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**Sustainable Attitude for Environment in Adult Education**

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# **S.A.F.E a manual for adult educators**

Estonia, Latvia, Lithuania, Netherlands, Slovakia, Sweden,

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## ABSTRACT

Increasing concerns about the human impact on the natural environment, in 1987, the World Commission on Environment and Development defined the concept of sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs"<sup>1</sup>.

To achieve sustainable development, society needs intelligent members of society. H. Gardner in his book from 1983 “Frames of Mind” gave seven separate forms of human intelligence: linguistic, logical-mathematical, spatial, musical, body-kinaesthetic, interpersonal and intrapersonal. Daniel Goleman in 2009 put forward a new concept - **ecological intelligence**, which focuses on the ability to understand the impact of our actions on the environment or, in Goleman's words, "*the ability to adapt to our ecological niche*". This means understanding the relationship between organisms and their ecosystems, as well as the ability to obtain cultural information, learn from experience and adapt to the environment without harming it. Ecological intelligence also means “**ecological literacy**”, which is defined as the ability to “**read**” and **interpret current environmental problems and the relationship between humans and nature**. The question is how can we develop our ecological intelligence? The solution could be to increase our awareness:

- The first step in developing our intellect is to become more aware of what we are doing. It is important to know how our daily decisions can affect our world and society (what food do you buy, how often do you drive, how much energy do you use, etc.);
- The second step is to make our habits more sustainable so that we can completely transform our lifestyles to create a better world for future generations to enjoy. Unfortunately, this could take years.

Education can make a major contribution to achieving these goals, which should contribute to a new vision of sustainable global development (UNESCO, 2015)<sup>2</sup>. A special attention has to be paid on adult education, as adult education and lifelong learning are seen as transversal goal and method to achieving the sustainable development goals (SDGs) (European Association for ..., 2018)<sup>3</sup>. Worldwide, adults need to develop new ways of living is closely related with adult educator competencies to work with sustainability issues.

Adult educators are educational agents considered one of the essential pillars in the education and training of people, they need to develop ecological intelligence and forms of eco-literacy that will support them in forging new patterns of sustainable life. Sustainability in adult learning helps prepare us to recreate the world to address current and future challenges through the development of new solutions and new ways of being.

Therefore, adult educators from six countries - Estonia, Latvia, Lithuania, Netherland, Slovakia and Sweden - working together have shared their knowledge and practical experience in the field of adult educators’ competence development and on the implementation of SDGs in

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<sup>1</sup> Brundtland, G (ed.): Our Common Future: The World Commission on Environment and Development, Oxford: Oxford University Press (1987).

<sup>2</sup> UNESCO: Rethinking education: towards a global common good? <https://unesdoc.unesco.org/ark:/48223/pf0000232555> (2015)

<sup>3</sup> Adult Education and Sustainability. EAEA Background Paper, September 2018., European Association for the Education of Adults (EAEA), Mundo-J, Rue de l’Industrie 10, B-1000 Brussels. [https://eaea.org/wp-content/uploads/2018/12/AE-and-sustainability\\_paper\\_final\\_9\\_2018\\_financers.pdf](https://eaea.org/wp-content/uploads/2018/12/AE-and-sustainability_paper_final_9_2018_financers.pdf)

education. As a result, a **S.A.F.E (Sustainable Attitude for Environment) a manual for adult educators** has been created.

**Main goal of this manual** is to support adults/ adult educators/ staff who is working with adults in sustainability in a broad sense of challenges of environment and climate changes with a focus on less consumption, zero-waste movement, on a healthy lifestyle, influence of physical activity on the physical and mental health and quality of life, active citizenship. Manual focussed on how to choose and develop triggers to facilitate dialogue with adult education on sustainable attitude for environment, as well as emphasizes how adult educators should have to educate and support adults from different organisations.

**Methodology of the S.A.F.E a manual for adult educators** is based on adult education in the SDG framework, Education for Sustainable Development (ESD) competencies and andragogy principles and Malcolm Knowles concept, Manual for adult educators based on SDGs and include, among others, skills to lead a healthier life, knowledge about equitable and sustainable consumption, the promotion of gender equality, awareness about environmentally friendly transport and energy efficiency, as well as the promotion of sustainable, inclusive economic growth. Local/ regional/ national activities from the individual and organizational perspective has been taken into account in the development of the Manual.

**S.A.F.E a manual for adult educators** contains seven sections. The first section introduces the methodological background of the handbook with focus on adult education in the SDG framework, Education for Sustainable Development competencies as well as andragogy principles and Malcolm Knowles concept. The next six sections cover topics on sustainable attitude for environment: sustainable consumption, zero waste movement, environmentally friendly transport and energy efficiency, sustainable, inclusive economic growth, adult educators' skills to lead a healthier life and gender equality, the layout of which is based on the following scheme:

- **Philosophy:** definition of the concept and scope; societal, economic and ecological dimension of the concept; key elements of concept (knowledge and understanding, skills, values and attitudes);
- **Policy:** regulatory documents (European or international, local, regional, national etc.); examples how different kind of organizations implement SDGs in their activities;
- **Partnerships:** collaboration between educational institutions leadership, governmental/ non-governmental organizations, learners and the wider community to build ecological intelligence / literacy;
- **Pedagogy and practice:** examples of linking to the curriculum; concept in the context of sustainable development goals (and examples of activities to promote them in work with adults); Recommendations how an adult educator should educate and support adults from different organizations.

Project partners hope that the **S.A.F.E a manual for adult educators** will interest not only adult educators, lecturers and researchers who work with education for sustainable development competencies, but also practitioners, who use sustainable development knowledge and environmentally friendly attitudes in their work or personal life, improving the social reality and contribute to the sustainable development of the country/ region/ world.

## Methodological background of the handbook

Methodology based on adult education in the SDG framework, Education for Sustainable Development (ESD) competencies and andragogy principles and Malcolm Knowles concept.

### Adult education in the SDG framework

On January 1, 2016, the world officially launched the transformative plan of action "The 2030 Sustainable Development Agenda", announcing 17 Sustainable Development Goals (SDG) with 169 associated targets, to address urgent global challenges over the next 15 years (UN, 2015)<sup>4</sup> (Figure 1). It seeks to integrate and balance the three dimensions of sustainable development - economic, social and environmental - in a comprehensive global vision.



**Figure 1.** Sustainable Development Goals.

The Sustainable Development Goals - also known as the SDGs or the Global Goals - are focused **"to protect the planet from degradation, including through sustainable consumption and production, sustainable management of natural resources and by taking urgent action on climate change, so that the planet can support the needs of present and future generations"**.<sup>5</sup>

The United Nations emphasizes the role of education in transforming lives, recognizing the important role of education as a key driver of development and in achieving the other proposed SDGs. According to UNESCO (2015)<sup>6</sup>, **"Education can, and must, contribute to a new vision of sustainable global development"**. Thus, the biggest challenge for educational institutions today is the integration of SDGs into the educational process, as well as the promotion of sustainable development ideas throughout the learning/ teaching process.

<sup>4</sup> *Transforming our world: the 2030 Agenda for Sustainable Development*. Resolution adopted by the General Assembly on 25 September 2015. A/RES/70/1. <https://sustainabledevelopment.un.org/post2015/transformingourworld>

<sup>5</sup> Sustainable Foundations: A Guide for Teaching the Sustainable Development Goals. Manitoba Council for International Cooperation, 2018. [http://mcic.ca/pdf/SDG\\_Primer\\_FINAL.pdf](http://mcic.ca/pdf/SDG_Primer_FINAL.pdf)

<sup>6</sup> UNESCO (2015) *Rethinking education: towards a global common good?* <https://unesdoc.unesco.org/ark:/48223/pf0000232555>.



Sustainable Development Goal 4 emphasizes the role of education in creating a more sustainable world and calls for “inclusive and equitable educational education and the promotion of lifelong learning opportunities for all” (UN, 2016)<sup>7</sup>. Target 4.7 specifies the role of education in development and global citizenship: “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” (UN, 2016).

Sustainable development goal 13 "Climate Action" claim to take urgent action to combat climate change and its impacts. According to SDGs target 13.3: **'Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning'**. UNESCO document state that *Action for Climate Empowerment*<sup>8</sup> is implemented through education which has a crucial role to play in climate change, building capacities and attitudes for climate change mitigation as well as stimulating and reinforcing understanding of, and attentiveness of climate change. Education, awareness-raising and public information play an essential role in increasing the capacity of communities to counter climate change and adapt to its impacts<sup>9</sup>. This document also states that climate change has to be included in school curriculum at all levels and across disciplines.

A particular attention should be paid to adult education. People are living longer in an increasingly global world, jobs are evolving and the impact of climate change is growing. To cope with these changes, there is need for adult education that promotes change by improving social, economic and environmental opportunities and also by improving learners' sustainable attitudes towards the environment.

Adult education contributes to the individual as well as societies development in many ways (*Adult Education and ...*, 2018)<sup>10</sup>: provides knowledge, skills and competences that can be used both in professional and private life as well as promotes transversal and generic skills, i.e. social skills, communication skills, analytical skills etc., sometimes also called “life skills”. It should be noted that more recent concepts of adult civic education are based on the idea of education as a tool for empowerment.

Several studies show that there is a strong link between adult education and sustainable development goals, as adult education promotes learning and training to acquire and update skills, knowledge and competences, while SDGs is a global framework for addressing common challenges and for the development. Therefore, adult education and lifelong learning are seen as transversal goal and method to achieving the SDGs (European Association for ..., 2018)<sup>11</sup>.

<sup>7</sup> *The Sustainable Development Goals Report 2016*. United Nations, New York, 2016. <https://www.un.org.lb/Library/Assets/The-Sustainable-Development-Goals-Report-2016-Global.pdf>.

<sup>8</sup> *Action for Climate Empowerment*. Guidelines for accelerating solutions through education, training and public awareness. UNESCO and UNFCCC, 2016. <https://unesdoc.unesco.org/ark:/48223/pf0000246435>.

<sup>9</sup> *Action for Climate Empowerment*. Guidelines for accelerating solutions through education, training and public awareness. UNESCO and UNFCCC, 2016. <https://unesdoc.unesco.org/ark:/48223/pf0000246435>

<sup>10</sup> *Adult Education and Sustainability*. EAEA Background Paper, September 2018., European Association for the Education of Adults (EAEA), Mundo-J, Rue de l'Industrie 10, B-1000 Brussels. [https://eaea.org/wp-content/uploads/2018/12/AE-and-sustainability\\_paper\\_final\\_9\\_2018\\_financers.pdf](https://eaea.org/wp-content/uploads/2018/12/AE-and-sustainability_paper_final_9_2018_financers.pdf).

<sup>11</sup> *Adult Education and Sustainability*. EAEA Background Paper, September 2018., European Association for the Education of Adults (EAEA), Mundo-J, Rue de l'Industrie 10, B-1000 Brussels. [https://eaea.org/wp-content/uploads/2018/12/AE-and-sustainability\\_paper\\_final\\_9\\_2018\\_financers.pdf](https://eaea.org/wp-content/uploads/2018/12/AE-and-sustainability_paper_final_9_2018_financers.pdf).

As adult educators are key drivers of change in the world, adult educators are who have to direct learners' positive energy to make changes. When learners are empowered with knowledge, critical reflection tools and media literacy, they are better prepared to act and make changes for themselves and others around the world. It is adult educators who can stimulate adult curiosity and provide them with the tools and resources to explore, understand, engage and understand the importance of sustainability. (Manitoba Council for ..., 2018).<sup>12</sup> Therefore, ways need to be found for adult educators to reshape the curriculum to address the threats that human daily activities pose to environment.

## Education for Sustainable Development competencies

**Education for Sustainable Development (ESD)** is defined as education that encourages change in knowledge, skills, values and attitudes to ensure a more sustainable and just society for all<sup>13</sup>. It gives people the opportunity to change their way of thinking and working towards a sustainable future. The ESD aims to enable current and future generations to meet their needs through a balanced and integrated approach to the economic, social and environmental dimensions of sustainable development. Wals A.E. has defined four competence-based **dimensions** of sustainability<sup>14</sup>:

- the dynamics and content dimension of sustainability,
- the critical dimension of sustainability,
- the change and innovation dimension of sustainability,
- the existential and normative dimension of sustainability.

Wiek A. et al. developing the basic principles of academic program development, identified five **key competencies in sustainability**<sup>15</sup>:

- systems thinking competence,
- anticipatory competence,
- normative competence,
- strategic competence,
- interpersonal competence.

In 2016, they added the sixth competency: integrated problem-solving competence.

In 2016 Glasser H. and Hirsh J. identified **five additional key competencies**<sup>16</sup>:

- affinity for life,

<sup>12</sup> *Sustainable Foundations: A Guide for Teaching the Sustainable Development Goals*. Manitoba Council for International Cooperation, 2018. [http://mcic.ca/pdf/SDG\\_Primer\\_FINAL.pdf](http://mcic.ca/pdf/SDG_Primer_FINAL.pdf).

<sup>13</sup> Education for Sustainable Development. UNESCO. 7. [https://plus.google.com/+UNESCO\(2013-05-10\)](https://plus.google.com/+UNESCO(2013-05-10)).

<sup>14</sup> Wals, A. E. J.: Beyond unreasonable doubt: Education and learning for socio-ecological sustainability in the Anthropocene. Inaugural address held upon accepting the personal Chair of Transformative Learning for Socio-Ecological Sustainability at Wageningen University (2015), [https://arjenwals.files.wordpress.com/2016/02/8412100972\\_rvb\\_inauguratie-wals\\_oratieboekje\\_v02.pdf](https://arjenwals.files.wordpress.com/2016/02/8412100972_rvb_inauguratie-wals_oratieboekje_v02.pdf).

<sup>15</sup> Wiek, A., Withycombe, L. and Redman, C.L.: Key competencies in sustainability: a reference framework for academic program development. *Sustainability Science*, 6(2), pp. 203-218 (2011)

<sup>16</sup> Glasser, H., Hirsh J.: Toward the Development of Robust Learning for Sustainability Core Competencies. Article in *Sustainability The Journal of Record* 9 (3), pp. 121-134 (June 2016), [https://www.researchgate.net/publication/307918372\\_Toward\\_the\\_Development\\_of\\_Robust\\_Learning\\_for\\_Sustainability\\_Core\\_Competencies](https://www.researchgate.net/publication/307918372_Toward_the_Development_of_Robust_Learning_for_Sustainability_Core_Competencies).



- knowledge about the state of the planet,
- wise decision- making,
- modelling sustainable behaviour and
- transformative social change.

Based on the above, sustainability indicators depend on the interaction of knowledge and skills, value and motivation drivers, and opportunities. The interrelationship of these dimensions influences personal behavior (Figure 2).



**Figure 2.** Key competencies and performance of sustainability citizens<sup>17</sup>.

The Joint Ministerial Session on ESD<sup>18</sup> recognized that the big problem in achieving ESD is the **competence of educators** and agreed that competence development in the EDD should be one of the priorities for further implementation of the UNECE strategy. Expert group set up by the UNECE Steering Committee on ESD, developed general recommendations policymakers for the development of competences across all sectors of education, with particular emphasis on formal education and a range of core competences in ESD for educators, to serve as a tool to facilitate the integration of ESD into all educational programs at all levels<sup>19</sup>.

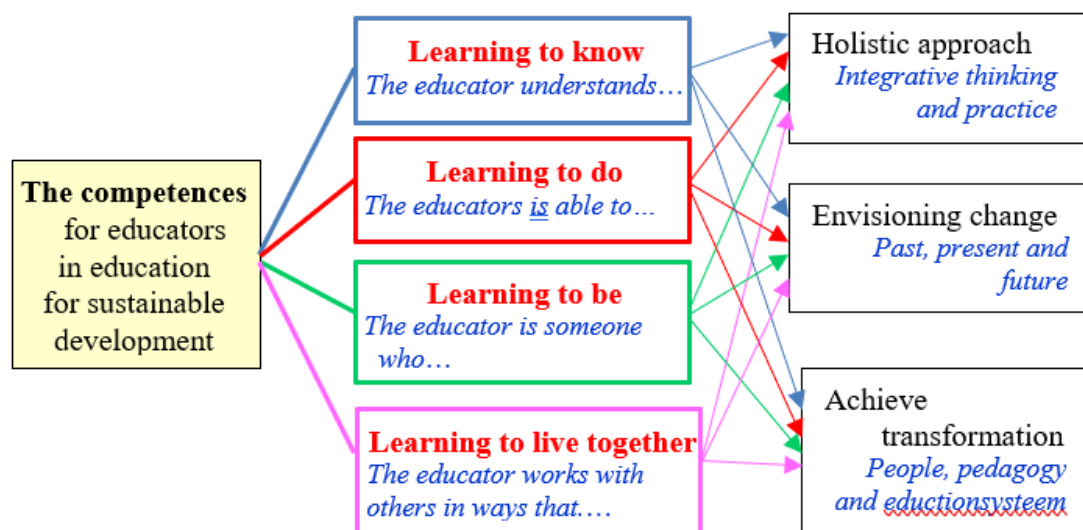
The competences for educators in education for sustainable development contain a set of categories that reflect a wide range of learning experiences (Figure 3):

- **Learning to know** means an understanding of the challenges facing society learners (*The educator understands....*);
- **Learning to do** refers to developing practical skills and action competence in relation to ESD (*The educator is able to....*);
- **Learning to do** refers to developing practical skills and action competence in relation to ESD (*The educator is able to....*);
- **Learning to be** addresses the development of one's personal attributes and ability to act with greater autonomy, judgement and personal responsibility in relation to SD (*The educator is someone who....*).

<sup>17</sup> A. Leicht, J. Heiss and W. J. Byun (eds) Issues and trends in Education for Sustainable Development. UNESCO (2018), <http://unesdoc.unesco.org/images/0026/002614/261445e.pdf>, last accessed: 2020/05/31.

<sup>18</sup> “Environment for Europe”. Statement of the UNECE Executive Secretary, The Sixth Ministerial Conference, Belgrade, (10 .10. 2007). [https://www.unece.org/press/pr2007/07gen\\_p10e.html](https://www.unece.org/press/pr2007/07gen_p10e.html), last accessed: 2020/01/06

<sup>19</sup> Learning for the future: Competences in Education for Sustainable Development, UNECE (2012), [https://www.unece.org/fileadmin/DAM/env/esd/ESD\\_Publications/Competences\\_Publication.pdf](https://www.unece.org/fileadmin/DAM/env/esd/ESD_Publications/Competences_Publication.pdf).



**Figure 3.** The competences for educators in education for sustainable development.

These categories should be applied and provided for:

- A **holistic approach**, which seeks integrative thinking and practice. The holistic approach includes three interrelated components: *integrative thinking, inclusivity and dealing with complexities*.
- **Envisioning change**, (past, present and future) which learns from the past, engages in the present and explores alternative future possibilities.
- **Achieving transformation**, which serves to change in the way people learn and in the systems that support learning.

## Andragogy principles and Malcolm Knowles concept

S.A.F.E (Sustainable Attitude for Environment) a manual for adult educators' methodology based on andragogical theory and principles. It should be noted that the term **andragogy** can be supposedly equivalent to the term pedagogy. Andragogy in Greek means man-leading in comparison to pedagogy, which in Greek means child-leading.

Malcolm Shepherd Knowles (1913 – 1997) was an American educator well known for the use of the term Andragogy as synonymous to adult education. According to Malcolm Knowles, andragogy is the art and science of adult learning, thus andragogy refers to any form of adult learning. (Kearsley, 2010)<sup>20</sup>.

## Knowles' 5 assumptions of Adult Learners

In 1980, Knowles made 4 assumptions about the characteristics of adult learners (andragogy) that are different from the assumptions about child learners (pedagogy). In 1984, Knowles added the 5<sup>th</sup> assumption (Table 1)<sup>21</sup>.

<sup>20</sup> Kearsley, G. (2010). Andragogy (M.Knowles). The theory into practice database. <http://tip.psychology.org>

<sup>21</sup> <https://elearningindustry.com/the-adult-learning-theory-andragogy-of-malcolm-knowles>

**Table 1.** Characteristics of adult learners (andragogy).

<i>Assumption</i>	<i>Characteristics</i>
<b>Self-Concept</b>	As a person matures his/her self-concept moves from one of being a dependent personality toward one of being a self-directed human being.
<b>Adult Learner Experience</b>	As a person matures he/she accumulates a growing reservoir of experience that becomes an increasing resource for learning.
<b>Readiness to Learn</b>	As a person matures his/her readiness to learn becomes oriented increasingly to the developmental tasks of his/her social roles.
<b>Orientation to Learning</b>	As a person matures his/her time perspective changes from one of postponed application of knowledge to immediacy of application. As a result, his/her orientation toward learning shifts from one of subject-centeredness to one of problem centeredness.
<b>Motivation to Learn</b>	As a person matures the motivation to learn is internal.

### Principles of andragogy

In 1984, Knowles suggested 4 principles that are applied to adult learning:

- Adults need to be involved in the planning and evaluation of their instruction.
- Experience (including mistakes) provides the basis for the learning activities.
- Adults are most interested in learning subjects that have immediate relevance and impact to their job or personal life.
- Adult learning is problem-centered rather than content-oriented (Kearsley, 2010).

**Table 2.** Adult Learners' Traits.

<b>Self-direction</b>	<b>Adults</b> feel the need to take responsibility for their lives and decisions and this is why it's important for them to have control over their <b>learning</b> . Therefore, self-assessment, a peer relationship with the instructor, multiple options and initial, yet subtle support are all imperative.
<b>Practical and results-oriented</b>	Adult learners are usually practical, resent theory, need information that can be immediately applicable to their professional needs, and generally prefer practical knowledge that will improve their skills, facilitate their work and boost their confidence. This is why it's important to create a course that will cover their individual needs and have a more utilitarian content.

<b>Less open-minded</b> and therefore more resistant to change	Maturity and profound life experiences usually lead to rigidity, which is the enemy of learning. Thus, <b>instructional designers</b> need to provide the “why” behind the change, new concepts that can be linked to already established ones, and promote the need to explore.
<b>Slower learning, yet more integrative knowledge</b>	Aging does affect learning. <b>Adults</b> tend to <b>learn</b> less rapidly with age. However, the depth of <b>learning</b> tends to increase over time, navigating knowledge and skills to unprecedented personal levels.
<b>Use personal experience as a resource</b>	<b>Adults</b> have lived longer, seen and done more, have the tendency to link their past experiences to anything new and validate new concepts based on prior learning. This is why it’s crucial to form a class with <b>adults</b> that have similar life experience levels, encourage discussion and sharing, and generally create a learning community consisting of people who can profoundly interact.
<b>Motivation</b>	<b>Learning in adulthood</b> is usually voluntary. Thus, it’s a personal choice to attend school, in order to improve job skills and achieve professional growth. This motivation is the driving force behind learning and this is why it’s crucial to tap into a learner’s intrinsic impetus with the right thought-provoking material that will question conventional wisdom and stimulate his mind.
<b>Multi-level responsibilities</b>	<b>Adult learners</b> have a lot to juggle; family, friends, work, and the need for personal quality time. This is why it’s more difficult for an adult to make room for learning, while it’s absolutely crucial to prioritize. If his life is already demanding, then the learning outcome will be compromised. Taking that under consideration, an instructional designer needs to create a flexible program, accommodate busy schedules, and accept the fact that personal obligations might obstruct the learning process.
<b>High expectations</b>	<b>Adult learners</b> have high expectations. They want to be taught about things that will be useful to their work, expect to have immediate results, seek for a course that will worth their while and not be a waste of their time or money. This is why it’s important to create a course that will maximize their advantages, meet their individual needs and address all the learning challenges.

## SUSTAINABLE CONSUMPTION

### Philosophy

#### Definition of the concept *sustainable consumption* and scope

There are several definitions of Sustainable consumption. In 1994, at the **Oslo Roundtable on Sustainable Production and Consumption**, it was defined as the use of services and related products which respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials as well as emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardize the needs of future generations.

As time has passed, definitions have broadened, narrowed, and shifted. The concept of sustainable consumption and production was later recognized in the **Johannesburg Plan of Implementation**, adopted in 2002 at the **World Summit on Sustainable Development**. On that occasion, sustainable consumption and production were identified as one of the three overarching objectives of, and essential requirements for, sustainable development, together with poverty eradication and the management of natural resources to foster economic and social development. It was acknowledged that fundamental changes in the way societies produce and consume are indispensable for achieving global sustainable development.<sup>22</sup>

Whereas Sustainable Consumption and Production may imply various things to different people, certain overarching concepts weave together broad areas of consensus to establish a holistic approach that exceeds regions and activity sectors.

According to **The One Planet network**, a multi-stakeholder partnership for sustainable development, Sustainable Consumption and Production is about systemic change, decoupling economic growth from environmental degradation and applying a lifecycle thinking approach, taking into account all phases of resource use in order to do more and better with less.<sup>23</sup>

The report *Fostering and Communicating Sustainable Lifestyles: Principles and Emerging Practices*, elaborated for **United Nations Environment Programme UNEP** (2016) specify: Consumption **refers not only to individuals** and households, but also to governments, business, and other institutions.

According to the report Sustainable consumption is **closely related to sustainable production and sustainable lifestyles**. "A sustainable lifestyle minimizes ecological impacts while enabling a flourishing life for individuals, households, communities, and beyond. It is **the product of individual and collective decisions** about aspirations and about satisfying needs and adopting practices, which are in turn conditioned, facilitated, and constrained by societal norms, political institutions, public policies, infrastructures, markets, and culture."<sup>24</sup>

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<sup>22</sup> <https://sustainabledevelopment.un.org/topics/sustainableconsumptionandproduction>

<sup>23</sup> <https://www.oneplanetnetwork.org/about/what-Sustainable-Consumption-Production>

<sup>24</sup> <http://wedocs.unep.org/handle/20.500.11822/17016>

The **United Nations Conference on Sustainable Development** (Rio+20) adopted the 10-Year Framework of Programmes on Sustainable Consumption and Production (10YFP). This is a concrete and operational outcome that responds to the 2002 Johannesburg Plan of Implementation (JPOI) which calls to all stakeholders to "Encourage and promote the development of a 10-year framework of programs (10YFP) in support of regional and national initiatives to accelerate the shift towards sustainable consumption and production to promote social and economic development within the carrying capacity of ecosystems."<sup>25</sup>

### **Societal, economic and ecological dimension of the concept *sustainable consumption***

Sustainable consumption and production **promote resource and energy efficiency, sustainable infrastructure, and access to essential services, green and fair employment, and a better quality of life for all**. According to UNEP, the implementation of Sustainable consumption as an integrated approach assists in achieving overall development plans, decreasing future economic, environmental, and social costs, strengthening economic competitiveness, and reducing poverty.

To 'decouple' economic growth and environmental degradation by improving resource use efficiency in the production, distribution, and use of products belongs to sustainable consumption's main goals. It focuses on keeping the energy, material, and pollution intensity of all production and consumption functions within the carrying capacities of natural ecosystems.

In order to enhance the sustainable management of resources and accomplish resource efficiency, sustainable consumption and production require "**lifecycle thinking**". With such a life cycle approach, sustainable consumption becomes a powerful lever to **stimulate the transformation to an eco-efficient economy** and shift environmental and social challenges into **business and employment opportunities**.

While "**doing more and better with less**" sustainable consumption and production increase net welfare gains from economic activities, **diminish resource use, degradation and pollution** along the whole lifecycle, and improve the quality of life.

Such change towards sustainable consumption and production **demand a systemic approach** and cooperation among actors operating in the supply chain, from producer to final consumer. It **involves various stakeholders**, including businesses, consumers, policymakers, researchers, scientists, retailers, media, development cooperation agencies, and others.

In agreement with UNEP, sustainable consumption and production **can contribute to poverty eradication**. For developing countries, it **offers opportunities to create new markets, green and decent jobs** (e.g. markets for organic food, fair trade, sustainable housing, sustainable transport and tourism, renewable energy) and more efficient welfare-generating natural resource management. UNEP states that sustainable consumption and production are also **an opportunity to leap to more resource-efficient, environmentally-sound and competitive technologies**.<sup>26</sup>

<sup>25</sup> <http://www.unep.fr/scp/>

<sup>26</sup> <https://sustainabledevelopment.un.org/index.php?page=view&type=400&nr=945&menu=1515>



### Key elements of concept sustainable consumption

Knowledge and understanding	Skills	Values and attitudes
<ul style="list-style-type: none"> <li>- to realize the complexity and often controversial nature of sustainable consumption issues,</li> <li>- to be aware of the environmental, economic and social impact of consumer behavior and individual lifestyle,</li> <li>- to acknowledge the use of the world's natural resources,</li> <li>- to understand the causes and consequences of the destruction of non-renewable resources,</li> <li>- to understand how the production processes are linked to the consumption system.</li> </ul>	<ul style="list-style-type: none"> <li>- ability to create own system of values and ideals, modify and change it based on new incentives,</li> <li>- ability to acquire, assess and use the information on the consequences of consumption especially on the environment</li> <li>- ability to reflect the compatibility of individual needs and cultural orientations to the idea of a sustainable future</li> <li>- ability to explore and scrutinize one's own aspirations wants and needs</li> <li>- ability to find creative, non-traditional solutions to problems.</li> </ul>	<ul style="list-style-type: none"> <li>- learn to look for alternative ways before making decisions or in front of problems that do not have a definitive or straightforward solution</li> <li>- the capacity to criticize unsustainable trends and systems of provision and to accept criticism by others</li> <li>- learn to value life and all living things, understand the place and role of each and everything in the world ecosystem.</li> </ul>

## Policy

### Regulatory documents

A range of policies at EU and national level **foster resource-efficient** and eco-friendly products and **raise consumer awareness**.

The building blocks of the EU's policy on sustainable consumption and production are an integral part of the **EU's renewed Sustainable Development Strategy**, which reinforces the EU's long-standing commitment to meet the challenges of sustainable development and builds on initiatives and instruments at EU and international level.<sup>27</sup>

<sup>27</sup> <https://www.eea.europa.eu/policy-documents/renewed-eu-strategy-for-sustainable-development>

The **Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan** presented by the European Commission comprises a range of proposals on sustainable consumption and production that will improve products' environmental performance and enhance the demand for more sustainable goods and production technologies.<sup>28</sup>

**The European Commission has developed policies and tools to support identifying green products and rewarding sustainable production practices.**

EU established and recognized the **EU Ecolabel, a label of environmental excellence** awarded to products and services matching high environmental standards during their life-cycle. The EU Ecolabel also promotes the circular economy and encourages companies to develop durable, easy to repair, and recycle products.<sup>29</sup>

The Commission has developed **legislation to reduce** lightweight carrier bags' consumption and the **environmental impact of packaging and packaging waste**.<sup>30</sup>

*The Commission also started the **Retail Forum** promoting more environmentally sustainable consumption patterns.* The Retail Forum is a multi-stakeholder platform set up to **exchange best practices** on sustainability in the European retail sector and recognize opportunities and barriers that may further or hinder the achievement of sustainable consumption and production.<sup>31</sup>

Vast opportunities for resource efficiency could be found also in the construction sector. **Level(s)** is a voluntary **reporting framework** for designing and constructing sustainable buildings. Within the framework, each indicator is designed to link the individual building's impact with sustainability priorities at the European level. Applying present standards, level(s) provides a common EU approach to assessing environmental performance in the built environment.<sup>32</sup>

Under the **EU consumer law**, the Commission elaborates **standards for how long products should last** or how easy they should be to restore, repair, and recycle. Such rules also support sustainable consumption, preventing unfair commercial practices and prohibiting misleading green claims.<sup>33</sup>

The European Commission has adopted a **Circular Economy Action Plan** that announces initiatives along the entire life cycle of products. Action Plan promotes circular economy processes, fosters sustainable consumption, and aims to ensure that the resources used are kept in the EU economy for as long as possible.<sup>34</sup>

To ensure that EU consumers are conscious of the impact of their choices on the environment, the European Commission proposed the **Product Environmental Footprint** and **Organisation Environmental Footprint** methods as a common way of measuring environmental performance.<sup>35</sup>

<sup>28</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52008DC0397>

<sup>29</sup> [https://ec.europa.eu/environment/ecolabel/index\\_en.htm](https://ec.europa.eu/environment/ecolabel/index_en.htm)

<sup>30</sup> The Packaging and Packaging Waste Directive (Directive (EU) 2015/720)

<sup>31</sup> <https://ec.europa.eu/environment/industry/retail/launch.htm>

<sup>32</sup> <https://ec.europa.eu/environment/eussd/buildings.htm>

<sup>33</sup> <https://ec.europa.eu/growth/single-market/european-standards/policy/>

<sup>34</sup> [https://ec.europa.eu/environment/circular-economy/index\\_en.htm](https://ec.europa.eu/environment/circular-economy/index_en.htm)

<sup>35</sup> <https://ec.europa.eu/environment/eussd/smgp/index.htm>

Eco-innovation and green technologies are essential to Europe's future and at the core of the EU's policies. Therefore, the Commission adopted the **Eco-innovation Action Plan (EcoAP)** intending to accelerate the market uptake of eco-innovation by addressing its obstacles and drivers.<sup>36</sup>

In order to help companies and other organizations to evaluate, report, and improve their environmental performance, the Commission developed the **Eco-Management and Audit Scheme (EMAS)** as a premium management instrument that crosses all economic and service sectors and is applicable worldwide.<sup>37</sup>

**Green Public Procurement (GPP)** or green purchasing is a voluntary instrument that has a crucial role in the EU's efforts to become a more resource-efficient economy. EU's public authorities are major consumers, by using their purchasing ability they can stimulate demand for more sustainable goods and services, which otherwise would be difficult to get onto the market. GPP is, therefore, a strong stimulus for eco-innovation.<sup>38</sup>

**The Slovak Republic**, in line with the 2030 Agenda for Sustainable Development and the instrument for achieving its goals, the EU Action Plan for the Circular Economy **uses** not only **legislative** but **also voluntary means of environmental policy**.

Among the most relevant legislation, Slovakia adopted Act. no. 79/2015 Coll. about waste, Act no. 529/2010 Coll. Act on Environmental Design and Use of Products (Ecodesign Act) Act no. 309/2009 Coll. Act on the Promotion of Renewable Energy Sources and Highly Efficient Cogeneration<sup>39</sup>

Within voluntary instruments that contribute to Circular economy's support, Slovak Republic implements **EMAS Ecolabel** and **GPP**. The institution **responsible for this implementation is the Slovak Environment Agency (SAE)**.

The Slovak economy consumes more resources than its natural capacity. **The ecological footprint of the Slovak economy is thus still negative**. Although Slovakia's requirements for resources is compared to other OECD countries lower, consumption still exceeds Slovakia's capabilities.

In line with UN SDG and Agenda 2030, **Sweden** has a coordinator for its implementation on national level. Apart the implementation task, he has to ensure that Sweden has a world-leading role in it<sup>40</sup>. There are also other regulatory documents in Sweden:

- National Action Plan for Agenda 2030<sup>41</sup>;
- There is also a national directive called Vision for Sweden 2025 to be used all over Sweden<sup>42</sup>

<sup>36</sup> <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52011DC0899>

<sup>37</sup> [https://ec.europa.eu/environment/emas/index\\_en.htm](https://ec.europa.eu/environment/emas/index_en.htm)

<sup>38</sup> [https://ec.europa.eu/environment/gpp/index\\_en.htm](https://ec.europa.eu/environment/gpp/index_en.htm)

<sup>39</sup> <https://www.sazp.sk/zivotne-prostredie/environmentalne-manazerstvo/udrzatelna-spotreba-a-vyroba/udrzatelna-spotreba-a-vyroba-na-slovensku.html>

<sup>40</sup> <https://www.regeringen.se/492ef0/contentassets/bb3407c1084d49928ba2e9f2ac9dad70/en-nationell-samordnare-for-agenda-2030-dir.-202017>

<sup>41</sup> <https://www.regeringen.se/49e20a/contentassets/60a67ba0ec8a4f27b04cc4098fa6f9fa/handlingsplan-agenda-2030.pdf>

<sup>42</sup> <https://www.boverket.se/globalassets/publikationer/dokument/2012/vision-for-sverige-2025.pdf>

## Examples how different kind of organizations implement sustainable consumption

The **Strategy of the environmental policy of the Slovak Republic until 2030 - Greener Slovakia**, Strategic document outlining the state's policy in the field of environmental protection, states it is crucial to move towards sustainable consumption, minimizing the footprint it leaves on the environment. Therefore, the state will support non-formal education activities and enhance conditions for the development of the third sector and local governments' educational activities, which will be focused on educating the general consumer public in terms of consciously reducing consumption. Thanks to educational activities and a nationwide campaign, civil society will have a good overview of environmental policy's voluntary instruments.

In the frame of Strategy of the environmental policy of the Slovak Republic, a **network of state and non-state centers of environmental education** is being created. Their task is to develop information and promotion activities on nature and landscape protection, including sustainable consumption support.

**The Ministry of the Environment of the Slovak Republic**, in cooperation with other state institutions, organizes an intensive, comprehensive **campaign to promote responsible and conscious consumption** of products, including foods with low carbon and environmental footprint. Educational activities focus on costumers' responsible consumption, active participation, and waste prevention. With the help of Producer Responsibility Organizations (PGIs) and the third sector, the emphasis is given to education in the field of waste management.

Particular attention is paid to responsible consumption in transport, nutrition, and clothing, as these are areas where consumers can have a direct and most significant impact.

Speaking about Sweden, it should be noted that Stockholm Region is one of the biggest employers in Sweden and an exceptional example of adapting sustainable and environmentally friendly approaches in all spheres of its work and infrastructure. Since 1990, Region Stockholm's emissions of carbon dioxide have decreased by over 70 percent (compared with the national target of 40 percent by 2020).

Zero Waste and no food waste is an approach practiced by many services. Starting from public transport run on bio-gas, ecological and locally produced food served in institutions and to securing local and foreign goods' purchase from responsible and sustainable sources.

## Pedagogy and Practice

### Concept *sustainable consumption* in the context of sustainable development goals

SDG No. 12: <b>Responsible consumption and production</b>	
<b>Activity description:</b>	World cafe discussion on the key issues, challenges and possible solutions in sustainable consumption and production

<b>Objective:</b>	<ul style="list-style-type: none"><li>• To critically analyze the key issues in sustainable consumption and production together with their negative impacts,</li><li>• To assess the current most significant challenges of sustainable consumption and identify possible solutions for the international community.</li></ul>		
<b>Target group:</b> Adult educators or learners.	<b>Time for activity:</b> 120 min	<b>Materials needed:</b> Flipcharts and markers for each group.	
<b>Activity implementation steps:</b> <ul style="list-style-type: none"><li>• The facilitator or trainer presents the activity and divides participants into small groups. Small groups' size varies according to the overall number of participants, preferably from 4-6 participants in one small group.</li><li>• Groups receive flipchart paper with one of the three headlines, either Issues, Challenges, or Solutions, and select the group leader.</li><li>• Each group shall select the group leader, preferably one comfortable with presenting ideas in front of all participants and one affiliated to the flipchart title.</li><li>• During the first part, participants should write down everything related to the headline (e.g., all issues related to sustainable consumption and production). Each of the participants will select one term that considers the most relevant.</li><li>• Leaders of the small groups remain in their positions; meanwhile, other members change places with members of another small group. In the beginning, the leader will present the previous group's ideas and repeat the process with new members. Together they analyze terms written on the flipchart, add new ones, and vote for the most relevant.</li><li>• Groups move again and repeat the process with further discussion and analysis.</li><li>• Throughout the last part, small groups come together and form the circle. The facilitator or trainer asks leaders to present their flipcharts together with all ideas they contain, emphasizing the ones participants consider the most relevant. Consequently, the facilitator opens a discussion to each term alternatively adds a new perspective.</li><li>• During the debriefing, the facilitator or trainer assesses the activity asking participants what specifically they learned - if they learned some new information or gained a new perspective.</li></ul>			
<b>Tips for facilitators/trainers:</b>	<ul style="list-style-type: none"><li>• Before the activity, it is recommended to conduct a brainstorming session involving the whole group, give a presentation about the sustainable consumption topic, or task participants to conduct a small research on this matter. Such steps will enhance learning outcomes and help to meet the objectives of the activity.</li><li>• For the same reason, it is recommended to provide participants with a definition of sustainable consumption and production before the world cafe starts.</li><li>• If the group is too big - e.g., there are more than 18 participants, it is recommended to add another flipchart with another title in order to keep nr. of participants in the small groups under 7 (e.g., divide issues of sustainable consumption and issues of sustainable production.)</li></ul>		

## **Recommendations how an adult educator should educate and support adults from different organizations**

***Focus on personal and social sustainability:*** *More community involvement in teaching, Reduce workloads, Promote openness in the workplace.* Essential factors in promoting personal sustainability include creating time for personal wellness, building a community that people enjoy learning in, reducing workloads, increasing the time allocated for reflection, and greater community involvement.

***Promote and practice collaboration:*** *Create incentives for collaboration. Promote collaborative inquiry. Support team-taught courses. Promote collaborative group work, peer learning.*

Competition, in the educational setting, is often encouraged as it creates opportunities for innovation and excitement and allows the institution to honour learners at the top of their field. Despite of that, the competitive environment creates rivalries between educators and various institutions. This is not to suggest that collaborative environments are not competitive or vice versa. However collaborative projects within and between educators and institutions create more time for reflection on important priorities that cross disciplinary boundaries.

***Infuse sustainability in educational institution's policies:*** Sustainability becomes the institution's vision and the overarching goal instead of excellence and "being the best". The institution becomes a living/learning lab.



## ZERO WASTE MOVEMENT

May 2020 UN Secretary-General issued a report on progress towards the 17 SDGs. Additionally to the indicators in the global SDG indicator framework it also highlights implications of the COVID-19 pandemic on each SDG.

According to SDG Knowledge Hub, 2020 SDG Progress Report finds “continued unevenness of progress” and identifies areas where significant improvement is required. Areas of progress until the end of 2019 included declining global poverty, falling rates of maternal and child mortality, access to electricity for more people, and the development of more national sustainable development policies and signing of international agreements for environmental protection.<sup>43</sup>

### Philosophy

#### Definition of the concept *zero waste* and scope

Zero Waste as a concept could be defined in many different ways depending on the country and approach. Originally it was brought to small towns in New Zealand at the first Zero Waste conference in Kataia in December 2000 by campaigner Warren Snow. In the last 20 years, No Waste, a simple term expressing the aspirations of recycling activists, became Zero Waste and a social movement bearing that name quickly took root in the USA, Europe, Asia and the entire globe.

**Zero-waste implies a life-style where trash is eliminated completely.** It requires a totally **new approach to recycling** with aim to protect the environment and moving towards circular economy. However, when it comes to zero waste concept, modern society of consumption implies it is almost impossible to leave no trash, nor disposables. However, many people are making a great effort and contributing to a more sustainable way of living. And here a pedagogical contribution of adult educators plays an important role.

#### Societal, economic and ecological dimension of the concept *zero waste*

From the economical point of view, **Zero waste** is an industrial term used to mimic nature in that we resume responsibility for our waste. That's a circular economy. An economy that's based on taking back the "waste" produced and turning it into something useful.

The true goal of zero waste:

- Prevent waste from happening: pre-cycling or refusing
- Putting value back into our belongings
- Reusing as much as we can with what we have.

Following these principles is tough when you live in a society that's based on a throwaway mentality. We don't have a circular economy; we have a linear economy.

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<sup>43</sup> <https://sdg.iisd.org/news/un-secretary-general-releases-2020-sdg-progress-report/>

We use precious resources to create products that are used on average five times and then put into a hole in the ground where it lives for all of eternity. We operate in a system that assumes there are infinite resources.

But, that is the flaw in a linear economy. We don't have infinite resources. Every year there is a day called "Earth Overshoot Day." It's a day to mark when we've used all the resources the earth can sustainably reproduce for the next year.<sup>44</sup>

A European initiative involving municipalities, companies and citizens' groups is encouraging its members to commit to the elimination of residual waste, thereby ending landfill and incineration as waste management practices.

**Zero Waste Europe** promotes infrastructural change in local waste management. It calls for waste prevention to be implemented in local plans, adoption by municipalities of waste separation so that waste streams are sorted at source, and for residual waste to be progressively reduced. For the latter to be achieved, according to **Zero Waste Europe**, “residual waste should be constantly studied in screening facilities so that kerbside schemes and reduction programmes [can] be further implemented, and non-recoverable products can be redesigned or removed from the market.”

So far, the zero waste approach has taken off most strongly in Italy and Spain, where dozens of municipalities have signed up. The pioneering zero-waste champion is **Capannori** in Tuscany, a town of about 47,000 inhabitants. It has achieved a 39% waste reduction since 2004, cutting the amount of waste generated per person per year from about 700 kilogrammes to about 430kg. More than 80% of Capannori's waste is now sorted at source and subsequently reused, recycled or composted. A residual 18% goes to landfill, but Capannori is working to reduce this, and has committed to zero waste to landfill by 2020. Capannori should be well positioned to meet European Union waste targets. The targets could include a limitation, or even a ban, on sending waste to landfill by 2020.

Zero Waste Europe is part of the **Zero Waste International Alliance**, and is supported financially by the non-profit organisation **GAIA**, the Global Alliance for Incinerator Alternatives/ Global Anti-Incinerator Alliance.<sup>45</sup>

### Key elements of concept sustainable consumption

One of the approaches for achieving Zero Waste is a concept of Zero Waste – 6 R:

Knowledge and understanding	Skills	Values and attitudes
Refuse	Flexibility, self-control	If you don't need it, don't buy it
Reduce	Adaptability, resilience	Limit how much of something you are using

<sup>44</sup> <https://goingzerowaste.com/>

<sup>45</sup> <http://www.zerowasteurope.eu>

Reuse	Learning to learn, creative thinking, communication	Use products or parts of products multiple times for multiple purposes
Recycle	Work ethic, accuracy	Sort and send materials like cardboard and glass to be recycled and redistributed
Repair	Flexibility, problem-solving	Fix broken things before tossing or buying new
Rot	Empathy, discipline	Compost natural materials

## Policy

### Regulatory documents

The European Commission adopted an ambitious **Circular Economy Package**, which includes revised legislative proposals on waste to stimulate Europe's transition towards a circular economy which will boost global competitiveness, foster sustainable economic growth and generate new jobs.

The revised legislative proposal on waste sets clear targets for reduction of waste and establishes an ambitious and credible long-term path for waste management and recycling. To ensure effective implementation, the waste reduction targets in the new proposal are accompanied by concrete measures to address obstacles on the ground and the different situations across EU Member States.

#### Key elements of the revised waste proposal include:

- A common EU target for recycling 65% of municipal waste by 2030;
- A common EU target for recycling 75% of packaging waste by 2030;
- A binding landfill target to reduce landfill to maximum of 10% of municipal waste by 2030;
- A ban on landfilling of separately collected waste;
- Promotion of economic instruments to discourage landfilling;
- Simplified and improved definitions and harmonised calculation methods for recycling rates throughout the EU;
- Concrete measures to promote re-use and stimulate industrial symbiosis –turning one industry's by-product into another industry's raw material;
- Economic incentives for producers to put greener products on the market and support recovery and recycling schemes (e.g. for packaging, batteries, electric and electronic equipment, vehicles).<sup>46</sup>

<sup>46</sup> [http://ec.europa.eu/environment/waste/target\\_review.htm](http://ec.europa.eu/environment/waste/target_review.htm)

The new **Action Plan** announces initiatives along the entire life cycle of products, targeting for example their design, promoting circular economy processes, fostering sustainable consumption, and aiming to ensure that the resources used are kept in the EU economy for as long as possible.

It introduces legislative and non-legislative measures targeting areas where action at the EU level brings real added value.

### **The new Circular Economy Action presents measures to:**

- Make sustainable products the norm in the EU;
- Empower consumers and public buyers;
- Focus on the sectors that use most resources and where the potential for circularity is high such as: electronics and ICT; batteries and vehicles; packaging; plastics; textiles; construction and buildings; food; water and nutrients;
- Ensure less waste;
- Make circularity work for people, regions and cities,
- Lead global efforts on circular economy.<sup>47</sup>

As a main regulatory document in **Slovak Republic** is **Envirostrategy 2030**<sup>48</sup>. The environmental policy strategy, which is still in force in Slovakia, was approved in 1993. It has not been updated for 25 years and does not address new environmental problems and challenges. The Ministry of the Environment of the Slovak Republic has prepared a new, modern environmental policy strategy until 2030.

### **Examples how different kind of organizations implement *zero waste movement***

An important tool for raising public awareness in the field of environmental protection in **Slovakia** is the Green Education Fund. In cooperation with donors from the private sector, the Fund makes it possible to support non-formal environmental education, covering topics such as waste management, waste reduction, and zero waste movement<sup>49</sup>.

The Slovak follower of the Zero -waste movement is Petra Slezáková. She has created a blog in which she shares her experiences in order to inspire people and simplify their path to waste-free life in Slovak conditions. Petra organizes numerous workshops for adult learners and provides private consultancies on minimizing individual ecological footprint and reducing waste production<sup>50</sup>.

As an example of active civil society action in Latvia, is **LIELĀ TALKA** (Big Cleanup) - based on folklore, implemented in modern and worldwide action. It is the largest non-governmental movement **in Latvia**, which is based on voluntary participation in the cleaning, rehabilitation and improvement of the environment. The **LIELĀ TALKA** movement is based on smartly organized public involvement, including all municipalities, schools, business partners, the media, diaspora organizations, and, of course, most importantly - every responsive supporter!

<sup>47</sup> <https://ec.europa.eu/environment/circular-economy/>

<sup>48</sup> [https://www.minzp.sk/files/iep/03\\_vlastny\\_material\\_envirostrategia2030\\_def.pdf](https://www.minzp.sk/files/iep/03_vlastny_material_envirostrategia2030_def.pdf)

<sup>49</sup> <http://zelenyvzdelavacifond.sk/sk/node/4>

<sup>50</sup> <http://www.zerowasteslovakia.sk/>

The ***LIELĀ TALKA*** is an event that encourages people to think and act to eradicate the causes of environmental pollution, not just the consequences, but also to restore understanding of the interaction between man and nature<sup>51</sup>.

A positive example of cooperation in the field of waste sorting **in Latvia** is a social project, within the framework of which the residents of Riga focus on the correct sorting of municipal waste and significantly increase the amount of sorted waste in their building. It should be noted that this project was launched with the so-called "Sorting Festival", in which the Green Belt also took part in an attractive plastic bottle sorting game, not only educating home residents about proper waste sorting and answering many questions about proper waste sorting principles, also encouraging the responsible handling of self-generated waste on a daily basis. Within the framework of the project, residents are provided with free specially adapted equipment for waste sorting in apartments, moreover, new household and sorted waste containers with specially created informative posters about proper waste sorting have been installed near the house. Also, when starting the project, the residents of the house were provided with useful, easily transparent and accessible information on proper waste sorting, which can be conveniently placed in their homes<sup>52</sup>.

A positive example is **Sweden** that has achieved tremendous results in Zero Waste concept due to its recycling and reusing approach.

Sweden has nearly reached ‘zero waste’ levels and imports at least two million tonnes of rubbish from other European countries. Sweden recycles an astounding 99 percent of locally-produced waste, thanks to the sensitiveness of its citizens to the environment and sophisticated collection techniques.

It means the country is by far the best in the world when it comes to recycling and reusing waste, having made great progress in its ‘recycling revolution’ over the past two decades.

The percentage of recycled waste by households has increased from 38 percent in 1975 to at least 99 percent today.

In 2001, 22 percent of rubbish was landfilled in Sweden, however, today the landfilled waste share is only one percent of the total produced.

As the policy of zero waste has seen the country running out of rubbish, Sweden has begun importing waste, with a four-fold increase between 2005 and 2014. Almost 2.3 million tonnes of waste were imported from the UK, Norway, Ireland and other countries in 2016. But unlike regular imports Sweden does not make any payments for receiving other countries’ waste, rather it is paid to do so.

Of the household waste produced in Sweden in 2017, around 15.5 percent was used for biological recycling, 33.8 percent for material recycling and 50.2 percent went to energy recovery. Landfills are a major contributor to global emissions of the greenhouse gas methane, and burning waste is kinder to the environment, experts say.

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<sup>51</sup> <https://talkas.lv/liela-talka/>

<sup>52</sup> <http://www.zalajosta.lv/lv/15augusta-uzsakts-vel-nebijis-atkritumu-skirosanas-socialais-eksperiments-riga-foto>

“If you incinerate one tonne of Italian waste in Sweden you get 500kg CO<sub>2</sub> equivalent less emissions than if it is dumped in a landfill in Italy. That’s a substantial reduction,” said Johan Sundberg, Energy and Waste Consultant at Profu.

Thanks to innovations of the country’ waste-to-energy programme, burning waste at incineration plants in Sweden supplies heat to more than one million houses in the country.

The recycling process does not end at the burning stage. The remaining ashes constitute 15 percent of the waste volume before burning. Metals in these ashes are recycled again, with the rest used in road construction. Just one percent remains and is deposited in dumps.

Moreover, the smoke from burning the waste is filtered through dry filters and water. And the dry filters are used to refill abandoned mines. Although it might be better than many other alternatives, the Swedish model does not mean the whole waste disposal process is 100 percent environmentally-friendly, particularly considering that half of all household waste is burnt to produce energy.

Weine Wiquist, CEO of the Swedish Waste Management and Recycling Association (Avfall Sverige), explains that reusing materials or products means using less energy to create a product, instead of burning one and making a new one from scratch.

Other critics also point out the fact that the by-product of burning waste is CO<sub>2</sub> and water, albeit non-toxic, the contribution of CO<sub>2</sub> emissions to global warming and climate change cannot be ignored.

### **Developed garbage collection**

Sweden has a state-of-the art waste collection system with recycling stations located no more than 300 metres from residential areas. There are also pipelines under roads that vacuum garbage which is sent by households to the stations.

The waste collection system helps to get rid of the smell of rubbish from neighbourhoods thanks to the use of underground deposits, it also means the rubbish does not occupy any space at street level.

Swedish company, Optibag, owns sophisticated machinery that can separate different coloured bags from each other. The machine sorts these bags automatically, which solves the problem and cost of sorting stations.

The Swedish community is well educated in sorting garbage for recycling and the government has strong strategy for its collection and re-use to supply energy.

In the Nordic country, prominent musicians record songs and commercials are televised to encourage people to return used bottles for recycling. Speakers playing music in public waste bins make for a more pleasant recycling experience and in supermarkets, people deposit bottles and cans in exchange for money, in a practice called panta.

Swedes commonly separate all rubbish in their homes and deposit it in separate containers according to type, such as metal, glass, plastic or food (Figure 4).



Then food is used for creating biogas, while glass bottles are reused or melting to produce new glass container. Plastic materials are converted into their raw state and special rubbish trucks collect dangerous chemicals and electric waste, such as broken or old furniture and televisions.<sup>53</sup>



**Figure 4.** Separation of rubbish and deposit in separate containers according to type.

## Pedagogy and Practice

### Examples of linking to the curriculum

Regardless the subject or curriculum, the elements of Zero Waste concept could be integrated and used by educators as the concept itself implies an integration of environmentally friendly approach on all levels and elements of our life. However, it requires some basic knowledge and understanding of Zero Waste approach to start living more sustainable. You can begin with buying second-hand clothes, recycling waste, changing cooking habits and diet, biking, saving water and energy. If done by millions of people, such small steps can bring to significant results. Together with their students the adult educators can develop simple exercise with inspiring examples on sustainable living decreasing the waste.

### Concept *zero waste* in the context of sustainable development goals

SDG No. 12 <b>Responsible Consumption and Production</b>	
<b>Activity 1 description:</b>	<ul style="list-style-type: none"> <li>• Extend the list of Zero Waste 6 R (refuse, reduce, reuse, recycle, repair, rot).</li> <li>• Try to think what kind of approaches one can apply in everyday life on a practical level.</li> </ul>

<sup>53</sup> <https://www.trtworld.com/europe/swedish-recycling-so-successful-it-is-importing-rubbish-24491>

<b>Objective:</b>	To practice Zero Waste thinking through extending the list of Zero Waste 6R.		
<b>Target group:</b>  Adult students and learners, teachers and educators	<b>Time for activity:</b>  30 min	<b>Materials needed:</b> cards with each of Zero Waste R, pens and paper, markers and presentation sheets.	
<b>Activity implementation steps:</b> <ul style="list-style-type: none"><li>• To introduce Zero Waste Concept to students, discuss each of 6R and give examples.</li><li>• To divide students in smaller groups and give the same task – to extent 6R list.</li><li>• To make a presentation for the whole group.</li></ul>			

SDG No. 12 <b>Responsible Consumption and Production</b>			
<b>Activity 2 description:</b>	<ul style="list-style-type: none"><li>• To divide into smaller groups to generate ways and examples for each Zero Waste 6R to be used in everyday life, at work place, community and national level.</li><li>• To make a presentation in front of the whole group and debate how applicable, influential or difficult the found ways are to apply.</li></ul>		
<b>Objective:</b>	To practice SDG 12 – Responsible Consumption and Production; to find solutions to Zero Waste concept to be used in everyday life.		
<b>Target group:</b> Adult students and learners	<b>Time for activity:</b> 30 min + time for group presentations	<b>Materials needed:</b> cards with each of Zero Waste 6R, pens and paper, markers and presentation sheets.	
<b>Activity implementation steps:</b> <ul style="list-style-type: none"><li>• To introduce Zero Waste Concept and 6R to students, discuss each of them and give examples.</li><li>• To divide students in smaller groups providing them with one card from 6R list.</li><li>• To generate new examples for the 6R and make a presentation for the whole group.</li></ul>			
<b>Tips for facilitators/trainers:</b>	Here are a few ideas for Zero Waste concept to get you and your students inspired <sup>54</sup> : <ul style="list-style-type: none"><li>• <b>Cotton pads</b> → washable cotton rounds</li><li>• <b>Tissues</b> → handkerchiefs</li><li>• <b>Tea bags</b> → loose tea used with a tea strainer</li><li>• <b>Plastic + paper bags</b> → a cotton reusable bag</li><li>• <b>Bottled water</b> → reusable water bottle</li><li>• <b>Cleaning wipes</b> → a microfiber cloth</li></ul>		

<sup>54</sup> <https://healinglifestyles.com/zero-waste-7-ways-to-less-excess/>

	<ul style="list-style-type: none"><li>• <b>Tin foil/cling film</b> → place in the fridge with a dish towel over the top</li><li>• <b>Coffee filters</b> → a French press.</li></ul> <p>Visual material examples are also good to use to stimulate creativity and thinking.</p>
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### **Recommendations how an adult educator should educate and support adults from different organizations**

It is generally known that one teaches best when one speaks from own experience. Even though it is hard to reach environmental goals just by households and individuals converting to living climate smart, it is nevertheless an important contribution to a new way of thinking and change of approach to the way of living. Some adults questioned by the Survey said they wished to live in a more sustainable and environmentally friendly way on every day basis, but lacked the knowledge and practical skills. Here adult educators' task is to provide them with examples and easy-to-apply approaches as well as common understanding what Zero Waste concept means.

# ENVIRONMENTALLY FRIENDLY TRANSPORT AND ENERGY EFFICIENCY

## Philosophy

### Definition of the concept environmentally friendly transport and energy efficiency and scope

**Clean and energy efficient vehicles**<sup>55</sup> have an important role to play in achieving EU policy objectives of reducing energy consumption, CO<sub>2</sub> emissions, and pollutant emissions.

The [Directive on the Promotion of Clean and Energy Efficient Road Transport Vehicles](#) aims at a broad market introduction of environmentally-friendly vehicles. It addresses purchases of vehicles for public transport services. Clean Transport Systems can fully meet the energy demand of the transport sector. Alternative low-carbon fuels should gradually substitute fossil fuels for transport propulsion in the long term.

### Societal, economic and ecological dimension of the concept *environmentally friendly transport and energy efficiency*

Growing<sup>56</sup> concerns over security of energy supply, climate change and health are driving a shift from fossil to alternative fuels and new vehicle propulsion systems capable of delivering long term sustainability. Three quarters of transport greenhouse emissions come from road transport. Transport is especially vulnerable to oil supply disruption and price volatility. Despite huge reductions in emissions of harmful pollutants, there remain concerns over air quality and noise, especially in urban areas.

Transport is an important building block in the **EU energy-climate policy**. Europe's climate and energy package includes targets for 2020 for energy efficiency, a target minimum share for renewable energy and targets for reducing greenhouse gas emissions. These cannot be reached without a significant contribution from transport.

The **Green Cars Initiative**, as part of the **European Economic Recovery Plan** recently adopted by the European Council, is aimed to support the development of new and sustainable forms of road transport.

The Commission is presently supporting three main alternative types of fuels and propulsion technologies which are being developed within the time horizon of 2020. Demonstrations aim to prove vehicle and infrastructure performance and safety with a view to removing market entry barriers. The candidate fuels and propulsion systems include:

- Biofuels, liquid or gaseous

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<sup>55</sup> European Commission - [https://ec.europa.eu/transport/themes/urban/vehicles\\_en](https://ec.europa.eu/transport/themes/urban/vehicles_en)

<sup>56</sup> European Commission - [https://ec.europa.eu/transport/themes/urban/vehicles/road\\_en](https://ec.europa.eu/transport/themes/urban/vehicles/road_en)

- Hydrogen and fuel cells
- Battery electric and hybrid electric vehicles with plug-in.

## Key elements of concept environmentally friendly transport and energy efficiency

Knowledge and understanding	Skills	Values and attitudes
<ul style="list-style-type: none"> <li>• To know about environmentally friendly transport and energy efficiency</li> <li>• To understand environmentally friendly transport benefits and energy efficiency</li> </ul>	To use environmentally friendly transport and energy efficiency in daily life	To follow principles of environmentally friendly transport and energy efficiency use

## Policy

### Regulatory documents

#### *Clean transport, Urban transport*

**Cycling**<sup>57</sup> is an efficient way of using expensive and scarce space in urban areas, and is healthy, clean and cheap. It has enormous potential when we acknowledge that almost half of all car trips in cities are of less than five kilometres.

The informal meeting of EU ministers for Transport adopted a [Declaration on Cycling](#) as a climate friendly transport mode, in Luxembourg, October 2015. Ministers called upon the Commission, Member States and local and regional authorities to consider a number of actions in that regard.

As a result, the Commission works on further integrating cycling into the multimodal transport policy, as follows:

- Reinforce **cycling aspects** within the current initiatives, such as [CIVITAS](#) and the [European Mobility Week](#) campaign,
- Give more attention to **increased road safety** in relation to cycling,
- Engage more with relevant inter-governmental **organisations** and **stakeholders**, via a cycling contact appointed in DG MOVE: [MOVE-CYCLING@ec.europa.eu](mailto:MOVE-CYCLING@ec.europa.eu)
- Reinforce **transport statistics** related to cycling.
- 

These activities should positively contribute towards increasing the modal share of cycling in the EU cities, in addition to the already existing activities supporting cycling and walking:

- It encourages cities to adopt Sustainable [Urban Mobility Plans](#) which should address cycling and walking.

<sup>57</sup> European Commission - [https://ec.europa.eu/transport/themes/clean-transport-urban-transport/cycling\\_en](https://ec.europa.eu/transport/themes/clean-transport-urban-transport/cycling_en)

- It promotes the exchange of urban mobility best practice through ELTIS – the [urban mobility portal](#) which includes more than 550 case studies.
- It addresses vulnerable road users like cyclists and pedestrians, through its road safety policy. The [Road Safety website](#) provides tips for pedestrians, information on traffic rules for cyclists, studies, key facts & figures and links to specific projects such as [BIKEPAL](#) and [SAFE CYCLE](#).
- It supports the awareness-raising campaign [European Mobility Week](#) promoting multimodality and the [European Week of Sport](#) promoting physical activity and participation in sport at all levels.
- It manages [Expert Group on Urban Mobility](#) to facilitate exchange of information and cooperation on urban mobility issues between Member States and the European Commission.
- It provides funding, in particular through the [European Structural and Investment funds](#) which support the development of cycle infrastructure in eligible regions, the [EU Health Programme](#) and the [Erasmus+ Sport Programme](#) which supports actions to promote the awareness of the importance of physical activity and healthy lifestyle, and through the [Horizon2020 Research Framework Programme](#) via the [CIVITAS initiative](#). The STEER (transport) pillar of the [Intelligent Energy-Europe programme](#) provided EUR 33.6 million to 21 European pilot projects related to cycling.
- It liaises with key stakeholders for exchange of best practice and support. Specific examples include support to the [Cycle Cities](#) project, the [CHAMP](#) project, the [CycleLogistics](#) project, the Clean Air initiative which conducts the [European Biking Cities](#) campaign, and the [VRUITS](#) project (ITS for vulnerable road users).
- The promotion of physical activity by EU citizens is discussed by representatives of the all EU Member States in the [High Level Group on Nutrition and Physical Activity](#). Member States encourage physical activity among children in the [Action Plan on Childhood Obesity](#). Stakeholders (such as industry, consumer/health NGOs and health professionals) develop voluntary actions on physical activity within the [EU Platform on Diet, Physical Activity and Health](#). These commitments can be found in the [Platform database](#).
- The Commission also assists EU national governments in the implementation of a [Council Recommendation on the promotion of physical activity across sectors](#), especially by supporting the establishment of a monitoring framework, and by setting up an Expert Group of Member States representatives to facilitate peer-learning and identification of successful approaches. That group also prepares recommendations to encourage physical education in schools [EU Work Plan for Sport](#).

The Government of the **Slovak Republic** approved the document: **Transport Development Strategy of the Slovak Republic until 2030**, which defines the vision, goals, priorities, and measures in the field of transport development. The strategy's objectives include ensuring the balanced development of transport services and reducing the impact of transport on the environment<sup>58</sup>.

The published White Paper on Transportation (Transportation 2050) proposes ambitious targets for both passenger and freight transport to be achieved by 2050<sup>59</sup>.

<sup>58</sup> <https://www.mindop.sk/ministerstvo-1/doprava-3/strategia/strategicky-plan-rozvoja-dopravy-sr-do-roku-2030/strategicky-plan-rozvoja-dopravy-sr-do-roku-2030>

<sup>59</sup> <https://www.mindop.sk/uploads/media/8b106cbe8b4d41551899373962d980550d7fc50a.pdf>



In passenger transport, it is the transfer of medium-distance passengers from individual to rail transport by 2050.

When transporting goods over a distance of more than 300 km, in freight transport, use railways or water transport - by 2030, a total of 30% of freight transport and by 2050, more than 50%.

### Examples how organizations implement in their activities clean transport

The work-related costs scheme <sup>60</sup>(WKR) has been definitively introduced **compulsory** as of **1 January 2015** for all employers in the Netherlands. With the EAS, employers can allow their employees to benefit from allowances and benefits in kind untaxed up to a predetermined percentage of the total wage bill.

The revised<sup>61</sup> [Clean Vehicles Directive](#) promotes clean mobility solutions in public procurement tenders, providing a solid boost to the demand and further deployment of low- and zero-emission vehicles.

The new Directive defines "clean vehicles" and sets national targets for their public procurement. It applies to different means of public procurement, including purchase, lease, rent and relevant services contracts. Adopted by the European Parliament & Council in June 2019, the Directive needs to be transposed into national law by 2 August 2021.

#### *Which vehicles are concerned?*

The Directive applies to cars, vans, trucks and buses (excluding coaches), when they are procured through:

- **Purchase, lease, rent or hire-purchase contracts** under obligations by EU public procurement rules (Dir. 2014/24/EU and 2014/25/EU)
- **Public service contracts** for the provision of passenger road transport services (Reg. 1370/2007)
- **Services contracts** for public road transport services, special-purpose road passenger-transport services, non-scheduled passenger transport, refuse collection services, mail and parcel transport and delivery. (Annex I of the Directive).

The Directive will only apply to contracts whose awarding procedure starts after 2 August 2021 (the end date for transposition).

#### *What is a "clean vehicle"?*

The revised Directive defines a "**clean vehicle**" as follows:

- Clean light-duty vehicle: any car or van meeting the following emission thresholds:
  - until 31 December 2025: no more than 50g/km CO<sub>2</sub> and up to 80% of applicable real driving emission (RDE) limits for NOx and PN;

<sup>60</sup> [https://www.nationalefietsprojecten.nl/pageid=1018/De\\_werkkostenregeling.html](https://www.nationalefietsprojecten.nl/pageid=1018/De_werkkostenregeling.html)

<sup>61</sup> [https://ec.europa.eu/transport/themes/urban/clean-vehicles-directive\\_en](https://ec.europa.eu/transport/themes/urban/clean-vehicles-directive_en)

- from 1 January 2026: only zero-emission vehicles.
- Clean heavy-duty vehicle: any truck or bus using one of the following alternative fuels: hydrogen, battery electric (including plug-in hybrids), natural gas (both CNG and LNG, including biomethane), liquid biofuels, synthetic and paraffinic fuels, LPG.

The Directive also sets a separate definition for "zero-emission heavy-duty vehicles", as a sub-category of clean heavy-duty vehicles.

*For light-duty vehicles (cars and vans), the definition is in line with the corresponding provisions under the latest CO<sub>2</sub> emission performance standards for cars and vans (Regulation 2019/631). In the first period, until 2025, the focus will be on low-emission vehicles, while in the second period, starting in 2026, the focus will be only on zero-emission vehicles.*

*For heavy-duty vehicles (trucks and buses), the definition includes all vehicles running on any of the alternative fuels listed in the Alternative Fuels Infrastructure Directive (Directive 2014/95); in order to reflect their performance in terms of air quality and decarbonisation, zero-emission heavy-duty vehicles are given a separate definition.*

### *National targets for procuring clean vehicles*

The national targets are defined as a minimum percentage of clean vehicles in the aggregate public procurement across a Member State. This means, Member States have full flexibility in how they distribute the effort across different contracting authorities and contracting entities. A Member State has to meet at least half of the procurement target for clean buses in each period through the procurement of zero-emission buses.

[Show Targets for clean light-duty vehicles](#) [Show Targets for clean heavy-duty vehicles](#)

*Because the targets are calculated on the basis of the aggregate public procurement across a Member State (i.e. on the basis of the total number of vehicles within the scope of the Directive, which are procured during the respective period), Member States have full flexibility in how they distribute the effort across different contracting authorities and contracting entities.*

*In other words, the Directive does not directly set requirements for individual tenders, nor targets for individual cities or public authorities: a Member State may decide to set higher and lower targets for different authorities, as long as the total number of vehicles procured during each period includes a minimum share of clean vehicles in line with objectives.*

### *Monitoring and reporting*

When contracting authorities or contracting entities procure vehicles through purchase, lease, or hire-purchase contracts within the scope of the Directive, all these vehicles count for the purpose of the national minimum target. In the case of public services contracts, or contracts for services under Annex I, the number of vehicles to be used for the provision of those services are counted.

Monitoring and reporting will happen primarily through the [Tender Electronic Database \(TED\)](#) to reduce administrative burdens.

Contracts falling within the scope of the Directive are already recorded in the TED database, so this approach will not create additional reporting requirements.

At the time of awarding a contract, individual Contracting Authorities and Contracting Entities should indicate how many vehicles are being procured, how many of these are clean vehicles, and how many are zero-emission vehicles. This is all information that is normally already known – and often also already provided in the contract award notice.

### Exemptions

The following vehicles are excluded from the Directive:

- Coaches (*vehicles of category M3 other than Class I & Class A*)
- Agricultural and forestry vehicles
- Two- and three-wheeled vehicles and quadricycles (*cat. L*)
- Track-laying vehicles
- Mobile machinery

The following vehicles are included in the Directive, but Member States may decide to exempt them, when they transpose the Directive:

- Special vehicles for use by armed services, civil protection, fire services and police forces
- Special vehicles for use on construction sites, quarries, ports, airports
- Armoured vehicles, ambulances, hearses, wheelchair accessible cars, mobile cranes.

*The vehicle categories falling outside the scope of the Directive generally present specific technical characteristics and market profiles which do not justify inclusion in the scope of the Directive. On the other hand, vehicles subject to national exemptions are generally vehicles that fall within the categories covered by the Directive, but which are dedicated to specific uses (e.g. police, emergency services, fire brigade...) and are specifically designed, constructed or adapted for this purpose.*

### Review

The Directive foresees a review in 2027; this should be used to set new targets for the time period post 2030, and to consider possible further expansion of the scope (e.g. to two- and three-wheeled vehicles). If no new targets are set, the targets set for 2026-2030 will continue to apply in the following years, over consecutive 5-year periods (2031-2035, 2036-2040, etc.).

The review clause also provides an opportunity to ensure that the Clean Vehicles Directive remains consistent with the approach followed in the context of the CO<sub>2</sub> emission performance standards post-2030, in case of changes in the latter.

### Relevant legislation

[Revised Clean Vehicles Directive \(2019/1161\)](#)

[Directive on the promotion of clean & energy-efficient road transport vehicles \(2009/33/EC\)](#)

[Report on the application of Directive 2009/33/EC on the promotion of clean and energy efficient road transport vehicles](#)

### *Partnerships: collaboration with educational institution leadership, governmental/ non-governmental organizations*

Bicycle use is widespread in the Netherlands<sup>62</sup>. 27% of all journeys are made by bicycle. And in some cities, this figure is much higher. But we can still do more to encourage people to travel by bicycle. After all, more than half of all trips by car are less than 7.5 kilometres. Most people would find this an acceptable distance to cycle. The popular e-bike also makes cycling longer distances an option.

### *Cycle superhighways*

If more people chose to cycle to and from work, the number of tailbacks during peak hours would be reduced. Options for promoting bicycle use generally focus on distances up to 15 kilometres. Cycle superhighways are an essential part of this, not only within cities but also between them. In recent years, central government has encouraged municipal and provincial authorities to establish good regional cycling routes. Currently, some 25 cycle superhighways are in use or under construction.

### *Rewarding bicycle use*

A number of regions are promoting bicycle use through mobile phone apps. A case in point is the [B-Riders](#) project in the province of Brabant. B-Riders are commuters who switch from car to bicycle. Coached by an app, they receive a financial reward for each kilometre cycled during peak hours. Experience has shown that most people continue to cycle even after the reward ceases.

### *Bicycle facilities and mileage allowance provided by employers*

Employers, too, benefit from employees cycling to work. Employees who cycle are in better shape and are less prone to absence through illness. Moreover, companies may be able to save on parking costs when more employees commute to work. For that reason, the government is encouraging employers to provide good facilities for cyclists:

- A mileage allowance for cyclists: employers may pay cyclists a (tax-free) mileage allowance of up to EUR 0.19 a kilometre, the same rate available to staff who travel to work by car.
- Simpler tax rules on using a company bicycle for private purposes: Sinds 1 January 2020 the tax rules for people who use a company bicycle for private purposes will be simplified. Each year, these employees will have to add 7% of the recommended retail price of their bicycle to their taxable income. This applies to bicycles, e-bikes and speed pedelecs paid for by the employer.

### *Activities in Slovakia*

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<sup>62</sup> Government of the Netherlands - <https://www.government.nl/topics/bicycles/bicycle-policy-in-the-netherlands>

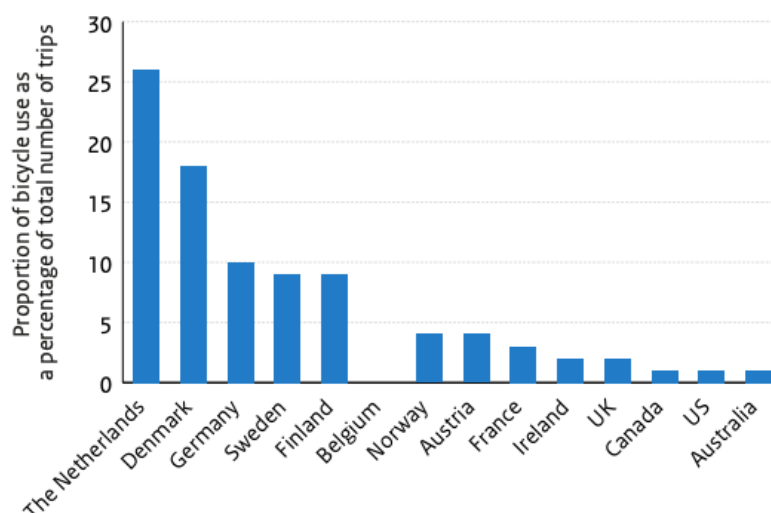
Non-formal environmental education and training in energy efficiency and environmentally friendly transportation in **Slovakia** are provided by departmental organizations of The Ministry of the Environment. It covers educational activities with the use of interactive elements, which include, for example, events on the occasion of important environmental days, discussions for all categories of schools, events for marginalized groups, exhibitions, excursions, film festivals, professional conferences, seminars for various target groups, as well as methodological days and accredited continuing education for adults. The implementation of environmental education is provided by Centers of Environmental Education SAŽP<sup>63</sup>.

## Pedagogy and Practice

### Examples of linking to the curriculum

In the 1960s, Dutch<sup>64</sup> cities were increasingly in thrall to motorists, with the car seen as the transport of the future. It took the intolerable toll of child traffic deaths – and fierce activism – to turn Amsterdam into the cycling nirvana of today. *Stop de Kindermoord* campaigners visit Amsterdam’s House of Representatives in 1972, a year after more than 400 children were killed in traffic accidents.

There are [more bicycles than people in the Netherlands](#)<sup>65</sup> and they account for almost half of all journeys between home and work in the city of Amsterdam alone. It’s small wonder the country proudly calls itself the “unrivalled number one bicycling nation” in the world.



**Figure 5.** The number one cycling nation<sup>66</sup>.

Being a relatively flat country, no doubt helps encourage people to get on their bike. As does the expanse of cycle paths and lanes that keep bikes separate from other traffic. But there is a little-known additional incentive for Dutch people to get on their bike – tax credits.

<sup>63</sup> <https://www.enviroportal.sk/clanok/strediska-environmentalnej-vychovy-sazp-centra-objavovania-a-nachadzania-vztahu-k-prirode>

<sup>64</sup> <https://www.theguardian.com/cities/2015/may/05/amsterdam-bicycle-capital-world-transport-cycling-kindermoord>

<sup>65</sup> Government of the Netherlands - <https://www.government.nl/topics/bicycles/bicycle-policy-in-the-netherlands>

<sup>66</sup> Image: Government of the Netherlands.

The Netherlands isn't the only country offering financial incentives to get people out of their cars and using pedal power instead of fossil fuel.

In the UK, the [Cycle to Work scheme](#) operates a lease-to-own model allowing employees to get discounted bikes and equipment through their employer. The employer buys the bicycle and leases it to the employee over a set period – usually 12 months. The monthly payments are deducted from gross earnings, meaning an effective saving of 32% for basic-rate taxpayers. There is also a mileage allowance made available for British cyclists who use their bikes for business purposes, of around \$0.26 per mile.

A similar tax-free bike-purchase scheme operates in the Netherlands as well as in Belgium, where a payment of [0,19 EUR per kilometre](#) is available to cyclists.

### Concept environmentally friendly transport and energy efficiency in the context of sustainable development goals

SDG No. 7 Ensure access to affordable, reliable, sustainable and modern energy for all			
<b>Activity description:</b>		To encourage to use environmentally friendly transport and energy efficiency	
<b>Objective:</b>		To analyse environmentally friendly transport and energy efficiency use	
<b>Target group:</b> Adult educators		<b>Time for activity:</b> 45 min	<b>Materials needed:</b> Computer and internet
<b>Activity implementation steps:</b> <ul style="list-style-type: none"><li>• Present environmentally friendly transport and energy efficiency concept and policy documents</li><li>• Analyse kind of clean transport</li><li>• Discuss difficulties which do not allows to use environmentally friendly transport and energy efficiency</li><li>• Suggestions for different stakeholders at national level</li><li>• Summary and actions in the individual, organizational, national level</li></ul>			
<b>Tips for facilitators/trainers:</b>		<ul style="list-style-type: none"><li>• To provide information for deeper analyse and discuss possible actions to use environmentally friendly transport and energy efficiency</li><li>• To use regulation documents and policy guidance and recommendations</li><li>• To find new suggestions depending on each country, institution situation</li><li>• To use digital, visual material</li></ul>	

### Recommendations how an adult educator should educate and support adults from different organizations

Each European country and European Commission have strategic documents and guidelines how to implement environmentally friendly transport and energy efficiency. But how to use in



daily life actions focussed on clean vehicles and energy save depends on adult educators. How adult educator could motivate and engage in environmentally friendly transport and energy efficiency use?

First of all, adult educator has to share knowledge about that, believe that each person actions are important and show examples from own experience. Adult educators should be motivated in each organisation to follow sustainable development goals and create an organisational strategy how to follow in the individual, organisational level sustainable changes. Adult educators should become main agent for changes in society.

## SUSTAINABLE, INCLUSIVE ECONOMIC GROWTH

**Goal 8** - To promote inclusive and sustainable economic growth, employment and decent work for all.

**Importance.** Sustained and inclusive economic growth can drive progress, create decent jobs for all and improve living standards.

### Philosophy

#### Definition of the concept sustainable, inclusive economic growth and scope

Society as a whole benefits when more people are being productive and contributing to their country's growth. Productive employment and “decent work” are key elements to achieving fair globalization and poverty reduction. In addition, unemployment can lead to unrest and disrupt peace if it is left unaddressed. Decent work means opportunities for everyone to get work that is productive and delivers a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration. It is also important that all women and men are given equal opportunities in the workplace. A continued lack of decent work opportunities, insufficient investments and under-consumption lead to an erosion of the basic social contract underlying democratic societies: that all must share in progress.

Target 8.3 is potentially transformative because of its emphasis on decent jobs and entrepreneurship, creativity and innovation, and formalization of the economy. Decent work is considered in the next section, but the areas of entrepreneurship, creativity and innovation have been set aside because they would require a more detailed examination at the country level, which is not possible here<sup>67</sup>.

Sustained and inclusive economic growth can drive progress, create decent jobs for all and improve living standards<sup>68</sup>. COVID-19 has disrupted billions of lives and endangered the global economy. The International Monetary Fund (IMF) expects a global recession as bad as or worse than in 2009. As job losses escalate, the International Labor Organization estimates that nearly half of the global workforce is at risk of losing their livelihoods.

Even before the outbreak of COVID-19, one in five countries – home to billions of people living in poverty – were likely to see per capita incomes stagnate or decline in 2020. Now, the economic and financial shocks associated with COVID-19—such as disruptions to industrial production, falling commodity prices, financial market volatility, and rising insecurity—are derailing the already tepid economic growth and compounding heightened risks from other factors.

<sup>67</sup> World Employment and Social Outlook – Trends 2019 [https://www.ilo.org/global/research/global-reports/weso/2019/WCMS\\_670542/lang--en/index.htm](https://www.ilo.org/global/research/global-reports/weso/2019/WCMS_670542/lang--en/index.htm)

<sup>68</sup> <https://www.un.org/sustainabledevelopment/economic-growth/>

## Societal, economic and ecological dimension of the concept *sustainable, inclusive economic growth*

*Sustained inclusive economic growth embraces three distinct properties –efficiency, equity and sustainability – within a single framework.* The concept of inclusive growth typically refers to equity with growth or to broadly shared prosperity resulting from economic growth. In development, the concept of inclusive growth has gained widespread currency in recent years, because it has broadened the discourse beyond a concern only with extreme poverty. The concept of environmental sustainability typically refers to the rates of renewable resource harvest, pollution creation and non-renewable resource depletion that can be continued indefinitely.

### Key elements of concept sustainable, inclusive economic growth

Knowledge and understanding	Skills	Values and attitudes
To know about sustainable economic growth, employment and decent work for all.	To use skills financial literacy skills	Developed productivity, greater efficiency in the use of environmental resources

## Policy

### Regulatory documents

Social dialogue has been long employed as a tool in the governance of work, with the objective of delivering sustainable economic growth, social justice and the kind of high-trust work relations that are not only valuable in themselves, but that can also improve business performance and increase workers’ share in rising profitability. The future of work presents a number of opportunities and challenges that require common solutions achieved through social dialogue<sup>69</sup>.

Sustainable Development Goal 8 comprises 12 targets, each of which has one or more associated indicators. The targets are mostly qualitative, such as to “[s]ustain per capita economic growth in accordance with national circumstances” or to “[p]romote development-oriented policies that support productive activities”. However, some targets do have specific measurable objectives, such as to achieve “at least 7 per cent gross domestic product growth per annum in the least developed countries”, “to eradicate forced labour, end modern slavery and human trafficking”, and to “end child labour in all its forms [by 2025]”. This blend of tangible and intangible objectives makes it rather challenging, from an analytical point of view, to present evidence of progress towards attaining SDG 8. The basic premise, however, is that sustained per capita economic growth in combination with decent work leads to inclusive growth. A mixture of policies aimed at promoting growth and productivity (targets 8.1–8.4, 8.10), employment and decent work (8.5, 8.6, 8.9) and core labour rights (8.7, 8.8) should

<sup>69</sup> [https://www.ilo.org/global/publications/books/WCMS\\_744465/lang--en/index.htm](https://www.ilo.org/global/publications/books/WCMS_744465/lang--en/index.htm)

therefore be adopted by countries to create a framework for sustained, inclusive and sustainable development.

In particular, SDG 8 envisages the achievement of “higher levels of economic productivity through diversification, technological upgrading and innovation”. Sustained growth, moreover, relies on the ability of domestic financial institutions to encourage financial inclusion, and on trade support being available to developing countries, especially least developed countries (LDCs). At the same time, economic growth should not be pursued at the expense of other SDGs. This means adopting a more progressive model of economic growth – one based on improving global resource efficiency in consumption and production, and on decoupling economic growth from environmental degradation.

For SDG 8 to be fully realized it is necessary that higher growth rates should be accompanied by decent work opportunities for all women and men, including young people and persons with disabilities. This involves ensuring equal pay for work of equal value, protecting labour rights, making work environments secure and eradicating forced labour, slavery and child labour. It is also important to create decent work opportunities in all areas of employment, encourage entrepreneurship and formalize micro-, small and medium-sized enterprises<sup>70</sup>.

**In Slovakia**, the primary document of economic development is the "Strategy of the Economic Policy of the Slovak Republic until 2030"<sup>71</sup>. The document of the Ministry of Economy of the Slovak Republic has the ambition to map the position of the Slovak Republic on global markets, macroeconomic development, the development of the sectoral structure of the Slovak economy and the issue of public finances.

### **Examples how different adult education organizations implement SDG 8 in their activities**

Sustainable Development Goal 8 requires improved performance on the core economic variables of sustained per capita economic growth and productivity (targets 8.1, 8.2). The LDCs have been set the additional objective of achieving GDP growth of at least 7 per cent per year in order to close the gap with other countries as far as living standards are concerned.<sup>3</sup> Moreover, in all countries the enhancement of productivity is meant to be driven by “diversification, technological upgrading and innovation”. Related to this focus on a specific form of growth is the expectation that it should be underpinned by “development-oriented policies that support productive activities” (target 8.3), and by requiring a transformation of economic models to encourage formalization, entrepreneurship and access to financial services. The need for greater efficiency in the use of environmental resources is identified with regard to both consumption and production (target 8.4). Lastly, improved access to financial services is required to encourage inclusivity (target 8.10). So how has the world performed against these targets? What conclusions can we draw on the basis of the available data?<sup>72</sup>.

<sup>70</sup> World Employment and Social Outlook – Trends 2019 [https://www.ilo.org/global/research/global-reports/weso/2019/WCMS\\_670542/lang--en/index.htm](https://www.ilo.org/global/research/global-reports/weso/2019/WCMS_670542/lang--en/index.htm)

<sup>71</sup> <https://www.economy.gov.sk/uploads/files/wRKb2ncO.pdf>

<sup>72</sup> World Employment and Social Outlook – Trends 2019 [https://www.ilo.org/global/research/global-reports/weso/2019/WCMS\\_670542/lang--en/index.htm](https://www.ilo.org/global/research/global-reports/weso/2019/WCMS_670542/lang--en/index.htm)

The strategy for education for sustainable, inclusive economic growth **in Slovakia** is to connect the education system with the labour market's needs and increase employers' involvement in the creation and innovation of educational content and support the creation of partnerships between education providers and employers. The responsible for the creation of such educational opportunities is The Ministry of Labour, Social Affairs and Family of the Slovak Republic<sup>73</sup>.

## Pedagogy and Practice

### Examples of linking to the curriculum

Knowing social statistical data about target groups (young women, disable persons, youth, migrants) which often are excluded in the labour market we could emphasize importance to develop financial competencies.

Two SDG 8 targets are relevant to this cluster. The first is target 8.5, which calls upon countries to “achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value”. The second is target 8.6, which envisages the proportion of young people not in employment, education or training (NEET) being substantially reduced – with the earlier target year of 2020 rather than 2030.

Target 8.5 takes existing inequalities in the labour market into account by emphasizing the need to achieve full employment for women and men of all ages, including persons with disabilities. Financial inclusion and financial education fit squarely within the OECD Framework's recommendations. Targeted financial inclusion and financial education policies help bridge inclusion gaps by directing support where it is needed most, thus contributing to inclusive growth and to more sustainable societies around the world.

Developing financial literacy in adult education important to solve the problem of low financial literacy of adults by creating awareness that financial literacy is needed in every daily activity. Changing their mindset, giving them methods and keys to develop their financial literacy, numeracy, digital skills and to use them in everyday life.

Particular efforts should be made to involve adult educators at all stages of the process, convince them of the importance of financial literacy for adults and themselves, as well as to provide them with the necessary resources and training so that they feel confident teaching financial literacy in classes.

The need to improve the financial literacy of people of all ages, especially adults, is particularly important in these days, when the SARS-COVID-19 not only changes our daily routine but also forces us to make important financial decisions, sometimes drastic. It is difficult to predict the real consequences of the current economic crisis, but it will inevitably affect each of our finances, forcing us to rethink our financial behavioral strategy. Not all of us have enough

<sup>73</sup> [https://www.partnerskadohoda.gov.sk/data/files/1187\\_metodologicka-priucka-pre-hodnotenie-synergickych-efektov-v-kontexte-strategie-europa-2020.pdf](https://www.partnerskadohoda.gov.sk/data/files/1187_metodologicka-priucka-pre-hodnotenie-synergickych-efektov-v-kontexte-strategie-europa-2020.pdf)

knowledge to manage our finances properly in the face of a crisis or in the long run, and adult educators also lack modern teaching content that is relevant to today’s realities.

**Financial literacy can contribute to global economic growth and sustainable development** by improving financial inclusion and well-being outcomes. Improving financial literacy levels around the world can also help bridge remaining socio-economic gaps and inequalities across and within countries, thus leading to more inclusive societies for all.

**Financial education policies can support the achievement of broader economic and social outcomes** by strengthening consumers’ resilience to major financial shocks.

**Significant progress has been made globally on financial education, but many more challenges lay ahead** including the digitalisation of finance, fine-tuning interventions to reach vulnerable audiences and addressing the implications of demographic changes.<sup>74</sup>

### ***Concept sustainable, inclusive economic growth in the context of sustainable development goals***

SDG No. 8 – To promote inclusive and sustainable economic growth, employment and decent work for all		
<b>Activity description:</b>	<ul style="list-style-type: none"> <li>Analyse and discussion.               <ul style="list-style-type: none"> <li>Adult educators should analyse suggested documents, websites to be able to discuss Adult educators should have financial literacy skills to be able to give consultations for adult learners.</li> </ul> </li> </ul>	
<b>Objective:</b>	To discuss how to stimulate decent work for all	
<b>Target group:</b> Adult educators	<b>Time for activity:</b> 90 min	<b>Materials needed:</b> Computer, internet, paper, pens
<b>Activity implementation steps:</b> <ul style="list-style-type: none"> <li>Analyse fundamental rights and protections, financial literacy and education</li> <li>Discuss how to stimulate decent work for all</li> </ul>		
<b>Tips for facilitators/trainers:</b>	Adult educator depending on topic direction could use different materials encouraging to analyse chosen topic. We recommend for adult educators to use for extra information gathering: <ul style="list-style-type: none"> <li>OECD information <a href="https://www.oecd.org/">https://www.oecd.org/</a></li> <li><a href="#">International Labour Organization</a></li> <li><a href="#">UN Development Programme</a></li> <li><a href="#">Inquiry into the Design of a Sustainable Financial System: Policy Innovations for a Green Economy</a></li> <li><a href="#">UN Global Compact</a></li> <li><a href="#">Economic and Social Commission for Asia &amp; the Pacific</a> <a href="#">Economic and Social Commission for Western Asia</a></li> </ul>	

<sup>74</sup> 5th OECD-GFLEC Global Policy Research Symposium to Advance Financial Literacy Effective financial education for sustainable and inclusive growth SYMPOSIUM PROCEEDINGS, 18 May 2018 OECD Conference Centre Paris, France



	<ul style="list-style-type: none"> <li>• <a href="#">Economic and Social Commission for Africa</a></li> <li>• <a href="#">Economic and Social Commission for Europe</a></li> <li>• <a href="#">Economic and Social Commission for Latin America &amp; the Caribbean</a></li> <li>• <a href="#">IMF – World Economic Outlook</a></li> <li>• <a href="#">UN Capital Development Fund</a></li> <li>• <a href="#">Asian Development Bank</a></li> </ul>
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### **Recommendations how an adult educator should educate and support adults from different organizations**

Adult educators have to focus on adult main finance literacy skills development and encouragement of entrepreneurship. Promote inclusive and sustainable economic growth, employment and decent work for all<sup>75</sup> should be focussed also on [Future of Work](#)<sup>76</sup> and [Labour Market Information Systems](#)

<sup>75</sup> International Labour Organisation [https://www.ilo.org/global/topics/dw4sd/theme-by-sdg-targets/WCMS\\_556964/lang--en/index.htm](https://www.ilo.org/global/topics/dw4sd/theme-by-sdg-targets/WCMS_556964/lang--en/index.htm)

<sup>76</sup> International Labour Organisation <https://www.ilo.org/global/topics/dw4sd/themes/fow/lang--en/index.htm>

## ADULT EDUCATORS' SKILLS TO LEAD A HEALTHIER LIFE

### Philosophy

#### Definition of the concept of healthy lifestyle and scope

**Sustainable living** is understood as a **lifestyle** that attempts to reduce an individual's or society's use of the Earth's natural resources and personal resources<sup>77</sup> According to Winter M., practitioners of sustainable living often attempt to reduce their carbon footprint by altering methods of transportation, energy consumption, and diet<sup>78</sup>.

A perfectly healthy person feels only if he is not only in **good physical health**, but also if he is happy and satisfied - **good mental health** and has good relationships with family and friends - **good social health**.

The study carried out in by *Izglitibas Inovaciju Parneses Centrs* shows, that 32.8% of adults suffer from stress at work in Latvia<sup>79</sup>. The causes of stress are different: risk of job loss/ change, acquisition of new responsibilities at work, tight / short deadlines, etc. The results of the study show that the level of emotional resilience in 20% of respondents is also low. However, 40% of adult think that they are surrounded by supportive people, who would help them in difficult situations and 36,1% are not afraid to reach out for support.

Positive search in any everyday situation, openness to new ideas and changes, sufficient rest, self-esteem, recognition and expression of one's emotions are important in promoting mental health.

The most important factors that make up a healthy lifestyle are:

- **daily regime** - sufficient amount of sleep, balanced work and rest time,
- **personal hygiene** - taking care of your health and cleanliness,
- **physical activity** - a sufficient amount of daily sports activities,
- **eating habits**, balanced and healthy diet, the required amount of water;
- **renunciation** of harmful habits,
- **mutual relations** - maintaining good relations with family members and friends;
- **positive thoughts**.

Promoting a **healthy lifestyle** requires: a well-thought-out diet, regular physical activity, and a variety of other healthy lifestyle changes to make an individual stronger, more energetic, and

<sup>77</sup> Ainoa, J., Kaskela, A., Lahti, L., Saarikoski, N., Sivunen, A. Storgårds, J., & Zhang, H. Future of living. In Neuvo, Y., & Ylönen, S. (eds.), *Bit bang rays to the future*. Helsinki University of Technology (TKK), MIDE, Helsinki University Print, Helsinki, Finland, 2009. pp. 174-204.

<sup>78</sup> Winter, M. *Sustainable Living: For Home, Neighborhood and Community*. First edition. Westsong Publishing, 2007. 164 p.

<sup>79</sup> <http://www.iipc.lv/surv/index.php/376678/lang-en>

safer. It doesn't take much to maintain a healthy lifestyle, because the key is to introduce healthy habits into daily routine. For instance:

- Eat healthy!
- Engage in physical activities!
- Quit smoking and other harmful habits!
- Think positive!

**A healthy diet** is a balanced and varied diet that includes fresh and natural foods, i.e. see a lot of fruits and vegetables, foods that contain vitamins and minerals, as well as eating habits and behaviour that contribute to the improvement and maintenance of both physical and psychological health.

To ensure a healthy lifestyle, **World Health Organizations (WHO)** recommends eating lots of fruits and vegetables, reducing fat, sugar and salt intake and exercising. Based on height and weight, people can check their body mass index (BMI) to see if they are overweight. WHO provides a series of publications to promote and support healthy lifestyles. World Health Organization offers **12 steps to healthy eating**<sup>80</sup>:

- Eat a nutritious diet based on a variety of foods originating mainly from plants, rather than animals;
- Eat bread, whole grains, pasta, rice or potatoes several times per day;
- Eat a variety of vegetables and fruits, preferably fresh and local, several times per day (at least 400g per day);
- Maintain body weight between the recommended limits (a BMI of 18.5–25) by taking moderate to vigorous levels of physical activity, preferably daily;
- Control fat intake (not more than 30% of daily energy) and replace most saturated fats with unsaturated fats;
- Replace fatty meat and meat products with beans, legumes, lentils, fish, poultry or lean meat;
- Use milk and dairy products (kefir, sour milk, yoghurt and cheese) that are low in both fat and salt;
- Select foods that are low in sugar, and eat free sugars sparingly, limiting the frequency of sugary drinks and sweets;
- Choose a low-salt diet. Total salt intake should not be more than one teaspoon (5g) per day, including the salt in bread and processed, cured and preserved foods. (Salt iodization should be universal where iodine deficiency is a problem);
- WHO does not set particular limits for alcohol consumption because the evidence shows that the ideal solution for health is not to drink at all, therefore less is better;
- Prepare food in a safe and hygienic way. Steam, bake, boil or microwave to help reduce the amount of added fat;
- Promote exclusive breastfeeding up to 6 months, and the introduction of safe and adequate complementary foods from the age of about 6 months. Promote the continuation of breastfeeding during the first 2 years of life.

It should be noted, that BMI is derived from a person's weight in kilograms, divided by height (squared) in centimetres. The recommended levels are adapted from the global WHO recommendation of 18.5–24.9 as a normal BMI.

<sup>80</sup> <https://www.euro.who.int/en/health-topics/disease-prevention/nutrition/a-healthy-lifestyle>

When choosing a healthy diet, it is recommended to place the main place in the menu of carbohydrates (*cereals, vegetables, fruits*), which provide the body mainly with energy, minerals and vitamins. It is recommended to choose local and seasonal fruits and vegetables. Proteins (*dairy products, eggs, meat, fish*) are the main building blocks of various cells and tissues, while fats (*oil, butter*) are needed to absorb fat-soluble vitamins (*A, D, E, K*). It is recommended to limit salt, sugar and products containing them in the diet, as well as to consume from 1.5 to 2 litres of water per day.

The best greens and spices for the brain: turmeric, sage, wasabi, garlic. The most valuable fruits and vegetables **for the brain**:

- vegetables (*onions, tomatoes, peppers, beets, avocados, broccoli, Brussels sprouts, cabbage, cauliflower*),
- leafy greens (*lettuce, mustard, spinach, turnip greens, seaweed*),
- legumes (*peas, black beans, mottled beans, white beans, red beans, soybeans, peanuts*),
- berries (*blueberries, blackberries, raspberries, strawberries, cranberries*),
- fruits (*apples, bananas, cherries, persimmons, pomegranates, grapes, kiwis, oranges, grapefruit, lemons, happiness, mandarins*).

**Physical activity.** Regular and moderate physical activity strengthens the human body, gives the body strength. In turn, a sedentary lifestyle contributes to the development of several diseases, including obesity and heart disease. A sedentary lifestyle causes muscle atrophy, impairs posture, health, promotes heart and respiratory diseases. That is why an active lifestyle is important. Exercise is an effective way to maintain your health, as it provides energy, improves muscle strength and endurance. Physical activity has also a positive effect on the speed of thinking and reacting, memory, the ability of new cells to form and grow, better decision-making, and the ability to concentrate.

**Sleep.** Sleep is a state of the body and psyche during which conscious contact with the outside world is lost. During sleep, various physiological processes take place in the body. The most important thing is that while sleeping in the body, the energy and functional reserves of cells are restored and accumulated. In addition, sleep provides balance and stability of the central nervous system. Therefore, sufficient sleep duration is necessary to maintain good health and ability to work. While sleeping, brain cells are restored, experiences are reworked into memories, memories are consolidated and moved where they are more quickly available, health-promoting growth hormones are released, connections between nerve cells increase, increasing brain 'plasticity', and decision-making skills are improved, reaction rates and hand-eye coordination.

### Societal, economic and ecological dimension of the concept *healthy lifestyle*

Characteristics of dimension	Measures leading to a healthier life
<b>Environmental dimension</b> of sustainability means that we are living within the means of our natural resources. To live in true	1) According to the <u>World Health Organization External</u> , 13 million deaths annually and nearly a quarter of all disease worldwide – including 33 percent of illnesses in children under age five – are due to environmental causes

<p>environmental sustainability, we need to ensure that we are consuming our natural resources, such as materials, energy fuels, land, water...etc, at a sustainable rate. Some resources are more abundant than others and therefore we need to consider material scarcity, the damage to environment from extraction of these materials and if the resource can be kept within Circular Economy principles. We need to aspire to net zero carbon and then move beyond to ultimately achieve climate positive principles</p>	<p>that could be avoided or prevented. Doing your part to take care of the environment helps you protect yourself and others from the <u>climate's effects on health</u>. Health issues such as asthma, chronic obstructive pulmonary disease (COPD), cardiovascular disease, and stroke can be aggravated by an unhealthy environment.</p> <p>Here are a few actions you can take to do your part to live smart.</p> <p>2) <b>Eat low on the food chain.</b> This means eating mostly fruits, veggies, grains, and beans.</p> <p>3) Choose <b>organic and local foods</b> that are in season.</p> <p>4) <b>Sustainable Diets</b> are those diets with low environmental impacts that contribute to food and nutrition security and to healthy life for present and future generations. Sustainable diets are protective and respectful of biodiversity and ecosystems, culturally acceptable, accessible, economically fair and affordable; nutritionally adequate, safe and healthy; while optimizing natural and human resources<sup>81</sup>.</p> <p>5) Purchase <b>Green Products</b><sup>82</sup>, which contains 30% or greater post-consumer recycled content, made of biobased content, s environmentally preferable, energy efficient, and/or water efficient, has minimal life cycle costs, has minimal risk of toxic/hazardous chemicals, is durable or has a long product life and also - is necessary.</p>
<p><b>Economic dimension</b> of sustainability requires that a business or country uses its resources efficiently and responsibly so that it can operate in a sustainable manner.</p>	<p>1) Labour and working conditions - safe and healthy;</p> <p>2) Provision of employment;</p> <p>3) Adequate payment for work performed;</p> <p>4) Stress at work (e.g, risk of job loss/ change, acquisition of new responsibilities at work, tight / short deadlines, etc.)</p>
<p><b>Social dimension</b> of sustainability is the ability of society, or any social system, to persistently achieve a good social well-being. Achieving social sustainability ensures that the social well-being of a country, an organisation, or a community can be maintained in the long term.</p>	<p>1) Sustainable society has the following features: <i>justice, useful social services, gender equality, political stability, security and cooperation</i>.</p> <p>2) Edward Fern divides all factors in three categories:</p> <ul style="list-style-type: none"> <li>• Actions (<i>jobs, hobbies and funs</i>)</li> <li>• Communications (<i>families and friends</i>)</li> <li>• Believes (<i>political, religious, social</i>)<sup>83</sup>.</li> </ul>

<sup>81</sup> Burlingame, B. (2012). *Sustainable diets and biodiversity – Directions and solutions for policy research and action Proceedings of the International Scientific Symposium Biodiversity and Sustainable Diets United Against Hunger*. Rome: FAO.

<sup>82</sup> <https://www.cdc.gov/sustainability/lifestyle/index.htm>

<sup>83</sup> Fren EF. (2001). *Advanced focus group research*. Sage publication, London.

	<p>3) In a sustainable society, social system is not subject to systematic barriers against: <i>Integrity, Influence, Competence, Impartiality and Meaning</i>”<sup>84</sup></p> <p>4) Social justice and diversity. Providing the opportunity for equal employment, decent living and working conditions, as well as gender equity and access to social wellbeing and justice for all, regardless of ethnicity, sexual orientation, religious belief, impairment or educational level<sup>85</sup>.</p>
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### Key elements of concept *healthy lifestyle*

Knowledge and understanding	Skills	Values and attitudes
<b>Knowledge</b> of a healthy lifestyle ( <i>physical, mental and social health</i> ) and a proper <b>understanding</b> of living, working, resting, eating, exercising and communicating with people	<ul style="list-style-type: none"> <li>skills practicing sustainable lifestyle</li> <li>learn, understand and change</li> <li><i>green skills</i><sup>86</sup></li> </ul>	To follow principles of sustainable lifestyle, healthy eating habits

## Policy

### Regulatory documents

Sustainability is a multifaceted issue, in which **the food production system** and our **diets** play a crucial role. Achieving a healthy and sustainable food future is an urgent matter that depends on global collaborative efforts. Therefore, there are several documents that regulate healthy food. For instance, **Great Food Transformation**, which include the unprecedented range of actions taken by all food system sectors across all levels that aim to normalize healthy diets from sustainable food systems. Transitioning to a sustainable food system that can deliver healthy diets for an estimated 10 billion people by 2050 is an unprecedented challenge. To begin food transformation process, the European Commission has been proposed five strategies as general starting points for national, regional, city, and local change<sup>87</sup>:

- **Seek international and national commitment to shift toward healthy diets.** Transitioning to a planetary health diet will require global consumption of foods such as red meat and sugar to decrease by 50%, while consumption of fruits, nuts, vegetables, and legumes must double.
- **Reorient agricultural priorities from producing high quantities of food to producing healthy food.** Shift the emphasis in food and agricultural policy from high volumes of a few crops to greater diversity of nutrient-rich crops.

<sup>84</sup> <https://www.diva-portal.org/smash/get/diva2:829864/FULLTEXT01.pdf>

<sup>85</sup> [https://www.researchgate.net/publication/254192910\\_Business\\_graduate\\_skills\\_in\\_sustainability](https://www.researchgate.net/publication/254192910_Business_graduate_skills_in_sustainability)

<sup>86</sup> <https://www.unclearn.org/sites/default/files/inventory/245646e.pdf>

<sup>87</sup> <https://www.hsph.harvard.edu/nutritionsource/sustainability/>



- **Sustainably intensify food production to increase high-quality output.** Use technology and system innovation to farm existing land with fewer inputs in order to experience better yields, sequester carbon, and conserve existing biodiversity and ecosystem services.
- **Strong and coordinated governance of land and oceans.** Protect natural ecosystems and biodiversity by collectively acting, at local and global levels, to halt the expansion of agricultural land and harvested marine areas.
- **At least halve food losses and waste, in line with SDGs.** Reduce food loss and waste in food production and consumption phases by 50% using a mix of technological solutions, consumer campaigns, and public policies.

According to **World Health Organization**, nutrition labels and health claims on foods provide information to consumers, what contribute to the achievement of public health objectives. Labelling provides consumers with information about the nutritional properties of a food and health claims (statements connecting a food, food component or a nutrient to a state of desired health) provide information to consumers about the nutritional and health advantages of particular foods or nutrients. Health claims are also a marketing technique used by food companies. The regulations in the document “**Nutrition labels and health claims: the global regulatory environment**”<sup>88</sup>

Another document, which could be noted, is EC Regulation on nutrition and health claims made on foods with regard to nutrient profiles and health claims made on plants and their preparations and of the general regulatory framework for their use in foods<sup>89</sup>.

There are also documents whose regulation is related to mental health. For instance, **Occupational safety and health policy** - practical tool for assisting organizations and competent institutions as a means of achieving continual improvement in occupational safety and health performance worked out by International labour organization<sup>90</sup>.

Of course, different countries have issued their own regulatory documents. For example, **in Latvia**, the Ministry of Health has issued an order "Healthy eating recommendations for adults"<sup>91</sup>. This document covers the basic principles of a healthy diet, including, diversity, balance, moderation. A healthy diet provides a person with energy and nutrients in such quantities as to meet the needs of a healthy person in specific working, environmental and living conditions

In the context of health education as a part of the educational system **in Slovakia**, it is not yet possible to achieve adequate acceptance and internalization of the principles and recommendations of a healthy lifestyle. Despite many concepts, strategies, elaborate forms, methods, and good intentions, the need to redefine health education is urgent.

**In Slovakia**, we need to redefine health education approaches so as to reflect the dynamics of the development of society in the field of a healthy lifestyle and contribute to the cessation, stabilization, and subsequent reversal of several adverse trends.

<sup>88</sup><https://apps.who.int/iris/bitstream/handle/10665/42964/9241591714.pdf;jsessionid=0650E71D43DEA5345CF6A29C96B06A2D?sequence=1>

<sup>89</sup>[https://ec.europa.eu/food/sites/food/files/safety/docs/labelling\\_nutrition-claims\\_swd\\_2020-95\\_part-1.pdf](https://ec.europa.eu/food/sites/food/files/safety/docs/labelling_nutrition-claims_swd_2020-95_part-1.pdf)

<sup>90</sup>[https://www.ilo.org/safework/info/standards-and-instruments/WCMS\\_107727/lang--en/index.htm](https://www.ilo.org/safework/info/standards-and-instruments/WCMS_107727/lang--en/index.htm)

<sup>91</sup>[https://esparveselibu.lv/sites/default/files/inline-files/VM\\_Uztura\\_ietek\\_pieaug.pdf](https://esparveselibu.lv/sites/default/files/inline-files/VM_Uztura_ietek_pieaug.pdf)

## Examples of how different organizations promote a healthy lifestyle

According to SDG No.17 "Revitalize the global partnership for sustainable development", a successful development agenda requires inclusive partnerships — at the global, regional, national and local levels — built upon principles and values, and upon a shared vision and shared goals placing people and the planet at the centre.

For example, **in Latvia**, close co-operation has been established between various organizations: educational institutions, governmental/ non-governmental organizations, professional associations, medical institutions in order to promote the development of adult skills to lead a healthier life. Partnerships includes:

- **Educational activities** to promote healthy eating habits and healthy lifestyle;
- **Measures/ projects** for the promotion of public health and prevention of diseases in local governments. **Health promotion programs** are regularly implemented in all municipalities, with an emphasis on people with disabilities, such as pensioners, pre-retirement age, pregnant women, new mothers, etc.;
- **Different events:** demonstrations of various active hobbies with the opportunity to try them; lectures by specialists and doctors; healthy eating master classes; free health measurement; sports days in companies; etc.

A good example of how to promote a healthier life is the project "Healthy resident of Riga in health Riga" implemented by the Riga municipality<sup>92</sup>, which purposefully focuses its activities on one of the most important basic principles of public health policy "health in all policies" in order to ensure that all sectors are involved and co-responsible in promoting and maintaining the health of the population. For example, the "**Healthy Lifestyle Day**" provided both adults and children with the opportunity to participate in sports activities and various competitions under the guidance of professionals throughout the day. The event also included educational classes and master classes on a healthy lifestyle, as well as free consultations with health care professionals. Within the framework of the mentioned project, various cooking master classes, classes for the promotion of mental health with elements of art therapy take place, as well as events in the context of family health. Similar projects are being implemented also in other municipalities.

An excellent example of cooperation is the **cooperation project "vESels"** of three organizations - Possible Missions, the Latvian Olympic Committee and Swedbank, which has developed teaching materials for 5th grade students with the aim of helping students to acquire knowledge and acquire skills and motivation to live healthy<sup>93</sup>.

As it is known, a sedentary lifestyle is a problem of the whole world, including Latvia, which affects the health of the population and often causes serious diseases. According to the data of the Ministry of Health of the Republic of Latvia and the Center for Disease Prevention and Control, only 33% of Latvians spend their free time physically active. In addition, 50% of the population aged 24 has an obesity problem. In order to promote an active lifestyle in Latvia, the Coca-Cola Foundation, in cooperation with the Latvian Olympic Committee, implemented

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<sup>92</sup> <https://veseligrizinijs.lv/>

<sup>93</sup> <https://www.iespejamamisija.lv/projekts-vesels-1>

the project “**Wake Your Body Grants**”, the main goal of which was to promote and improve the popularity of an active and healthy lifestyle among all residents.

Courses focused on a healthy lifestyle are provided mostly by private corporations and small businesses **in Slovakia**. In the center of their attention lies physical and mental health, nutrition, and relaxation<sup>94, 95</sup>.

## Pedagogy and Practice

### Examples of linking to the curriculum

#### Concept *healthy lifestyle* in the context of sustainable development goals

SDG No. 3 - <b>Ensure healthy lives and promote well-being for all at all ages</b> SDG No. 7 - <b>Ensure access to affordable, reliable, sustainable and modern energy for all</b> SDG No. 12 - <b>Ensure sustainable consumption and production patterns</b>		
<b>Activity description:</b>	Workshop (with tasting) on healthy and economical food using a multi cooker	
<b>Objective:</b>	To acquaint the participants of the seminar with the principles of healthy and economical nutrition, as well as to demonstrate that healthy nutrition can also be extremely tasty.  Since a multi cooker is used for cooking, explain how this type of cooking provides energy efficiency, as well as discuss the benefits of slow cooked food.	
<b>Target group:</b> Adult teachers/ learners	<b>Time for activity:</b> 1,5 h	<b>Materials needed:</b> Products according to the recipes below; multi cooker; kitchen utensils, gloves, ...
<b>Activity implementation steps:</b> <ul style="list-style-type: none"> <li>• Divide all participants into three groups.</li> <li>• Distribute recipes, products and explain tasks to participants.</li> <li>• Give instructions on what to do: <ul style="list-style-type: none"> <li>➤ <i>Get to know the recipe!</i></li> <li>➤ <i>Find all the necessary products and accessories / dishes.</i></li> <li>➤ <i>Find out if meeting participants are not allergic to any ingredients!</i></li> </ul> </li> </ul>		

<sup>94</sup> <https://www.psychologickyinstitut.sk/index.php/sk/vzdelavacie-kurzy/soft-skills/kurz-zdravy-zivoty-styl-psychohygiena-skolenie>

<sup>95</sup> <http://www.serena.sk/kurz/M0082/klub-zdravia-a-uspesny-zivotny-styl->

<p>➤ <i>Good luck!</i></p> <p>➤ <i>When the food is ready, you will have to tell others what you have made.</i></p> <ul style="list-style-type: none"> <li>• When the food is cooked, it is tasted.</li> <li>• Each group presents their food and tells others how it was prepared.</li> <li>• While enjoying a meal, participants can discuss energy consumption using different energy sources for cooking.</li> </ul>		
<p><b>Tips for facilitators/trainers:</b></p> <ul style="list-style-type: none"> <li>• Other recipes that are healthy and use local products can be prepared.</li> <li>• Products for cooking can be provided by the seminar organizer, but participants can be divided into groups in advance and asked to provide the necessary products themselves.</li> <li>• This task can be modified, for example, by asking each team to take care of one meal and find a healthy, economical recipe for themselves, using local / seasonal products.</li> </ul>		
<p><b><i>Bean salad with tuna, tomatoes and basil</i></b></p> <p><u>Ingredients for 1 serving</u></p> <ul style="list-style-type: none"> <li>▪ tuna, 45 g</li> <li>▪ canned or boiled beans, 60 g</li> <li>▪ cherry tomatoes, 50 g</li> <li>▪ cucumber, 50 g</li> <li>▪ oil, 1 tablespoon</li> <li>▪ basil to taste</li> <li>▪ lime juice to taste</li> <li>▪ salt, pepper to taste</li> </ul> <p><u>Preparation</u></p> <p>Peel cucumbers, cut into pieces. Tomatoes cut in half. Separate the basil leaves. Drain the bean and tuna liquid. Put all ingredients in a bowl, add lime juice, spices and mix thoroughly. Serve!</p>	<p><b><i>Sweet potato porridge with roasted seeds</i></b></p> <p><u>Ingredients for 1 serving</u></p> <ul style="list-style-type: none"> <li>▪ sweet potato, 200 g</li> <li>▪ oil, 2 tablespoons</li> <li>▪ red onion, 1/6 part</li> <li>▪ garlic, 1/3 part</li> <li>▪ dried coriander, chili flakes to taste</li> <li>▪ salt and pepper to taste</li> <li>▪ water for stewing</li> <li>▪ seeds, 5 g</li> </ul> <p><u>Preparation</u></p> <p>Pour oil into the pot and fry chopped onion, garlic, coriander and chili. Add potato sliced in cubes and stew a few minutes. Add water, boil until ready. Blend to a homogeneous consistency, add salt, pepper to taste. Sprinkle with seeds roasted on a dry pan.</p>	<p><b><i>Fruit salad with yogurt</i></b></p> <p><u>Ingredients for 1 serving</u></p> <p>pear, 15 g apple, 15 g orange, 15 g banana, 20 g spinach, 5 g yogurt without additives, 20 g</p> <p><u>Preparation</u></p> <p>Cores remove from pears and apples. Peel the orange. All the fruits cut into small cubes. Bananas blend with spinach and yogurt. Place the fruit in the dishes and pour the prepared sauce. Serve!</p>

## Recommendations how an adult educator should educate and support adults from different organizations

According to Irina Bokova, Director-General, UNESCO, education represents opportunity. At all ages, it empowers people with the knowledge, skills and confidence they need to shape a better future<sup>96</sup>. At the centre of quality education for all is the development of life skills<sup>97</sup>.

Recommendations for **formal / non-formal adult education program** outcomes:

- Define the outcomes of the formal / non-formal adult learning program, aligning them with approaches to education for sustainable development and taking into account the competencies needed for employment and career development (e.g. WEF, 2018<sup>98</sup>) as well as life skills (e.g. WHO<sup>99</sup>) with the focus on sustainability and also healthy lifestyle;
- Review the aims of the course(es). The aims should also include the acquisition of knowledge, skills and competences necessary for sustainable development.

Recommendations for **program's content**:

- Any formal / non-formal adult education program must include a link between the content and the sustainable development goals;
- Tasks or practical training should promote an awareness of sustainability, climate changes and other global challenges.

Recommendations for the **organization of the adult education process**:

- Implement group/ team work, think about tasks that would encourage collaborative learning,
- To provide appropriate learning conditions for adults, following the principles of practice and experience-based learning taking into account accessibility, ergonomics, support, etc.
- Adult educator - inspirer for adult learners (healthy lifestyle, physical activities, daily regime, healthy food, etc.);
- Provide study materials availability and accessibility to students, etc.

<sup>96</sup><https://unesdoc.unesco.org/ark:/48223/pf0000225027>

<sup>97</sup> UNESCO. 2005. Draft Life Skills: The Bridge to Human Capabilities. Paris: UNESCO8

<sup>98</sup> World Economic Forum. The Future of Jobs Report 2018. Insight Report. <http://www.unesco.org/education/tlsf/>

<sup>99</sup> <https://hangoutagile.com/do-you-know-the-top-10-life-skills-recommended-by-the-world-health-organization-who-is-that-a-good-idea-to-know-before-you-learn-and-develop/>

## GENDER EQUALITY

### Philosophy

#### Definition of the concept *gender equality* and scope

ACHIEVING GENDER EQUALITY AND WOMEN’S EMPOWERMENT IS INTEGRAL TO EACH OF THE 17 GOALS. Women have a critical role to play in all of the SDGs, with many targets specifically recognizing women’s equality and empowerment as both the objective, and as part of the solution.

Goal 5, to “**Achieve gender equality and empower all women and girls**”<sup>100</sup> is known as the stand-alone gender goal, because it is dedicated to achieving these ends. Deep legal and legislative changes are needed to ensure women’s rights around the world. While a record 143 countries guaranteed equality between men and women in their Constitutions by 2014, another 52 had not taken this step. Stark gender disparities remain in economic and political realms. While there has been some progress over the decades, on average women in the labour market still earn 20 per cent less than men globally. As of 2018, only 24 per cent of all national parliamentarians were female, a slow rise from 11.3 per cent in 1995.

The Gender Equality Index is a tool to measure the progress of gender equality in the EU, developed by EIGE (European Institute for Gender Equality). It gives more visibility to areas that need improvement and ultimately supports policy makers to design more effective gender equality measures.

The numerous interconnections between the various Goals attribute an obvious centrality to the Goal focused on education. Some 750 million adults – two thirds of them women – remained illiterate in 2016. Half of the global illiterate population lives in South Asia, and a quarter live in sub-Saharan Africa.

Women achieve higher tertiary education attainment rates, but male graduates are more likely to find employment in 2018, the employment rate for recent male graduates (83.3 %) was higher than the rate recorded among women (80.0 %). This pattern has been apparent since 2006, but its intensity has changed over time. The largest gender gap was recorded in 2007. The gap shrank significantly with the onset of the economic crisis, but widened in 2010 and remained within the 3.3 to 4.7 percentage-point range in favour of male graduates between 2010 and 2018.

#### Societal, economic and ecological dimension of the concept *gender equality*

**Women: from vulnerable groups to drivers for change.** It is a Global Agenda for sustainable development that definitively surpasses the idea that sustainability is only an environmental issue but affirms an integrated vision of the different development dimensions: the economic, social and environmental.

<sup>100</sup> <https://www.un.org/en/sections/issues-depth/gender-equality/>



Why should we care about women entrepreneurship? In lower income countries, working as an employee is the exception, not the norm for men and women. Only 7% of women ages 15 and up are employed as wage workers in low-income countries, compared to 18% of men (this includes public and private sector jobs as employees, formal and informal). Female entrepreneurship (and self-employment, in general) - working without a boss, be it in a micro, small, medium, and large enterprises - consequently becomes an important vehicle for women's empowerment.

Here we take a closer look at one segment of being a business owner, excluding microenterprise ownership - the largest category of business owner in the developing world for both men and women - due to a lack of systematic data on this group.

**Globally, only 1 in 3 businesses are owned by women.** Here you can see share of small, medium, and large firms with a woman among the principal owners (%) (Figure 6).

### World



Source: Enterprise Surveys. Retrieved from The World Bank Gender Data Portal<sup>101</sup>.

**Figure 6.** Proportion of women among the main business owners.

In the resolution adopted in January 2020 European Parliament welcomes the commitment of the new Commission President to make ‘equal pay for equal work’ the founding principle of the new European Gender Strategy (2020-2024). This strategy include binding provisions on pay transparency and on the gender pay gap, applying to both the public and private sector, as well as strong enforcement policies, clear targets and monitoring to better measure progress. Gender Pay Gap Action Plan will be revised by the end of 2020, which should set clear targets for the member states to reduce the gap over the next five years. According to the Commission, the EU gender pay gap in hourly pay is 16%, although this varies significantly across member states, where as the gender gap in pension income is 37%.

Lifelong learning and vocational training for women should ensure they have access to high-quality employment and opportunities. In particular, MEPs call for greater promotion of entrepreneurship, science, technology, engineering and mathematics (STEM) subjects and

<sup>101</sup> [https://blogs.worldbank.org/opendata/women-entrepreneurs-needed-stat?fbclid=IwAR16O4Cp2YXZp\\_ccFixtfQsC9Azp8oH4KMJ75ZJaYygzby8tM-Kt8UDRW90](https://blogs.worldbank.org/opendata/women-entrepreneurs-needed-stat?fbclid=IwAR16O4Cp2YXZp_ccFixtfQsC9Azp8oH4KMJ75ZJaYygzby8tM-Kt8UDRW90)

digital education for girls from an early age, in order to combat existing educational stereotypes and ensure women enter developing and well-paid sectors<sup>102</sup>.

This year marks 25 years since the adoption of the UN’s Beijing Declaration aimed at the advancement of women around the globe, the 10th anniversary of UN Women - dedicated to gender equality and the empowerment of women - and five years since the adoption of the Sustainable Development Goals, one of which is gender equality.

Progress has been made, but inequality between men and women persists, including on the labour market. On average, women in the EU are paid less than men:

- The gender pay gap is the difference in average wages between men and women.
- The unadjusted gender pay gap is the difference between the average gross hourly earnings of men and women expressed as a percentage of male earnings. It does not take into account education, age, hours worked or type of job.

Women in the EU earn on average almost 15% less per hour than men. There are large differences between member states: the biggest gender pay gap was recorded in Estonia (23%), while the EU country with the lowest gender pay gap was Romania (3%).

Although more women than men finish higher education in the EU, they are represented less on the labour market. Almost 30% of women in the EU work part-time and they are much more likely to stop work to take care of children and relatives.

The gender pay gap changes with age - it tends to be lower when people first start work and widens afterwards, although these patterns vary between countries. The gender pay gap also differs by industry, and in 2017 was higher in the private sector than in the public sector in the majority of EU countries.

An important reason for the gender pay gap is the overrepresentation of women in relatively low paying sectors and underrepresentation in higher-paid sectors. For example, on average in the EU in 2018, there were more male than female scientists and engineers - 59% compared to 41%. Women hold only 33% of managerial positions in the EU.

The gender pay gap means women are at higher risk of poverty in old age. In 2018, women in the EU aged over 65 received pensions that were on average 30% lower than male pensions. The situation between member states differs here as well - from a 43% pension gap in Luxembourg to 1% in Estonia.

The low proportion of women employees in managerial positions also contributes to the gender pay gap. In all Member States the proportion of women in managerial positions is lower than that of men. Data shows that women are systematically under-represented in decision-making positions<sup>103</sup>: in the first half of 2019, on average, women accounted for only 6.9% of CEOs, 17.6% of executives, and 30.4 % of non-executives. In addition, women managers working in companies with 10 or more employees are paid less than men in all Member States. Women managers in the EU earn ten euros less than men per hour.

<sup>102</sup> <https://www.europarl.europa.eu/news/en/press-room/20200128IPR71208/ambitious-measures-needed-to-ensure-equal-pay-for-women-say-meps>

<sup>103</sup> <https://www.europarl.europa.eu/news/en/headlines/society/20200227STO73519/gender-pay-gap-in-europe-facts-and-figures-infographic>

These financial inequalities over the lifetime contribute to an even bigger gender pension gap. Data shows a higher risk of poverty for women pensioners in most Member States. The risk of poverty is highest in Bulgaria and the Baltic countries, ranging from 59.0 % in Estonia to 34.1 % in Bulgaria, compared to 43.1 % to 20.0 % for men in the same countries<sup>104</sup>. Here also more about pay gap.



**Figure 7.** Gender pay gap in Europe: facts and figures (infographic)<sup>105</sup>.

<sup>104</sup> <https://eige.europa.eu/gender-statistics/dgs/data-talks/what-lies-behind-gender-pay-gap>

<sup>105</sup> <https://www.europarl.europa.eu/news/en/headlines/society/20200227STO73519/gender-pay-gap-in-europe-facts-and-figures-infographic>

### Key elements of concept *gender equality*

Knowledge and understanding	Skills	Values and attitudes
<p>To acquire knowledge, understanding and critical thinking about global, regional, national and local issues and the interconnectedness and interdependency of different countries and populations.</p> <p>Identification of materials and data about gender equality and also which haven't been declared yet.</p> <p>Work on self-esteem and awareness.</p> <p>Presentations of books, movies, debates on politics and society with a focus on gender equality produced by women.</p>	<p>Enhance gender empowerment: relational, personal psychosocial cap-abilities as an asset to improve local development.</p> <p>Career counselling and training: literacy, ICT skills, how to write a resume.</p>	<p>UNESCO characterizes the ECG according to three main characteristics: Respect for diversity, Solidarity A shared idea of humanity.</p> <p>To have a sense of belonging to a common humanity, sharing values and responsibilities, empathy, solidarity, and respect for differences and diversity.</p> <p>To act effectively and responsibly at local, national and global levels for a more peaceful and sustainable world.</p> <ul style="list-style-type: none"> <li>▪ the feeling of belonging to a broader community and a common humanity;</li> <li>▪ the interdependence of the political, economic, environmental, social, and cultural dimensions;</li> <li>▪ the interconnection between local, national, and global levels.</li> </ul>

## Policy

### Regulatory documents

New European Gender Strategy (2020-2024):

<https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12114-Gender-equality-in-the-EU>

The Gender Equality Act was the last act before Estonia joined EU in 2004.

<https://www.riigiteataja.ee/en/eli/ee/Riigikogu/act/530102013038/consolide>

The draft of the law met lots of opposition and the legislative procedure was painfully long and difficult. The current situation in the labour market in Estonia reflects precisely the stereotype-based decisions among members of society.

Estonia is in the bottom group of EU countries when it comes to indicators of gender equality. If the average gender equality index for European Union member states was 67.4 points out of

a possible 100 in 2019, Estonia's score was 69.8, data from the European Institute for Gender Equality (EIGE) <https://eige.europa.eu/gender-equality-index/compare-countries>.

The index considers labor market position, financial situation, education, use of time, power resources and health of men and women. A Eurostat overview of gender salary differences still has Estonia in last place in Europe. The difference between the salaries of men and women in companies with more than 10 employees was 22.7% in 2018, while the European Union average came to 14.8% <sup>106</sup>.

**The Slovak Republic** has a universal regulation of equal opportunities, as well as its special regulation in some laws, into which the regulation of EU directives has been transferred. Gender Equality is guaranteed by Slovakia's constitution, the Employment Act, the Labor Code, and the Anti-Discrimination Act. Strategic documents covering the topic of gender equality are the **National Gender Equality Strategy** and **Gender Equality Action Plan** <sup>107</sup>.

### **Examples how different kind of organizations implement gender equality in their activities**

One of interesting sample is “Who makes the news?” knowledge, information and resource portal which applied media research. The work focuses on gender and other axes of discrimination in and through media and communication. Portal promotes critical media research to generate evidence for education, awareness, training and advocacy, supporting women’s use of media for their own empowerment and for the development of their communities. It advocates full and equal participation of women in public communication so that their multiple and complex interests, experiences and realities become part of the public agenda. It also supports civil society evidence-building on media and marginalized sectors of society in order to advance social justice goals for all in and through the media.

This work has resulted in an extensive network of individuals and organizations concerned about gender, media and critical communication broadly, from grassroots activists to academics and development organisations. **The Global Media Monitoring Project (GMMP)** is a worldwide media monitoring, research and advocacy project implemented collaboratively with women’s rights organizations, grassroots groups, media associations, faith-based / interfaith organizations, university students and researchers across the world. Next GMMP will be in autumn 2020<sup>108</sup>.

**In Slovakia** education in the field of gender equality and equal opportunities is provided by several non-governmental organizations (e.g., Citizen, Democracy and Responsibility<sup>109</sup>, Freedom of choice<sup>110</sup> ) as well as the **Department of Gender Equality and Equal Opportunities**. Accredited courses for public administration are being prepared within the national project of the Institute of Gender Equality<sup>111</sup>.

<sup>106</sup> <https://news.err.ee/1061276/estonia-lags-europe-in-terms-of-gender-equality>

<sup>107</sup> <https://www.gender.gov.sk/>

<sup>108</sup> <http://whomakesthenews.org/gmmp-2020>

<sup>109</sup> <http://odz.sk/en/>

<sup>110</sup> <http://moznostvolby.sk/>

<sup>111</sup> <http://www.instituttr.sk/>

## Pedagogy and Practice

### Concept gender equality in the context of sustainable development goals

SDG No. 5: Gender equality		
<b>Activity description:</b>	Group work on stereotypes in professions for women and men	
<b>Objective:</b>	To choose and discuss what professions are for women and what for men.	
<b>Target group:</b> Adult educators or learners.	<b>Time for activity:</b> 45 min	<b>Materials needed:</b> Few sets of professions for man and woman. Flipcharts for each group. Markers. Scissors.
<b>Activity implementation steps:</b> <ul style="list-style-type: none"> <li>• Educator presents activity and divides group in few smaller groups.</li> <li>• Each group has flipchart, markers, scissors and set of professions.</li> <li>• Groups discuss what professions are for women and what for men.</li> <li>• They draw woman and man on flipchart, give them name and choose possible professions for them from the set of professions.</li> <li>• Each group present what choose and argument own decision.</li> <li>• Other participants ask questions to each group.</li> <li>• Educator facilitates and summarises activity.</li> </ul>		
<b>Tips for facilitators/trainers:</b>	<b>Set of profession:</b> accountant, actor, actress, architect, artist, banker, bank clerk, barber, bookkeeper, builder, businessman, businesswoman, bus driver, butcher, carpenter, cashier, chef, cook, cleaning woman/man, dentist, filmmaker, fisherman/woman, florist, gardener, hairdresser, investor, jeweler, journalist, judge, lawyer, lecturer, librarian, mechanic, model, musician, nurse, optician, painter, pharmacist, photographer, physician, pilot, police officer, politician, professor, programmer, psychologist, receptionist, salesman, salesperson, saleswoman, secretary, singer, sponsor, stenographer, surgeon, teacher, taxi driver, therapist, translator, travel agent, veterinarian, videographer, waiter, waitress, writer, window cleaner, air force pilot, soldier, military engineer, air force officer, army captain, army general, army major, artillery officer, colonel, lieutenant, navy officer, sergeant, president of the country, president of company, vice-president, director, financial director, manager.	



## **Recommendations how an adult educator should educate and support adults from different organizations**

To organise an educational process that leads people to actively engage for fostering change in the social, cultural, political, and economic structures that influence their lives, countries should:

- integrate the SDGs into their own short programs in middle term;
- integrate the SDGs at local, regional national level;
- conceptualize a new model of development;
- ensure policy coherence.

A direct responsibility of each one, within their mandate, for the achievement of the SDGs, the process of policy coordination, which must have the 2030 Agenda at its core.

People continue to acquire competences throughout lifetime, especially at work but also through the activities of their free time. The participation of adults to training activities is an important element in improving their competences.

To address the decision makers and grow the ability to decide (adults, parents, illiterate).

Together with representatives of the third sector and civil society, has developed a multidimensional approach to measure “equitable and sustainable well-being”, in order to complement the indicators related to production and economic activity with measures of the key dimensions of well-being, together with measures of inequality and sustainability.

## AFTERWORD

Adult educators identify lack of systemic approach for SDGs implementation working in non-formal adult education field. There are policy mechanisms and different declarative documents but systemic implementation guidance and daily working manuals to reach local, national, European and worldwide context for adult educators are missing. For that reason, **S.A.F.E a manual for adult educators** on SDGs implementation into adult education have to be disseminated the adult education institutions at European and national level.

Manual express main idea about why we have to invest into adult educators' competencies to work into S.A.F.E (SUSTAIN) direction. Worldwide, adults need to develop new ways of living is closely related with adult educators' competencies to work with sustainability issues, also on Education for Sustainable Development competencies, Life Skills, sustainable consumption, adult education in the SDG framework.

Project partners believe that **S.A.F.E a manual for adult educators** contributes to the develop of ecological intelligence to adult educators and forms eco-literacy that will support them in forging new patterns of sustainable life. Sustainability in adult learning support adult educators to develop a sustainable spiral framework working in different levels with adults, and include skills to lead a healthier life, knowledge about equitable and sustainable consumption, the promotion of gender equality, awareness about environmentally friendly transport and energy efficiency, as well as the promotion of sustainable, inclusive economic growth.

The project team is convinced of the transferability potential of the **S.A.F.E a manual for adult educators**. It can be exploitable by the wider community and could be also transferred from non-formal adult education to formal education, to VET system and self-learning.