



Environmentally related SDG indicators

Experiences and challenges in the monitoring of the SDG indicators

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Fifth Meeting of the Expert Group on Environment Statistics
UNSD, New York, 16-18 May 2018

Coordination mechanism: main players

Implementing the 2030 Agenda and National Sustainable Development Strategy:

- **Government Office** is a central coordinator (Strategy Unit)
- **Inter-ministerial Working Group for Sustainable Development** (ministries and Statistical Office)
- **Estonian Sustainable Development Commission** (non-governmental organizations, stakeholders)

Compilation of SDIs and the role of statistical office

Agreement of indicator framework and selection principles

Government Office Strategy Unit, inter-ministerial Working Group for Sustainable Development, Statistics Estonia



Proposal and discussion of indicators

Sustainable Development Commission, Government Office Strategy Unit, inter-ministerial Working Group for Sustainable Development, Statistics Estonia



Approval of the list of indicators

Sustainable Development Commission



Preparation of datasets for the indicators

Inter-ministerial Working Group for Sustainable Development, Statistics Estonia



Publication of indicators

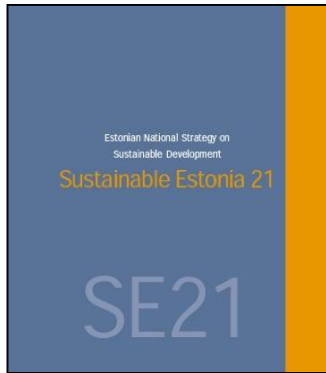
Statistics Estonia

Basic national indicator framework relevant to
Estonian Sustainable Development Strategy
*“Sustainable Estonia 21” (2005) and transition to SDG
framework*



Strategic framework for SD in Estonia

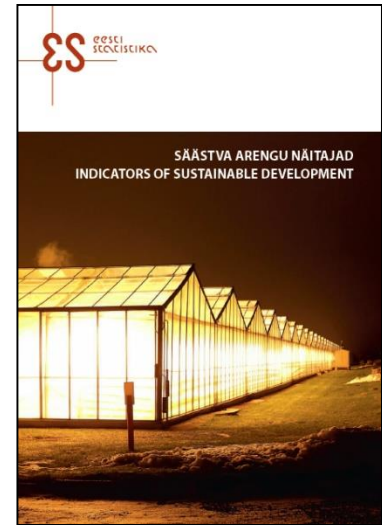
- Sustainable Development Law (1995)
- Estonian Sustainable Development Strategy “Sustainable Estonia 21” (2005)



Four interconnected development goals

- Viability of Estonian cultural space
- Growth of welfare
- Coherent society
- Ecological balance

- Less than 100 sustainable development indicators relevant to 4 goals and 18 subgoals



ES

2002



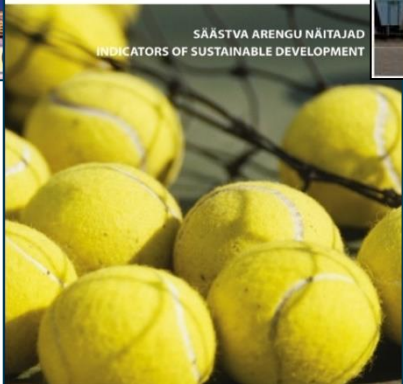
SÄÄSTVA ARENGU NÄITAJAD
INDICATORS OF SUSTAINABLE DEVELOPMENT



ES
Eesti
Statistikaamet

2006

SÄÄSTVA ARENGU NÄITAJAD
INDICATORS OF SUSTAINABLE DEVELOPMENT



ES
Eesti
Statistikaamet

2009

SÄÄSTVA ARENGU NÄITAJAD
INDICATORS OF SUSTAINABLE DEVELOPMENT



ES
Eesti
Statistikaamet

2011

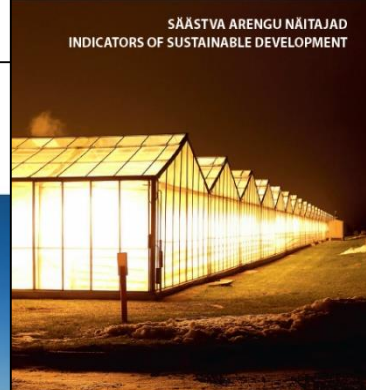
SÄÄSTVA ARENGU NÄITAJAD
INDICATORS OF SUSTAINABLE DEVELOPMENT



ES
Eesti
Statistikaamet

2015

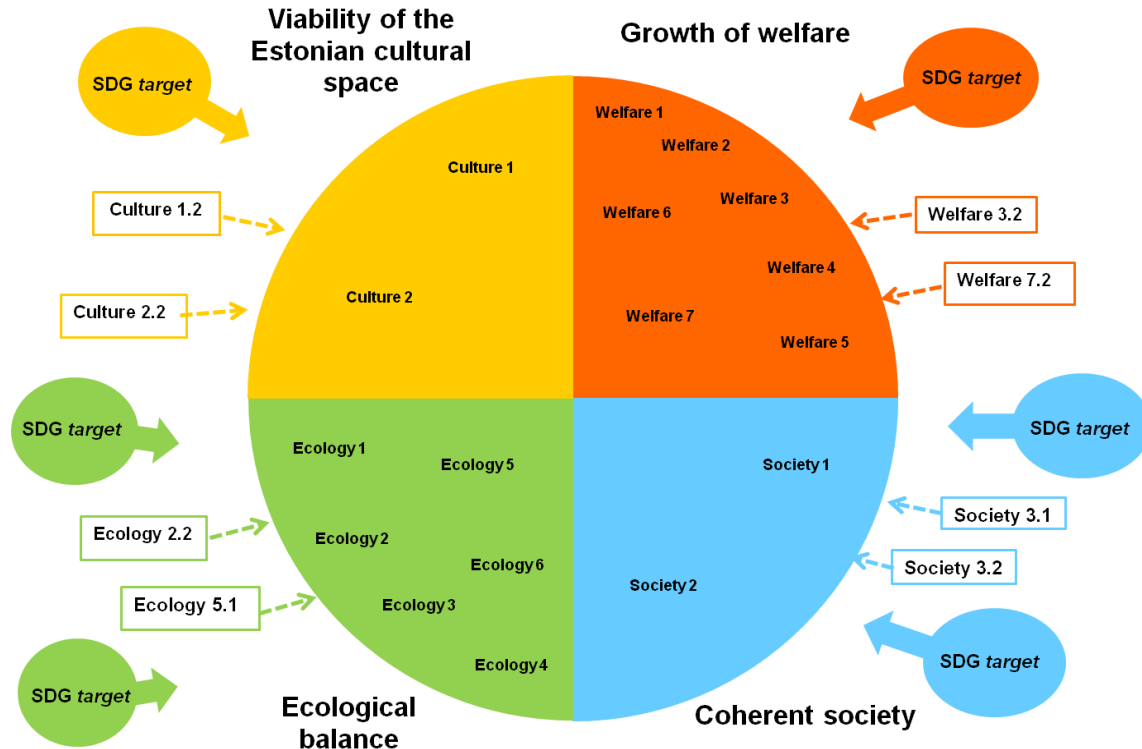
SÄÄSTVA ARENGU NÄITAJAD
INDICATORS OF SUSTAINABLE DEVELOPMENT



First attempt for taking SDGs on board: proposed framework based on national strategy

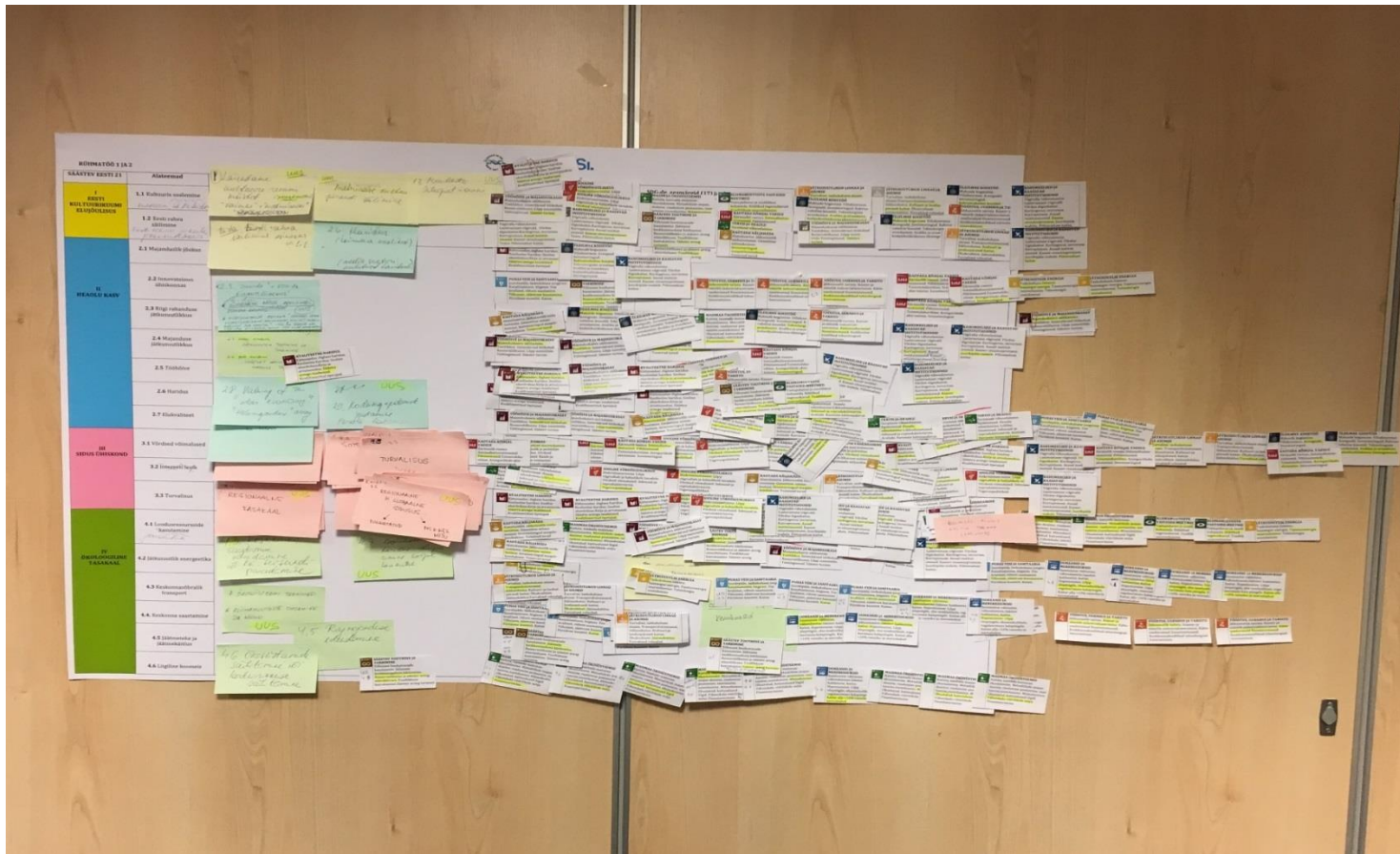
Adding the missing SDG goals and sub goals to existing SDI framework.

Seminar on implementation of SDGs and on planning activities for the future – February 2017

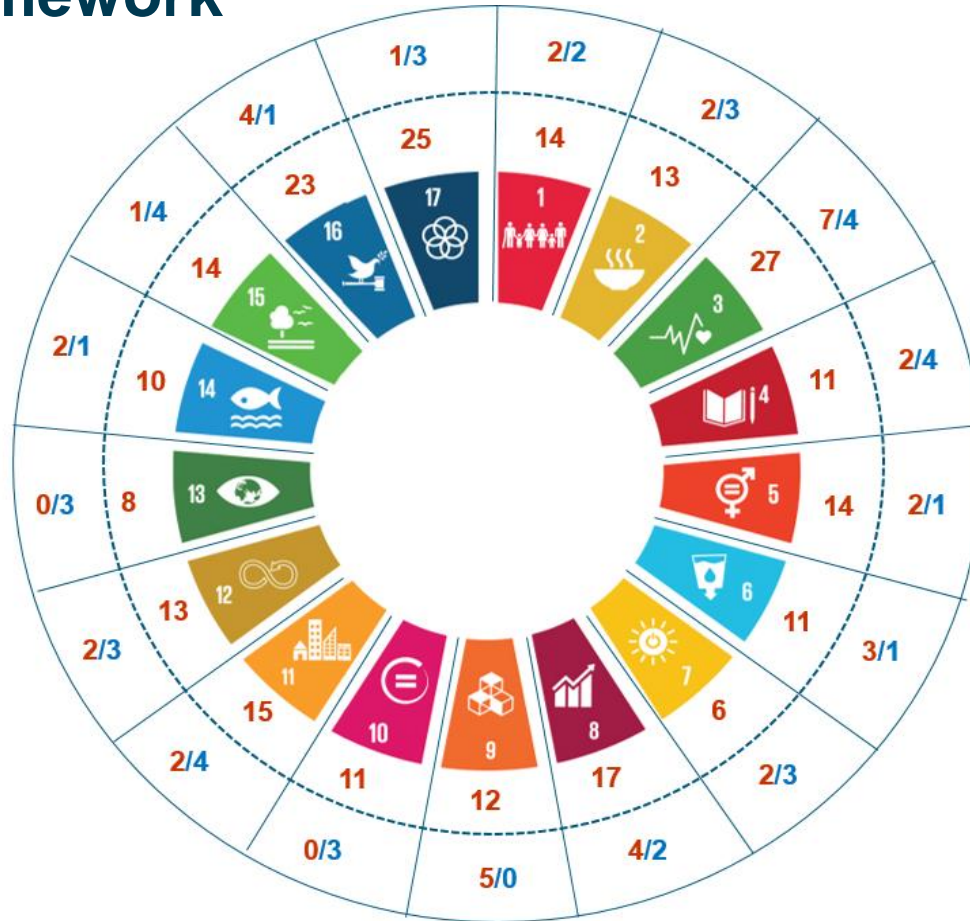


Criteria for choosing SDG indicators

- Policy relevance
- Timeliness
- Frequency = Regular data production
- International comparability (EU-28)
- Comparability over time
- Length of time series



Second attempt for taking SDGs on board: proposed framework



OUTMOST CIRCLE:
national SDG
indicators

INNER CIRCLE:
global SDG
indicators

RED: number of
UN SDG indicators

BLUE: number of
national indicator

National SDG indicators

The set was approved in December 2017.

Total of **88** indicators

- of what **41** (~46%) are in line with SDG indicators
- **47** indicators are either proxy's or are important at national level

- **31%** are not produced by Statistical Office

Global sustainable development goals (SDG)		Estonia's indicators of sustainable development (2017)		Global sustainable development goals (SDG)		Estonia's indicators of sustainable development (2017)			
Goal 1 	End poverty in all its forms everywhere.	Absolute poverty rate		Goal 6 	Ensure availability and sustainable management of water and sanitation for all.	The share of wastewater that is treated according to the requirements in total collected wastewater			
		Relative poverty rate				Share of consumers who receive proper drinking water from the public water supply			
Goal 2 	End hunger, achieve food security and improved nutrition and promote sustainable agriculture.	Agricultural productivity		Goal 7 	Ensure access to affordable, reliable, sustainable, and modern energy for all.	Energy productivity			
		Share of organic agricultural area in relation to the total utilised agricultural area				Energy dependency rate			
		Share of organic agricultural production in all agricultural production				Energy efficiency of the building stock *			
		Pesticides placed on the market				Share of energy expenses from total household expenses			
Goal 3 	Ensure healthy lives and promote well-being for all at all ages.	Life expectancy		Goal 8 	Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all.	Share of renewable energy in total final energy consumption			
		Healthy life years				Employment rate (20–64-year-olds)			
		Obesity rate				Long-term unemployment rate (15–74-year-olds)			
		Deaths due to external causes of morbidity and mortality per 100 000 inhabitants				Young people neither in education nor in employment and training (NEET)			
		Avoidable mortality				Real GDP growth			
		Death due to chronic diseases				Resource productivity			
		Cases of HIV, tuberculosis, hepatitis B and hepatitis C per 100,000 inhabitants				Productivity			
		Suicides per 100,000 inhabitants				Share of expenditures on research and development of the GDP			
		New cases of mental and behavioural disorders per 100,000 inhabitants (including mental and behavioural disorders due to psychoactive substances among young people)				Research and development personnel			
		Alcohol consumption				Share of connections with the speed of 100 Mbp/s or faster of the total number of fixed Internet connections			
Goal 4 	Ensure inclusive and quality education for all and promote lifelong learning opportunities for all.	Smoking prevalence		Goal 9 	Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.	Rate of Internet use			
		Participation in lifelong learning				Modal split of freight transport and passenger transport by mode of transport			
		Tertiary education (proportion of 30–34-year-olds with higher education)				Income per household member			
		Share of 16–74-year-olds with digital competence				Income inequality			
		Share of students with the highest level of performance (proportion of students who have achieved the fifth and sixth level of PISA reading, maths and science)				Self-reported unmet need for medical care			
		Share of young people in hobby activities							
Goal 5 	Achieve gender equality and empower all women and girls.	Share of young people with basic education or lower level of education who will not continue their studies		Goal 10 	Reduce inequality within and among countries				
		Gender pay gap				Goal 11 	Make cities inclusive, safe, resilient, and sustainable.	Proportion of architectural monuments in good and satisfactory status	
		Women in leadership positions						Number of people injured or killed in traffic accidents in cities	
		Time use of men and women						Fine particulate matter PM10 and PM2.5 in ambient air	
								Green urban areas*	
		Satisfaction with the status of dwellings							
		People commuting work by public transport or by bicycle, or on foot							



Global sustainable development goals (SDG)		Estonia's indicators of sustainable development (2017)
Goal 12  Ensure sustainable consumption and production patterns.		Waste generation
		Recycling rate of municipal waste
		The share of hazardous waste of for recovery
		Companies and institutions implementing environmental management systems
Goal 13  Take urgent action to combat climate change and its impacts		Greenhouse gas emissions per GDP
		Greenhouse gas emissions from the energy sector
		Greenhouse gas emissions from the transport sector
Goal 14  Conserve and sustainably use the oceans, seas and marine resources.		Proportion of marine protected areas
		Spawning stock biomass of fish species populations used for commercial purposes
		The share coastal bodies in good status
Goal 15  Protect and restore terrestrial ecosystems and promote their sustainable use; manage forests sustainably; halt and reverse desertification and biodiversity loss.		Share of protected natural objects from the land territory
		Share of protected forest land in the total forest land
		Emission of acidifying pollutants
		EU Habitats Directive habitats in favourable conservation state
		EU Habitats Directive species in favourable conservation state
Goal 16  Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.		Corruption perceptions index
		Number of persons with undetermined citizenship
		Share of people who consider their neighbourhood safe
		Number of people killed due to assault
		Number of people who have been victims of violence per year
Goal 17  Strengthen the means of implementation and revitalize the global partnership for sustainable development		Share of official development assistance from gross national income
		Structural balance of the consolidated budget of the general government sector
		Share of general government debt in the GDP
		Share of environmental taxes in total tax revenues
Viability of Estonian cultural space		Natural increase
		Total fertility rate
		Speakers of Estonian language
		Visitors of cultural institutions
		Share of persons participated in cultural hobby activities




Next steps from now on



- Production of data for indicators and metadata – June 2018
- Update of the thematic webpage for SD (SDGs) –October 2018
- Publication of the Estonian SDG indicator set – November 2018
- Possible development of dashboard for current set of sustainable development indicators – 2019-2020



Environmental indicators in national SDG framework



UN SDG Goal	National SDG indicator	Comparability global/national/EU	FDES theme	Institution producing data	Old /New
2 ZERO HUNGER 	Share of organic agricultural production in total agricultural production	national	-	Statistical Office	new
	Pesticides placed on the market	national	3.4.1 Release of chemical substances	Statistical Office	new
	Use of fertilisers	national	3.4.1 Release of chemical substances	Statistical Office	new
6 CLEAN WATER AND SANITATION 	The share of wastewater that is treated according to the requirements	global, national, EU	3.2.2 Collection and treatment of wastewater	Statistical Office	new
	Proportion of inhabitants who receive proper drinking water from public water supply	global	5.1.2 Access to selected basic services	Estonian Health Board	new
	Groundwater extraction	national, proxy for EU (Water exploitation index)	-	Estonian Environment Agency	new
	Status of surface water	global, national	-	Estonian Environment Agency	old

UN SDG Goal	National SDG indicator	Comparability global/national/EU	FDES theme	Institution producing data	Old /New
7 AFFORDABLE AND CLEAN ENERGY 	Energy productivity	national, EU	-	EU	new
	Energy dependence	national, EU	-	Statistical Office	old
	Share of renewable energy in gross final energy consumption	global, national, EU	2.2.2 Production, trade and consumption of energy, diferent concept;	EU	old
8 DECENT WORK AND ECONOMIC GROWTH 	Resource productivity	global, national, EU	-	Statistical Office	old
11 SUSTAINABLE CITIES AND COMMUNITIES 	Fine particles PM10 and PM2.5 in ambient air (emissions)	global, national, EU	1.3.1 Air quality	Estonian Environment Agency	old
	Green urban areas*	national	5.1.5 Environmental concerns specific to urban settlements	Statistical Office	new

UN SDG Goal	National SDG indicator	Comparability global/national/EU	FDES	Institution producing data	Old /New
12 RESPONSIBLE CONSUMPTION AND PRODUCTION 	Recycling rate of municipal waste	global, national, EU	3.3.2 Management of waste	Statistical office	new
	Generation of waste	national, proxy EU (Generation of waste excluding major mineral wastes)	3.3.1 Generation of waste	Statistical Office	old
	Proportion of recovered hazardous waste	global, national	3.3.2 Management of waste	Statistical Office	new
	Companies and institutions implementing environmental management systems	national	-	Ministry of Environment(EMAS) International Organizations for Standardization	old
	Volume of oil shale mining	national	-	Estonian Land Board	old
13 CLIMATE ACTION 	Greenhouse gas emissions with relation to the GDP	global, national, EU	3.1.1 Emissions of greenhouse gases	Ministry of Environment	old
	Greenhouse gas emissions from the energy sector	national	-	Ministry of Environment	new
	Greenhouse gas emissions from the transport sector	national	-	Ministry of Environment	new

UN SDG Goal	National SDG indicator	Comparability global/national/EU	FDES	Institution producing data	Old /New
14 LIFE BELOW WATER 	Proportion of marine areas under protection	global, national, proxy for EU (Sufficiency of marine sites designated under the EU habitats directive)	1.2.2 Ecosystems and biodiversity	Estonian Environment Agency	new
	Spawning stock biomass of fish species populations used for commercial purposes	proxy for global (Proportion of fish stocks within biologically sustainable levels), national	2.5.2 Aquatic resources	Statistical Office	new
	Proportion of coastal water bodies in good status	global, national	-	Estonian Environment Agency	new
15 LIFE ON LAND 	Share of protected areas of in total terrestrial territory	global, national, proxy for EU (Sufficiency of terrestrial sites designated under the EU Habitats Directive)	1.2.2 Ecosystems and biodiversity	Estonian Environment Agency	old
	Proportion of protected forest land in the total forest land	national	1.2.2 Ecosystems and biodiversity 1.2.3 Forests	Estonian Environment Agency	old
	Emission of acidifying pollutants	national		Statistical Office	old
	EU Habitats Directive habitats in favourable conservation state	national, EU	-	European Environment Agency	new
	EU Habitats Directive species in favourable conservation state	national, EU	1.2.2 Ecosystems and biodiversity	European Environment Agency	new



Future tasks and challenges on SDGs in Statistics Estonia

Statistics Estonia's role in coordination widens:

IN 2018: 88 national SDG indicators and around 20 data providers to coordinate

IN FUTURE: work on global SDG-s will come in addition: 232 global SDG indicators and more than 60 custodian agency's

Development of „national reporting platform“

Visualisation and SDG topic related dashboards



Growing responsibilities of NSI-s and the central role in monitoring of the implementation of Agenda 2030:

New developments

- UN Statistical Commission on the 48 th session (March 2017) strongly recommended that national data to be used for global reporting and that adjustments and estimates to the country data be undertaken in full consultation with countries and through fully transparent mechanisms. ([StatCom 48 report, para. I, 1](#)).
- General Assembly adopted the resolution (6 July 2017) which outlines that global review is to be primarily based on national official data sources and ensures that National Statistical Offices have a coordinating and central role ([A/RES/71/313 para. 6](#)). Methodologies used for harmonisation need to be disclosed ([A/RES/71/313 para.7](#)) as well.
- UN Statistical Commission on 49 th session (March 2018):
 - “(f) ...welcomed the draft guidelines on data flows and global data reporting for the SDGs as an initial step“
 - “(g) requested the IAEG-SDGs to work jointly with custodian agencies and establish a fruitful dialogue between all parties, to further refine the guidelines by taking into account concerns raised at UNSC...” ([StatCom 49 report, Decisions f and g](#))
- UNECE expert group on Member States are carrying out the pilots on data flows

Future challenges regarding global SDGs on national level

- Nationalisation of global indicators
- Identification of national data providers and focal points;
- Ensuring of the harmonization of global and national indicators and indicator sets;
- Developing of the competence:
 - to explain the difference between global and national indicators and indicator sets, incl the indicators provided outside NSOs
 - for the validation of non-statistical indicators
- Development of metadata
- Development of sub-national statistics as additional dimension

Final thoughts


- Statistical Office's role in SDG monitoring coordination widens
- Enhancing the position of statistics on all levels will help the implementation of the 2030 Agenda by providing evidence and guide policy interventions

FDES could have new demands from the side of environmental SDG-s and needs to adjust possible new indicators



Thank you!



<p>1 NO POVERTY</p> 	<p>End poverty in all its forms everywhere</p>	<p>10 REDUCED INEQUALITIES</p> 	<p>Reduce inequality within and among countries</p>
<p>2 ZERO HUNGER</p> 	<p>End hunger, achieve food security and improved nutrition and promote sustainable agriculture</p>	<p>11 SUSTAINABLE CITIES AND COMMUNITIES</p> 	<p>Make cities inclusive, safe, resilient, and sustainable</p>
<p>3 GOOD HEALTH AND WELL-BEING</p> 	<p>Ensure healthy lives and promote well-being for all at all ages</p>	<p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p> 	<p>Ensure sustainable consumption and production patterns</p>
<p>4 QUALITY EDUCATION</p> 	<p>Ensure inclusive and quality education for all and promote lifelong learning opportunities for all</p>	<p>13 CLIMATE ACTION</p> 	<p>Take urgent action to combat climate change and its impacts</p>
<p>5 GENDER EQUALITY</p> 	<p>Achieve gender equality and empower all women and girls</p>	<p>14 LIFE BELOW WATER</p> 	<p>Conserve and sustainably use the oceans, seas and marine resources.</p>
<p>6 CLEAN WATER AND SANITATION</p> 	<p>Ensure availability and sustainable management of water and sanitation for all</p>	<p>15 LIFE ON LAND</p> 	<p>Protect and restore terrestrial ecosystems and promote their sustainable use; manage forests sustainably; halt and reverse desertification and biodiversity loss</p>
<p>7 AFFORDABLE AND CLEAN ENERGY</p> 	<p>Ensure access to affordable, reliable, sustainable, and modern energy for all</p>	<p>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</p> 	<p>Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</p>
<p>8 DECENT WORK AND ECONOMIC GROWTH</p> 	<p>Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all</p>	<p>17 PARTNERSHIPS FOR THE GOALS</p> 	<p>Strengthen the means of implementation and revitalize the global partnership for sustainable development</p>
<p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p> 	<p>Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</p>		