## Introduction of Environmental-Economic Accounts in Russia: New Plans and Current Work

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In October 2012 a *Governmental plan* of environmental statistics development was adopted in Russia.

The major purpose of the work:

- improvement of environmental, first of all, *natural resources* statistics, and
- development of *resource productivity (RP)* measurements.

This task fosters new efforts in the field of SEEA introduction.

In this connection the work will be concentrated on the development and production of:

- Asset accounts
- Physical flow accounts
- - Environmental activity accounts

- The Plan considers development of systematic statistics, including:
  - -stock inventory in physical and monetary terms (annual),
  - -changes in stock in physical units and value (annual),
  - -uses of resources (annual).

This data should be developed for major types of natural resources:

Land:

value and changes since 2016, including

#### Agricultural land:

<ul> <li>stock inventory in physical units</li> </ul>	since 2016
<ul> <li>changes in stock in physical units</li> </ul>	since 2016
<ul> <li>uses in physical units</li> </ul>	since 2016

 Water resources, Mineral and Energy resources, Natural aquatic resources, Timber resources, Biological resources:

<ul> <li>stock inventory (units and market value)</li> </ul>	since 2016
<ul> <li>changes (units and market value)</li> </ul>	since 2016
<ul> <li>uses (units and market value)</li> </ul>	since 2019

- The Plan stipulates that since 2016 the SNA balance sheet will include natural resources on annual basis.
- Assessment of natural resources productivity will be published on regular (annual) basis since 2018.
- Quarterly natural resource data for the balance sheet and resource productivity will be introduced after 2018

# **Research programme** (started 2013) includes **development of methodology** for:

1	AV2	luation	of
_	Eva	luation	OI

mineral and energy resources	2013
water resources	2013
biological resources	2014
timber resources	2014
land	2014
natural aquatic resources	2015
2) resource productivity assessment	2016
3) SEEA asset accounts construction	2016

# <u>Asset Accounts</u> Physical Asset Account for Environmental Assets - 2016

	Mineral &	Land (incl.		Timber resources		Aquatic resources		
	energy resources	forest land)	Soil resources	Cultivated	Natural	Cultivated	Natural	Water resources
<b>Opening stock of resources</b>	X	X	X	X	X	X	X	X
Additions to stock of resources				7			principal special	
Growth in stock	na	X	Soil formation Soil deposition	Growth	Natural growth	Growth	Natural growth	Precipitation Return flows
Discoveries of new stock	X	na	na	na	na	X	X	X
Upwards reappraisals	X	X	X	X	X	X	X	X
Reclassifications	X	X	X	X	X	X	X	X
Total additions to stock								
Reductions in stock of resource	es							
Extractions	Extractions	na	Soil extraction	Removals	Removal	Harvest	Gross catch	Abstraction
Normal reductions in stock	na	na	Erosion	Natural losses	Natural losses	Normal losses	Normal losses	Evaporation Evapotranspiration
Catastrophic losses	X	X	X	X	X	X	X	X
Downwards reappraisals	X	X	X	X	X	X	X	X
Reclassifications	X	X	X	X	X	X	X	na
Total reductions in stock								
Closing stock of resources	X	X	X	X	X	X	X	X

## Physical Flows Accounts Physical Supply and Use Table

Industries	Households	Accumulation	Rest of the world	Environment	Total
			/		Maria Paris Sala
				Flows from the environment	Total supply of natural inputs
Output			Imports		Total supply of products
Residuals generated by industry	Residuals generated by final household consumption	Residuals from scrapping and demolition of produced assets			Total supply of residuals
•		Warring C			
Extraction of natural inputs					Total use of natur inputs
Intermediate consumption	Household final consumption	Gross capital formation	Exports		Total use of products
Collection & treatment of waste and other residuals		Accumulation of waste in controlled landfill sites		Residual flows direct to environment	Total use of residuals
	Output  Residuals generated by industry  Extraction of natural inputs Intermediate consumption Collection & treatment of waste	Output  Residuals generated by industry  Extraction of natural inputs  Intermediate consumption  Collection & treatment of waste	Output  Residuals generated by industry  Extraction of natural inputs  Intermediate consumption  Collection & treatment of waste  Residuals generated by final household consumption  Cessiduals generated by final household consumption  Gross capital formation  Accumulation of waste in controlled	Output  Residuals generated by industry household generated by industry household consumption  Extraction of natural inputs  Intermediate consumption  Collection & treatment of waste  Households  Residuals from scrapping and demolition of produced assets  Residuals from scrapping and demolition of produced assets  Extraction of natural inputs  Accumulation  The world  Accumulation  Accumulation  Accumulation  The world  Accumulation  Accumulation  The world  Accumulation  Tomports  Tomports  Tomports  Accumulation of waste in controlled	Residuals generated by industry household generated by industry household consumption produced assets  Extraction of natural inputs  Intermediate consumption consumption formation  Collection & treatment of waste remainder the world the world the world  Flows from the environment  Imports  Flows from the environment  Accumulation of generated by final demolition of produced assets  Flows from the environment  Extraction of natural inputs  Extraction of natural inputs  Intermediate Household final Gross capital Exports  Accumulation of waste residual flows direct to

## Environmental activity accounts Environmental Protection

#### **Environmental protection expenditures**

mln rubles

	2005	2010	2011	2012
Total	233930	372382	412014	432446
including:				
Protection of ambient air				
and climate	53765	80071	88362	89020
Wastewater management	105369	169152	197073	196279
Waste management	22739	41510	44172	36328
Protection and remediation				
of soil, groundwater and				
surface water	13444	17219	23435	33905
Protection of biodiversity				
and landscapes	12542	22975	13381	17850
Other environmental				
protection activities	26071	41455	45591	59064
Total, % of GDP	1,1	0,8	0,8	0,7

#### **Asset Accounts**

Physical Asset Account for Environmental Assets - 2016

### **Target:**

Construction of recommended table "Total national expenditure on environmental protection" (SEEA Central Framework, Table 4.3.3)

1)	Adaptation of Classification of Environmental Activities	2014 - 2015
2)	Integration environmental activities into Input-Output tables	Next generation of basic IOT (for 2016) - 2019-2020

Thank you for your patience!