nature education points. Selected ESD-related issues are operationalised here in educational processes and environmental dimensions shown in association with socioeconomic factors. Scaffolding strategies in the development of pedagogical content knowledge among teachers are investigated in an accompanying study. *(AA IV, Objective 1; School: AA II, Objective 1)*

- Analogue and digital teaching and learning materials have been designed and implemented in selected research and development projects in the Department of Geography and developed in projects with students in education. The materials can be used as representative best practice examples for the implementation of ESD in formal and informal education contexts and are disseminated or made available free of charge via suitable platforms (such as bne-portal.de and the departmental website rgeo.de). *(AA II, Objective 3; AA III, Objective 5)*
- In interdisciplinary topic selection for future bachelor's or master's theses and research projects in the Department of Geography, a special focus is placed on the development and testing of psychometric test procedures for measuring the degree of implication of ESD/sustainability in formal and informal educational contexts. *(AA III, Objective 1)*
- In the context of the UNESCO Chair for Earth Observation and Geo-Communication of World Heritage Sites and Biosphere Reserves – established at the Heidelberg University of Education, Department of Geography, Research Group for Earth Observation (rgeo) – special emphasis is placed in research and teaching on the promotion of environmental and sustainability research and ESD. In line with this focus, research and development projects based on the use of modern geoinformation technologies such as satellite remote sensing and of innovative laboratory and field methods are to be initiated, implemented and disseminated. The global links created by the UNESCO Chair also promote the exchange of knowledge, methods and concepts in the context of ESD with countries of the Global South. *(AA II, Objective 3; AA III, Objective 4)*
- The Department of Geography also contributes to the ongoing promotion of ESD in school and higher education through GIS Station, Klaus Tschira Competence Centre for Digital Geo-Media and the Geco-Lab Centre of Competence for Geo-Ecological Spatial Exploration as extramural learning spaces and teaching and research laboratories. These offer regular courses and further training, in some cases together with other cooperation partners (such as Lernort Labor e. V.). The Department of Geography also contributes with various education formats and contexts to the advancement of ESD. To this end, the Chair contributes to the lectures provided as part of the electives for Module 4 of interdisciplinary studies at the Heidelberg University of Education and aims among other things to continue developing joint education approaches and education events such as ESD project events (among others with the Heidelberg Center for the Environment at Heidelberg University) and ESD lecture series. *(AA IV, Objective 1; School: AA II, Objective 1)*
- The Department of Physics promotes the incorporation of ESD in teacher training with two main measures: Firstly, a practice-oriented teacher training programme, in which the implementation of ESD also takes into account physics aspects and the Baden-Württemberg primary schools curriculum, integrating theory and practice in collaboration with primary schools in the region. Secondly, regular further training for primary school teachers focused on ESD and renewable energy in primary school, provided and evaluated by the Professional School of the Heidelberg University of Education as a regular further education measure for primary school teachers. *(AA IV, Objective 1; School: AA I, Objective 1; AA II, Objective 1)*
- To promote skills building in future teachers for the implementation of ESD at school, the Department of Physics plans to initiate research-based pilot projects in the context of teacher training for sustainable development at as many stages of training as possible. *(AA IV, Objective 1; School: AA II, Objective 1)*
- Research projects are to be launched to investigate the effectiveness of ESD educational activities in teaching and learning processes in school education. Existing good practice models in the fields of school

development, further and continuing training for teachers and teaching and learning materials should be identified, revised as appropriate and disseminated in order to support the implementation of ESD. *(AA II, Objective 3; School: AA IV, Objective 3)*

German Council for Sustainable Development (RNE)

- Through its involvement in the steering committee of the Science Platform Sustainability 2030, RNE supports the extension of sustainability research to include the dimension of implementation-oriented challenges. *(AA II, Objective 5)*
- As a stakeholder in the HOCH^N higher education project, RNE is actively committed to the systematic implementation of sustainability in all areas of higher education and to networking among higher education institutions. *(AA III, Objective 1)*
- RNE promotes sustainability reporting by higher education institutions by developing a sustainability reporting standard, the Sustainability Code for Higher Education Institutions. *(AA III, Objective 2)*

rootAbility gUG

- By developing a guide, online portal and online course with financial support from the German Federal Environmental Foundation (DBU), rootAbility and the UNESCO Chair 'Higher Education for Sustainable Development' at Leuphana University are promoting the establishment of more student-run and student/staff-run green offices at German higher education institutions. *(AA IV, Objective 3 und 4)*

University of Hamburg

- The University of Hamburg promotes substantive and structural sustainability by implementing its May 2016 Sustainability Commitment based on the whole institution approach. This expressly commits to establishing and promoting Education for Sustainable Development (ESD) in University teaching, further and continuing training and knowledge transfer.¹⁵ *(AA I, Objective 1)*
- Conference on Good Practice in Teaching Sustainability: The Sustainability in Education team at the Center for a Sustainable University will hold a conference in 2017/18, on the basis of which quality criteria for ESD can be developed and refined

based on good practice examples in ESD using current (higher education) educational science and educational psychology findings. *(AA II, Objective 3)*

- Participation in the Hamburg lernt Nachhaltigkeit initiative: Ever since the establishment of the University of Hamburg Center for a Sustainable University (KNU) in 2011, representatives of the University and KNU have actively contributed to Hamburg lernt Nachhaltigkeit (HLN), an ESD initiative spearheaded by the Hamburg Ministry for Environment and Energy (BUE). They have also co-founded the inter-university network Hamburg University Alliance for Sustainability (HaHoNa). Within the framework of HLN, working groups have recently been established for the participative development of a master plan for the implementation of ESD in a wide variety of education contexts in Hamburg. The University of Hamburg has most delegates in the Higher Education working group but also contributes in others to the establishment and further development of ESD in Hamburg. Among other things, the Higher Education working group makes use of the recommendations of the national Expert Forum on Higher Education and of key issues identified for exploration of the priority action areas under the GAP. As part of HaHoNa, KNU will once again publish a 'climate savings book' for students in 2017. *(AA III, Objective 1)*
- German Sustainability Code evaluation in HOCH^N: The University of Hamburg supports other higher education institutions through its leading role in the HOCH^N joint project in the revision of indicator sets and reporting standards on the basis of the German Sustainability Code for Higher Educations published by the German Council for Sustainable Development. In 2018, a revised guideline will be prepared on the basis of the trial phase of the German Sustainability Code for Higher Education Institutions. *(AA III, Objective 2)*
- Piloting sustainability-specific organisational development and training measures: The Center for a Sustainable University (KNU) and a KNU-coordinated, BMBF-funded joint project, Sustainability at Higher Education Institutions: Develop – Network – Report (HOCH^N), provide for the conceptualisation and piloting of science-based sustainability-related HR, organisational development and further training measures. Examples include innovation circles for sustainability

¹⁵ https://www.nachhaltige.uni-hamburg.de/downloads/1_7-positionspapiere/commitment-des-uhh-praesidiums-zur-nachhaltigkeit.pdf.

topics, interactive workshops on interpretation of the concept of sustainability from different perspectives, and training and coaching measures on participatory skills and values. *(AA III, Objective 3)*

- Financial support for student engagement: The Center for a Sustainable University funds small-scale student sustainability projects (announcing a call for up to €1,000 every six months). It funds student teaching and study reform projects in which students can also address ESD (the call procedures are still to be finalised).
- The University of Hamburg AStA (Student Council) frequently supports student sustainability initiatives (mostly approximately €300 per semester). The University of Hamburg Alumni Association offers support for financing student projects through networking. By 2018, the University of Hamburg will examine the possibility of developing a long-term funding line for structural measures. *(AA IV, Objective 5)*
- Networking activities in HOCH^N: The University of Hamburg supports other higher education institutions through its leading role in the HOCH^N joint project in exchange on new, visionary narratives for a sustainable higher education landscape. *(AA V, Objective 2)*
- Hamburg Sustainable Development Summit (HSDS): The University of Hamburg Center for a Sustainable University is hosting the first Hamburg Sustainable Development Summit from 26 to 29 September 2017, an international conference which will bring together three sustainability networks (COPERNICUS Alliance, 7th European Postgraduate Symposium on Sustainable Development and the BMBF-funded joint network HOCH^N) and other interested parties to exchange views on sustainable development topics – including educational issues. This will also provide a platform for discussion on ESD. *(AA V, Objective 2)*

Virtual Academy of Sustainability

- In collaboration with various research projects, the Virtual Academy of Sustainability supports the rapid incorporation of new ESD/sustainability research findings into teaching by quickly translating findings into a range of educational video formats and making them freely available for higher education use. *(AA II, Objective 5)*
- The Virtual Academy of Sustainability promotes international use of open educational resources on ESD/Sustainability by providing free English and Spanish-language courses online. It is also expanding its Higher Education Partner Network internationally and promotes the integration and recognition of ESD in education the world over. *(AA III, Objective 4)*
- The Virtual Academy of Sustainability provides a wide range of free online courses for higher education institutions and students throughout Germany. The range is constantly being expanded with the production of additional courses on relevant topics in collaboration with experts. The teaching/learning format is also being further developed to incorporate blended learning and exploratory learning. The Virtual Academy will work with other institutions that offer virtual higher education resources to generate common knowledge on the digitisation of ESD and to explore the possibilities of virtual study programmes on ESD. *(AA III, Objective 5)*
- The Virtual Academy of Sustainability provides free online courses providing basic knowledge of ESD/sustainability in higher education that are designed so that all higher education institutions can easily incorporate them in elective/general studies courses. In addition, the Virtual Academy's newly developed teaching/learning formats on exploratory learning enable students to actively engage with research processes, exchange ideas and make their own research outcomes available to the community. *(AA IV, Objective 1)*

World University Service, German Committee e. V.

- WUS will establish an ESD sustainability award for student theses (BA and MA).¹⁶ *(AA I, Objective 4)*

¹⁶ <https://www.wusgermany.de/en/international-students/grenzenlos-across-boundaries-global-learning-vocational-education>.

Expert Forum on Non-Formal and Informal Learning/Youth



Arbeitsgemeinschaft Natur- und Umweltbildung Bundesverband e. V. (ANU)

- ANU will compile best practice examples of youth participation in ESD and make them publicly available. ANU will take part in the development of a guideline for learning spaces and networks. *(AA I, Objective 2)*
- ANU will design and provide suitable further training for key personnel. *(AA I, Objective 2)*
- ANU will make the environmental education website www.umweltbildung.de available for the platform. *(AA III, Objective 1)*
- ANU will develop an approach for the incorporation of innovative/current ESD elements and methods into existing programmes for multipliers at federal and Länder level by 2019 and implement it by 2030. *(AA III, Objective 1)*
- In cooperation with a consortium of providers, ANU has operated an ESD training programme for 20 years in which 25 multipliers are trained over a two-year period. ANU will expand this programme to train 30 multipliers a year and will look into sources of funding. *(AA III, Objective 1)*
- ANU will contribute to a study that will develop quality criteria by the end of 2018 to serve as the basis for viable new funding instruments. *(AA VII, Objective 1)*
- ANU supports efforts to develop new financial support systems that advance high-quality non-formal and informal ESD from project to structure by advising decision-makers on the choice of suitable instruments taking into account the heterogeneity of stakeholders. *(AA VII, Objective 3)*

Federal Ministry of Education and Research (BMBF)

- BMBF is committed to increasing direct youth participation in the implementation of the National Action Plan. To this end, BMBF supports a separate Youth Forum. Members of the Youth Forum take part in the work of the Expert Forums. One voting delegate and one deputy are nominated for the National Platform. BMBF is setting up an office at Stiftung Bildung to provide organisational support for youth participation and to offer coaching and training. Each year, a separate youth congress and regional events are held jointly with the Youth Forum. BMBF also provides ongoing support for the implementation of 'projects of the month' by the Youth Forum, thus providing an opportunity for young people to take part at local level in the implementation of the National Action Plan on ESD. *(AA I)*

Federal Ministry of Family Affairs, Senior Citizens, Women and Youth (BMFSFJ)

- BMFSFJ supports the establishment of ESD and inclusion in (international) youth work. A starting point in this regard is provided by a concept paper on implementing Education for Sustainable Development (ESD) in international youth work developed by the ENB working group of the International Youth Service of the Federal Republic of Germany (IJAB). *(AA II, Objective 2)*
- In ongoing collaboration with national providers and provider groups under the Federal Government's Child and Youth Plan (KJP), BMFSFJ will promote the implementation of more awareness and training measures around ESD, for example under the youth strategy Taking Action for a Youth-Appropriate Society 2015-2018. *(AA II, Objective 3)*
- BMFSFJ supports ESD as a standard and as an objective of accompanying educational work in the Federal Voluntary Service, incorporating insights from the approaches tested in the ESD in Voluntary Services project. *(AA III, Objective 2)*

Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB)

- BMUB pursues a long-term approach of involving adolescents and young adults in its policy areas. A range of formats is used to encourage young people to actively contribute their ideas, wishes and solutions for sustainable development. (AA I, Objective 2)

Bündnis ZukunftsBildung/BUND (Friends of the Earth Germany) and BUNDjugend (Young Friends of the Earth Germany):

- BUND is committed to educational work for the conservation and responsible use of nature and the environment and to active promotion of environmental education and ESD in school and extramural education. For many years, the BUND national working group on environmental education, working together with BUNDjugend, has organised multi-day networking and further training workshops with the focus on ESD. These address current issues and present good practice examples. Experts from Germany and abroad present new studies and discuss options for action. (AA II, Objective 2)

Bündnis ZukunftsBildung/Youth Association for the Protection of Nature (NAJU im NABU e. V.)

- NAJU will carry out an internal follow-up study focusing on ESD. A quantitative section will consist of a questionnaire survey of NABU groups and youth leaders. These findings will be supplemented with field interviews with group and youth leaders. The results will subsequently be presented and discussed in three to four regional workshops for active members of NABU and NAJU. The outcomes of the regional workshops will be collated in a final workshop and goals for the association's development laid down by a project advisory council. (AA II, Objective 1)

Bündnis ZukunftsBildung/Greenpeace e. V.

- Greenpeace organises extracurricular activities around the sustainability-related issues of mobility, consumption and democracy in participatory processes. (AA IV)

Codewalk ICT Consulting (Sustainable Development Communication Agency)

- Codewalk ICT Consulting has experience in developing local and regional education networks and educational projects to support the establishment of sustainable education landscapes and offers its expertise for development of a guide to implementing educational landscapes with an ESD focus. (AA IV, Objective 1)
- Codewalk ICT Consulting will contribute its expertise in the discourse surrounding critical sustainable development communication using digital media in order to help attain the objectives under the National Action Plan. (AA V, Objective 4)

German Federal Youth Council (DBJR)

- DBJR has many years of experience in participation processes. It commits to contributing the advice and networking potential available from its projects jugend.beteiligen.jetzt and Werkstatt MitWirkung. In addition, the projects develop effective online participation tools that can also be made available. (AA I)
- Youth associations are not about providing structure and organisation for children and adolescents. Children and adolescents themselves create the organisation and the structure. They experience community, organise in peer groups and assume responsibility. This makes youth associations a key socialisation agent and as such an essential complement to the educational processes provided by other agents of socialisation. Youth associations therefore fight for young people to be able to develop independently and provide them with non-predefined spaces in which they can experience self-efficacy. The DBJR is committed to conserving such spaces and creating more. (AA VI)
- The DBJR fights for reliable, structural funding. (AA VII)

German Commission for UNESCO (DUK)

- All kulturweit volunteers will address ESD and sustainability concepts to a greater extent in the seminars accompanying their volunteering service and will be given incentives to promote sustainability in a practical way with self-conceived projects at the places where they are deployed.

On an even more closely targeted basis, kulturweit will also offer in-depth seminars for former volunteers to train as ESD multipliers for non-formal education in Germany ('ESD teamers').
(AA III, Objective 2)

LernortLabor – Bundesverband der Schülerlabore e. V.

- LernortLabor – Bundesverband der Schülerlabore e. V. (the national association of schools labs) will support direct youth participation at the next three LeLa annual meetings where young people will be able to present their schools lab projects in a session dedicated to them. *(AA I, Objective 2)*
- To support networking between local non-formal and informal educational amenities, LernortLabor – Bundesverband der Schülerlabore e. V. will supplement the 'Lab Tour' presentations on schools labs at its annual congress with information about the educational landscapes that they are part of. *(AA IV)*

LernortLabor – Bundesverband der Schülerlabore, Schülerlabor-Netzwerk GenaU and Geco-Lab

- On behalf of LernortLabor – Bundesverband der Schülerlabore (the national association of schools labs) and GenaU (a regional student laboratory network of schools labs at research and higher education institutions in Berlin and Brandenburg), Geco-Lab (the Centre of Competence for Geo-ecological Space Exploration of the Department of Geography at the Heidelberg University of Education) is devising a workshop on ESD for schools lab operators and staff. The aim is to jointly draw up recommendations on how to integrate ESD into institutions' own schools lab programmes and in this way to strengthen multipliers in their role. Geco-Lab will hold the workshop on three occasions together with practitioners in the field: (1) At the 2018 LeLa annual conference in Kiel (northern Germany); (2) at a network partner of GenaU in Berlin (eastern Germany); (3) at Geco-Lab, Department of Geography, the Heidelberg University of Education (southern Germany). *(AA III, Objective 1)*

Klimahaus Bremerhaven

- Klimahaus Bremerhaven will provide technical and logistical support for the implementation of a local microproject by young people in Bremerhaven until 2019. *(AA I, Objective 1)*

NatLab schools lab of the Department of Biology, Chemistry and Pharmacy, Free University Berlin

- The Free University Berlin Department of Biology, Chemistry and Pharmacy supports the Agenda 2030 Sustainable Development Goals. In this connection, the NatLab schools lab will advertise a part-time (50%) two-year position in 2017 to help NatLab educators in integrating aspects relating to diversity, ESD and other Agenda 2030 Sustainable Development Goals into their education work. *(AA II, Objective 3)*

netzwerk n e. V.

- netzwerk n e. V. is committed to youth participation in policy-making processes in general and within higher education institutions and has many contacts with students who transform their higher education institutions as pioneers of change. In addition, it supports methodological skills and knowledge building for young people through its 'Wandercoaching' peripatetic coaches programme, enabling them to change and shape their surroundings on the basis of sustainable development. *(AA I)*
- In its 'Wandercoaching' peripatetic coaches programme and in conceptual workshops, netzwerk n e. V. provides capacity building for change agents and multipliers. With suitable Länder and Federal Government funding, these programmes can be scaled up to national level. In addition, netzwerk n e. V. operates an online collaboration platform that provides sustainability advocates with a complete toolkit for data protection-certified virtual collaboration, networking and presentation and has the capacity to become the national and international forum for virtual exchange in the ESD community. *(AA III)*

Media Partner Network/Expert Forum on Non-Formal and Informal Learning/Youth and the Collegium for the Management and Design of Sustainable Development (KMGNE):

- An alliance comprising members of the Media Partner Network will develop a blended mentoring programme for a young leadership programme and implement it from 2018. The young leadership programme will foster the development of transformative literacy and of transformation and participatory skills in young leaders and change agents. In the IT-supported programme, mentors from transformation labs will provide young leaders with support in their projects and initiatives. This will be paralleled by modular leadership training. *(AA I, Objective 1; AA III, Objective 1)*
- KMGNE, the Collegium for the Management and Design of Sustainable Development, in collaboration with the Media Partners Network and with the support of further partners, will prepare and organise a series of annual conferences from 2017 to 2020 on storytelling and forms of narrative in ESD. The subject matter of the conference series will be (a) (re)discovering and developing forms of (media) narrative in ESD (fairy tales, old documentaries, new good practice examples, etc.), (b) audiovisual and digital formats for storytelling around sustainable development (such as web series) and (c) narratives of sustainable development (such as positive futures) versus narratives of non-sustainable development. *(AA V, Objective 1)*

Heidelberg University of Education

- Educational landscapes incorporating ESD also make an essential contribution to social transformation towards sustainable development. In the Stadt-Raum-Bildung ('City-Space-Education') living lab project, important basic research is being carried out for the implementation of such educational landscapes. As part of this cooperative research project between the University of Stuttgart, SRH University Heidelberg and the Heidelberg University of Education, a guidebook is being developed by and for all stakeholders in a school transformation process for the creation of a sustainable community or knowledge city. The project participants are researching from educational and architectural perspectives the development of sustainable educational landscapes that make greater provision

for heterogeneity, inclusive education and all-day schooling. *(AA IV, Objective 1; School: AA V, Objective 1)*

Youth Association for the Protection of Nature (NAJU im NABU e. V.)

- NAJU will be represented on the project advisory board and promote the youth participation project in order to reach as many young people as possible. *(AA I, Objective 1)*

German Council for Sustainable Development (RNE)

- RNE plans a youth competition to publicise and promote new ideas and approaches to communication, publicity and dissemination of the Sustainable Development Goals in the mainstream education sector. This commitment contributes to the implementation of SDG 4 and in particular target 4.7. *(AA I, Objective 1; AA III, Objective 3)*

Expert Forum on Local Authorities



Federal Ministry for Economic Cooperation and Development (BMZ)

- Through Engagement Global's Service Agency Communities in One World (SKEW), BMZ funds support services for local authorities in the field of local development policy. SKEW provides various forms of support for local authorities, including a small projects fund and personal support from coordinators for local development policy; aspects relating to the promotion of ESD can be taken into account in the application process. There are also numerous overlaps with one of SKEW's own areas of activity, Local Sustainable Development; this is reflected in the measures set out in the following. *(cross-cutting)*
- SKEW contributes to awareness raising about sustainable development issues and their establishment at local level with symposia and conferences on Agenda 2030. *(AA II, Objective 1 und 4)*
- SKEW advises local authorities and policymakers on the development of interdepartmental local sustainability strategies in the context of the SDGs. City stakeholders are involved in the process. Representatives of the local administration, policymakers and the public learn about the SDGs and are provided with advice about implementing them at local level. This also makes it possible to incorporate ESD into the sustainability strategy with long-term strategic and operational goals and measures. *(AA II, Objective 1 und 4)*
- Networking between SKEW project local authorities with ESD local authorities for exchange, mutual support and to complement local activities. *(AA IV)*

- The SKEW local development policy coordinators in local authorities can also support the establishment of ESD at local authority level. *(AA V, Objective 4)*

Bündnis Zukunftsbildung/BUND (Friends of the Earth Germany) and BUNDjugend (Young Friends of the Earth Germany):

- BUND and BUNDjugend support the establishment and development of education regions/education networks/educational landscapes. In many Länder, there are BUND-supported environmental education centres and/or networking points that, with their contacts, knowledge and activities, constitute or have the potential to become an important local partner. *(AA II, Objective 4)*

Codewalk ICT Consulting (Sustainable Development Communication Agency)

- Codewalk ICT Consulting supports collaboration between ESD local authorities with its expertise from the UN Decade in Bad Honnef to produce a positive list of arguments for incorporating ESD in local authority mission statements and highlighting the positive impact of ESD on local communities. *(AA III, Objective 5)*

Free and Hanseatic City of Hamburg

- The Free and Hanseatic City of Hamburg will implement and further develop NUN (North German Partnership for the Support of the UN Decade of ESD) certification in Hamburg and so contribute to quality development in non-school ESD. *(AA II, Objective 5)*
- The Hamburg Senate has commissioned an ESD initiative, 'Hamburg lernt Nachhaltigkeit', to develop an ESD action plan ('master plan') for Hamburg and to submit a report by the end of the GAP in 2019. *(AA V, Objective 2)*

German Association of Local Utilities (VKU)

- The German Association of Local Utilities supports its member utilities in delivering on their commitment to ESD. To create lasting environmental awareness, local public utilities start with the very youngest – on topics such as avoiding and separating waste. *(AA I)*
- The German Association of Local Utilities is able to provide specific good practice examples from local public utilities on the basis of its evaluation of the European Week for Waste Reduction and Let's Clean Up Europe. *(AA IV)*

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Imprint

Published by

National Platform on Education for Sustainable Development
c/o Federal Ministry of Education and Research – Division
"Learning Regions; Education for Sustainable Development"
11055 Berlin
Germany

Information as of September 2017 (with an updated foreword
as of June 2019)

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Responsibility for the content lies with the National Platform
on Education for Sustainable Development.

The National Platform is the supreme steering body for
the German implementation of the UNESCO Global Action
Programme on Education for Sustainable Development
(2015-2019). The Federal Ministry of Education and Research
is chairing the National Platform. Six Expert Forums support
the National Platform. They bundle expertise from the fields of
early childhood care and education, schools, technical and vo-
cational education and training, higher education, non-formal
and informal learning/youth, and local authorities and receive
impetus from ten ESD Partner Networks.

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Words-Worth Stocks & Stocks GbR

Layout

wbv Media, Bielefeld
Hauke Sturm

Printed by

MKL Druck GmbH & Co. KG, Ostbevern

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p. 4/5: United Nations
p. 7: plainpicture/PhotoAlto/Michele Constantini
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