

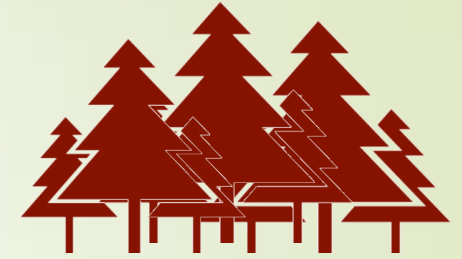
RUSSIAN REGIONAL FOREST PLANNING

Speaker:

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Forest Fund lands area – **1,2** billion hectares
Wood reserve – **83,4** billion cubic meters



The total forest Fund
lands area –
4632,4 thousand ha
including:
Commercial forest –
3990,3 thousand ha;
protective forest–
642,1 thousand ha.
wood reserve– **736,4**
million m³

Russian forestry in the structure of the national economy

- ✓ The share of gross domestic product – **1,7%**
- ✓ Share of foreign exchange earnings from exports – **2,1%**
- ✓ Share in the volume of shipped products by industry as a whole – **2,5%**
- ✓ Share of world timber trade – **2,9 %**
- ✓ The value added per unit of harvested wood is much lower than in developed countries

1 m³
of wood



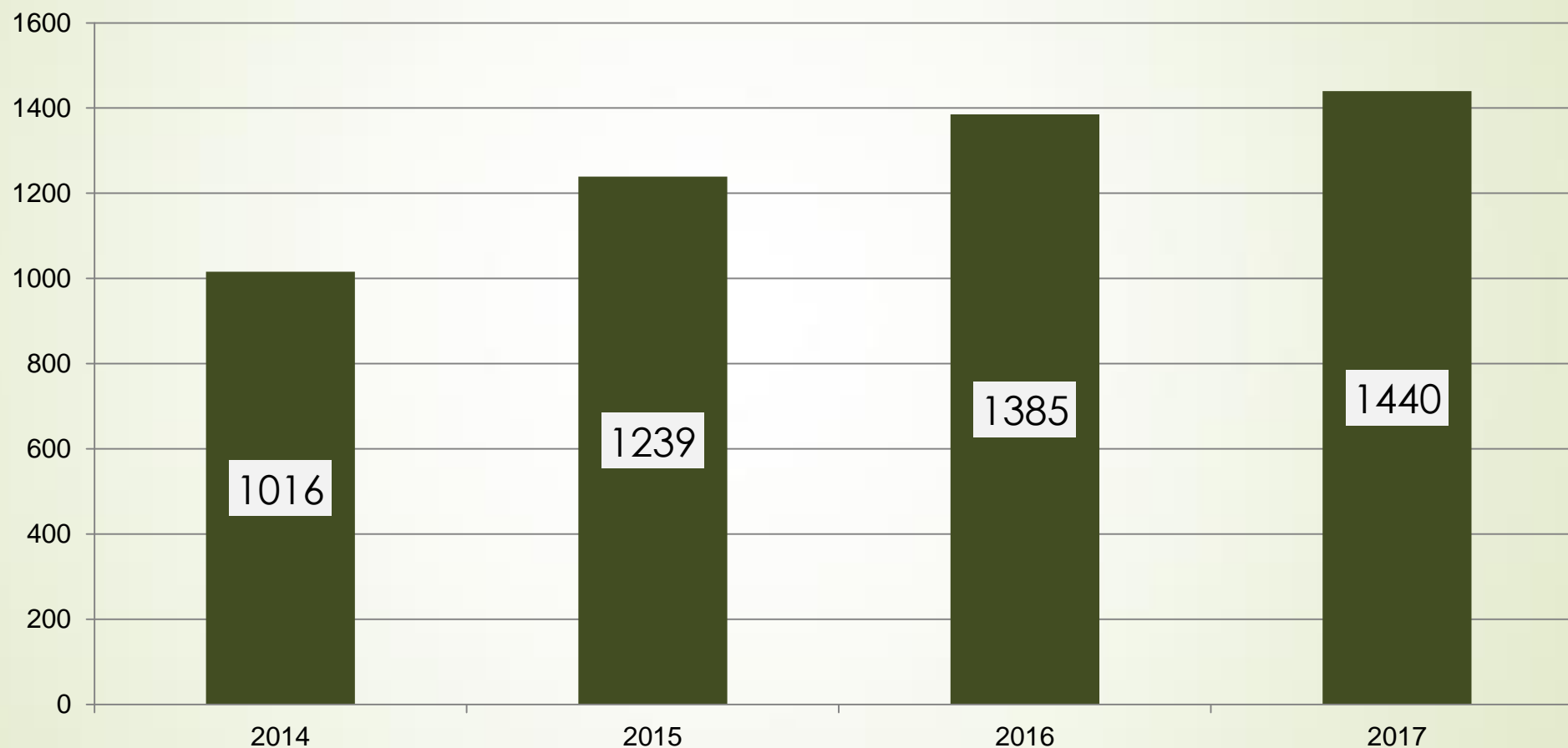
- Russian Federation – 264 \$
- USA – 1000 \$
- Finland – 1200 \$

THE NUMBER OF EMPLOYEES IN THE FOREST SECTOR OF THE ECONOMY AS OF 01.01. 2017 ACCORDING TO ROSSTAT

Forest sector segments of the economy	Thousands of people
Forestry	74,8
Logging	171,2
Woodworking industry	217,6
Pulp and paper production	286,6
Furniture production	131,5

- ❑ 35 % employees over 50 years of age or retirement age;
- ❑ the annual need for specialists is from 3 to 15 thousand people;
- ❑ annual need for targeted retraining-more than 7 thousand people

THE VOLUME OF PRODUCTION OF THE FOREST SECTOR OF THE RUSSIAN FEDERATION FOR 2014-2017, BILLION RUBLES



The uneven allocation of production capacity of the forest sector in the Russian Federation

European part		Asian part
25 %	Wood reserve	75 %
55 %	Production of mechanical processing products	46 %
82 %	The production of pulp and paper	17 %

THE VOLUME OF PRODUCTION OF THE FOREST SECTOR OF THE RUSSIAN FEDERATION 2013-2017

Name products	units	2013	2014	2015	2016	2017	2017/ 2016, %
Lumber	1million m³	21.7	21.5	22.0	23.8	25.9	108.8
Plywood	1000 m³	3,329.0	3,569.0	3,658.0	3,812.0	3,723.0	97.6
Chipboard	1000 con. m²	6,600.0	6,822.0	7,207.0	7,394.0	8,472.8	114.5
Fibreboard	1000 000 con. m³	427.0	469.0	502.0	555.0	590.5	106.3
Factory-made wooden houses	1000 m²	177.0	213.0	214.4	227.3	233.0	102.5
Pellets	1000 tons	715.9	913.3	966.0	1066.0	1343.0	125.9
Cellulose	1000 tons	7,211.0	7,537.0	7,875.0	8,208.0	8,586.9	104.6
Paper and cardboard	1000 tons	7,800.0	8,153.0	8,196.0	8,646.0	8,568.8	99.1

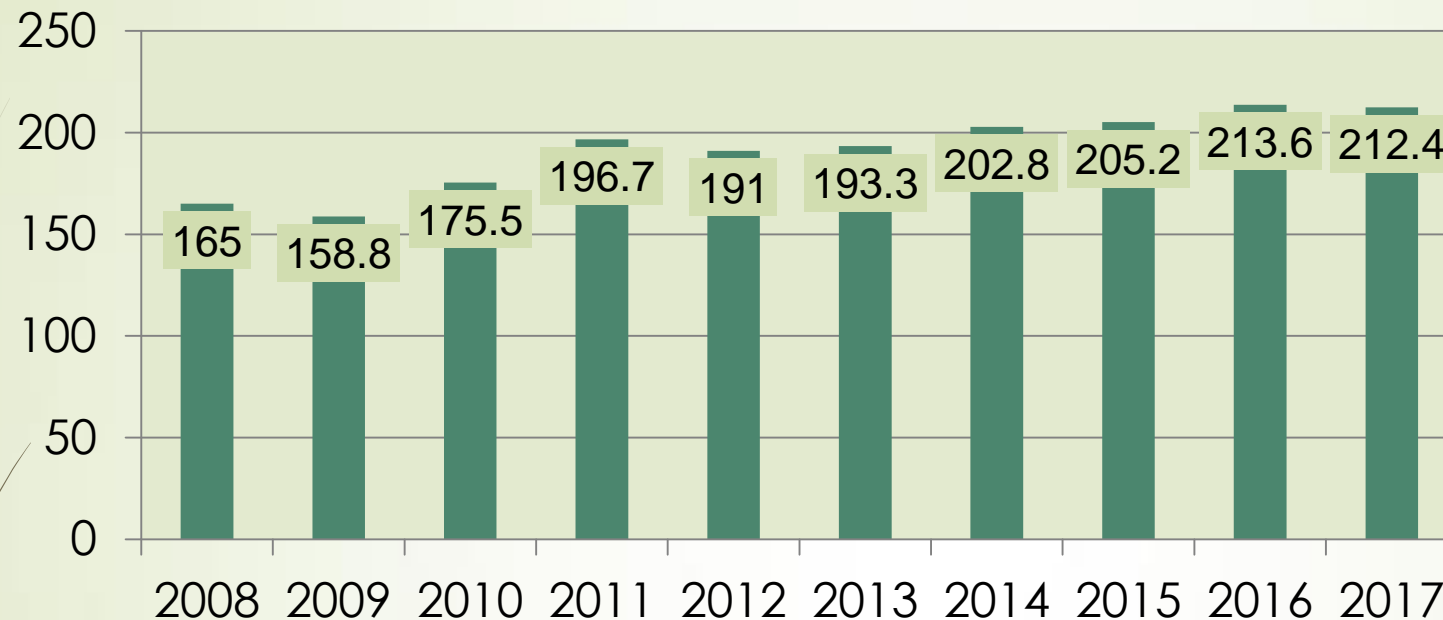
Structure of exports of forest products in 2017

In 2017 the export of products of forestry in the whole of Russia amounted to – \$11.3 billion.

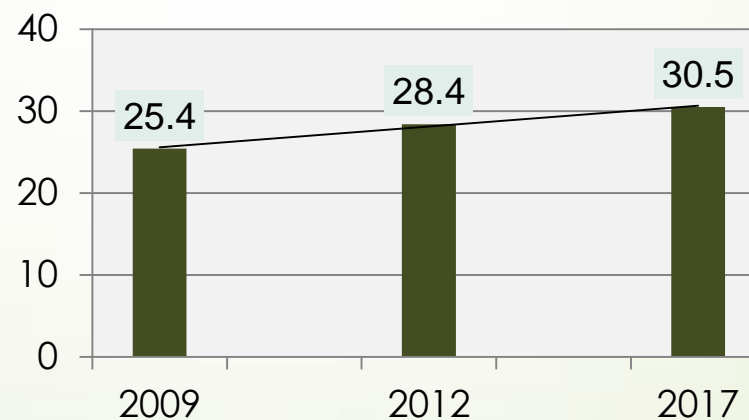
The bigger result was only in 2008. – \$11.8 billion

Name products	Cost, million \$	specific weight in total exports of products of forestry, %
Carving wood	4069,0	35,9
Paper and cardboard	1851,0	16,3
Roundwood	1467,0	12,9
Plywood and veneer	1240,0	10,9

DYNAMICS OF CHANGE IN VOLUMES OF LOGGING FOR 2009-2017, MILLIONS OF CUBIC METERS



The volume of logging
in the Sverdlovsk region
in 2017 - 7 million m³



The percentage of
development
of allowable wood
removal



**IN 2017 THE VOLUME OF REFORESTATION IN RUSSIA HAS EXCEEDED
THE AREA OF CONTINUOUS CUTTINGS AMOUNTED TO 953
THOUSAND HECTARES**

**IT IS NECESSARY TO ESTABLISH A
LEGISLATIVE NORM: 1 HA OF FORESTS
CUT DOWN → 1 HA RESTORED WITH
HIGH QUALITY**

THE KEY PROBLEMS OF THE RUSSIAN FOREST SECTOR

- 1 LOW LEVEL OF DEVELOPMENT OF THE DOMESTIC MARKET
- 2 INFRASTRUCTURE AND ECONOMIC BARRIERS
- 3 RELATIVELY LOW INVESTMENT ATTRACTIVENESS OF THE INDUSTRY
- 4 DEPENDENCE ON IMPORTED EQUIPMENT
- 5 TERRITORIAL FRAGMENTATION OF THE TECHNOLOGICAL CHAIN
- 6 THE SHORTAGE OF PERSONNEL AND LACK OF FUNDING FOR RESEARCH AND DEVELOPMENT WORK

CHARACTERISTICS OF THE FOREST SECTOR IN THE ECONOMY OF THE SVERDLOVSK REGION


Forests occupy 68.6% of the territory of the Sverdlovsk region and are part of the forest zone covering the North-Ural taiga. The area of the forest resources is 15.2 million hectares, of which 12.7 million hectares are covered with forest, and of that total 7.2 million hectares are coniferous plantations. Amongst the coniferous species, pine predominates (34% of the total forest area in the region), spruce (16%) and cedar (6%).

The main reserves of coniferous forests are found in the northern, central and southern parts of the region.

Birch is the leader among deciduous species (36% of the total area, but there are also aspen, alder, linden, willows and poplar.

Territorially the Sverdlovsk state forestry resources are divided into 31 forest districts.

The executive body of state power in the Sverdlovsk Region is the Ministry of Natural Resources of the Sverdlovsk Region. This includes the Forestry Department of the Sverdlovsk Region.



Logging. According to official data, Sverdlovsk region holds the 16th place in Russia for timber reserves. The annual allowable physical volume of timber removals (authorised felling) is 24.2 million m³. The actual volume of logging is however a lot less – only 30% (or 7 million m³ in 2017 year) of the authorised felling.

Forests suitable for felling are very unevenly spread and reserves of the predominant species have poor transport accessibility.

Timber processing. Enterprises of the forestry sector operate in every municipality. In all of them, they play an important social role as core enterprises.


Sverdlovsk region takes 10th place in the forest sector of the Russian Federation for the harvesting of wood products, the 6th place for the production of sawn timber and the 4th place for the production of plywood.

BASIC INDICATORS OF THE ACTIVITY OF ENTERPRISES IN THE FOREST SECTOR OF THE SVEDLOVSK REGION 2013-2016

Indicator	Year				2016 / 2015, %
	2013	2014	2015	2016	
1	2	3	4	5	6
1. The number of operating enterprises	3,087	3,045	2,977	2,977	100.0
2. Average number of employees	15,441	14,622	14,449	12,819	88.7
3. Investments in fixed assets in current prices, million roubles	387.7	284.4	210.3	489.7	232.8
4. Financial results, million roubles	- 396.5	462.8	713.7	985.1	138.0
5. The volume of goods shipped from own production, completed work and services, million roubles	18,301.1	17,577.0	21,150.2	19,439.3	91.9


THE VOLUME OF PRODUCTION OF THE FOREST SECTOR OF THE SVEDLOVSK REGION 2013-2017

Name views' products	units	2013	2014	2015	2016	2017	2017/ 2016, %
Lumber	1000 m³	349.9	303.9	270.2	265.5	312.9	117.8
Plywood	1000 m³	220.0	235.0	238.9	251.5	233.6	92.8
Chipboard	1000 m²	11,450.0	12,660.0	12,546.0	10,751.9	10,289.5	95.6
Fibreboard	1000 con. m³	59.8	51.6	24.8	33.6	37.7	112.2
Paper and cardboard	1000 tons	45.4	40.6	38.1	42.2	46.8	110.9



The main types of forestry product are:
sawn timber, plywood, solid wood-particles and wood-fibre plates, paper and cardboard, wallpaper, round wood, wood pellets, furniture, wooden house kits, box packaging, charcoal.

Timber processing is made up of two major of economic activities:
timber processing and production of wood products
pulp and paper production, publishing and printing activities.



A forest planning document is the forest plan of a territorial entity of the Russian Federation.

Ten years of experience in forest planning have revealed many organizational and methodological shortcomings in plan development and implementation.

The main reasons forest plans fail is due to the lack of a scientifically-based strategy and the use only of forest inventory practices while in development.

**For the entire period that forest planning has been in effect
no amendments have been made to articles
85 and 86 of the Forestry Code of the Russian Federation.**

**In practice, this means the existing document
is not necessary to observe.**

**There is a need for deeper research, both
theoretical and applied, on systems analysis
and a review of the current approach
to regional forest planning.**

The ten-year period of forest plan application by territorial subjects of the Russian Federation has demonstrated their failure to achieve the main tasks set for them:

- Effectively use designated forest lands as federal property;**
- Assess the efficacy of implementation by Russian Federation government authorities of the responsibilities allocated to them.**

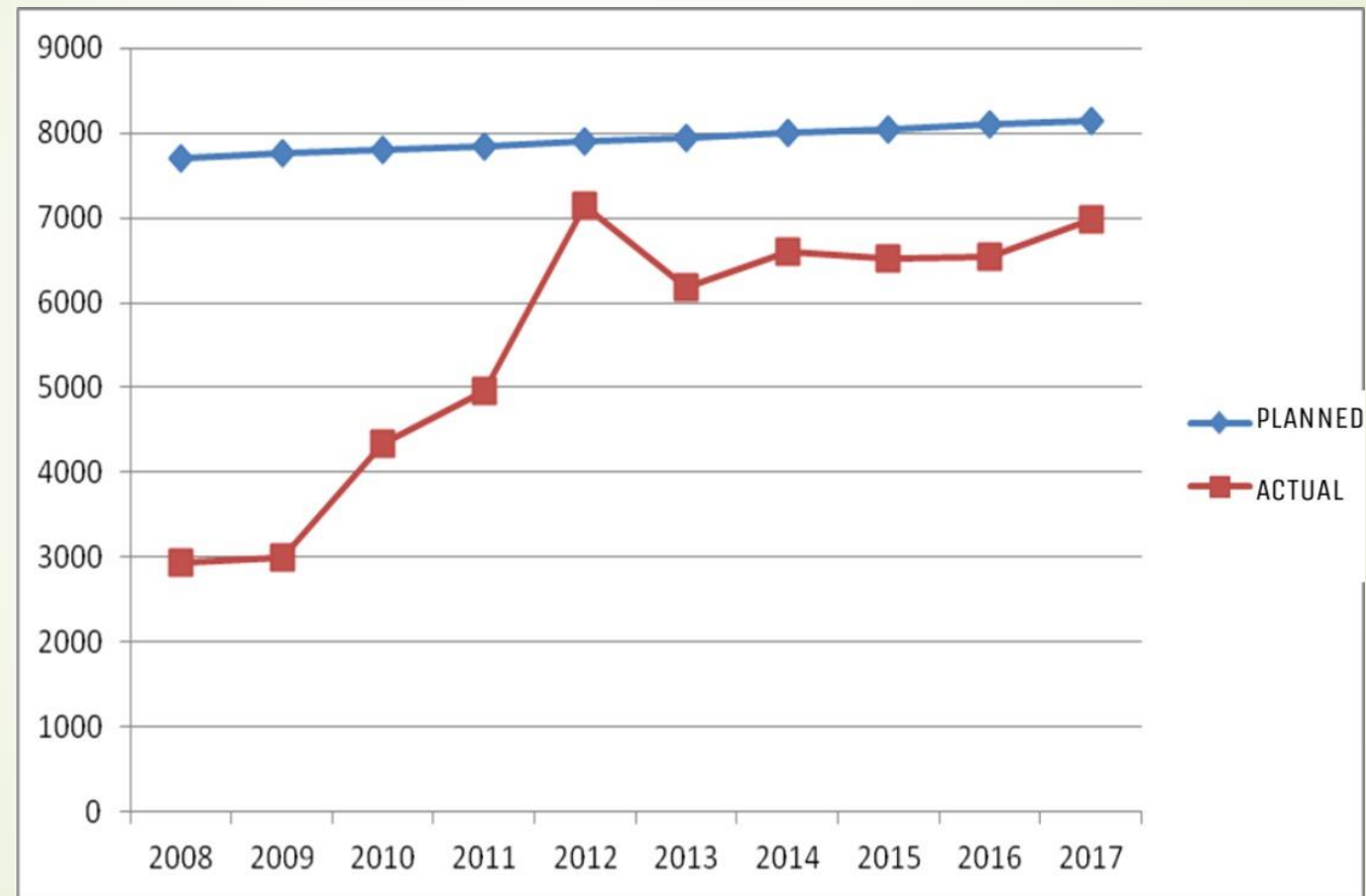
The forest plan was formed based on forestry regulations, which do not account for such issues as characteristics of current and future demand for forest resources, as well as an efficacy evaluation for proposed activities.

As a result, the conducted forest management activities are not supported by financial resources and the forest usage estimates are excessive.

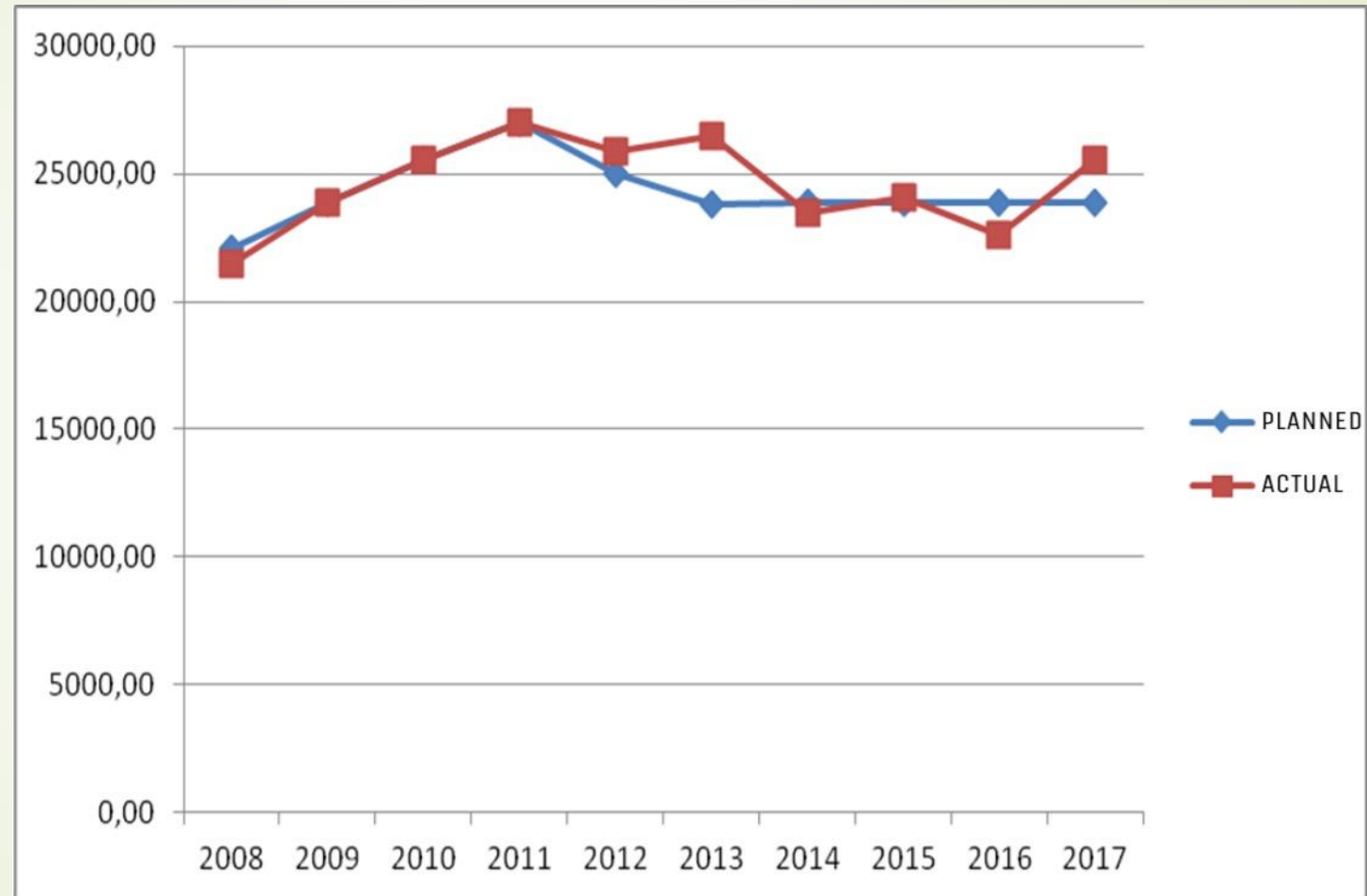
Regional Forest Planning Documents. Sverdlovsk Region

- 1). “The Forest Plan for Sverdlovsk Region for 2009-2018”
- 2). “Development Strategy for the Timber Industry of Sverdlovsk Region until 2020”
- 3). The Sverdlovsk Region’s government-sponsored program “Forestry Development in Sverdlovsk Region until 2024”

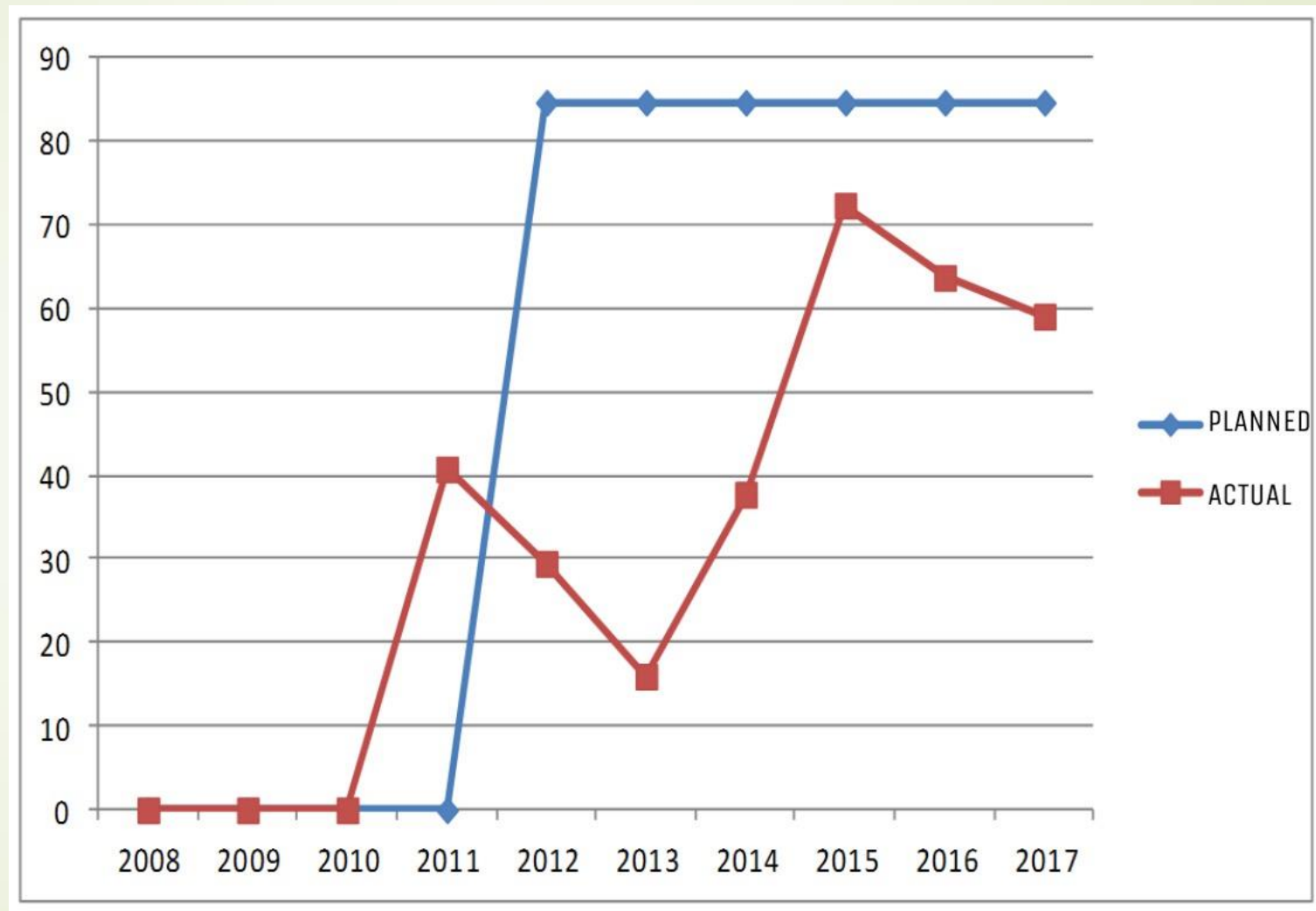
Planned and actual volumes of forest harvesting in a one thousand m³ area in the Sverdlovsk Region, 2008-2017



Planned and actual volumes of reforestation on one hectare of forest lands in Sverdlovsk Region, 2008-2017



Forest road construction on one kilometer of forest lands in Sverdlovsk Region, 2008-2017



ACTUAL DATA ON THE PRODUCTION VOLUME OF SVERDLOVSK REGION PRIMARY FOREST PRODUCTS IN COMPARISON WITH FOREST PLAN INDICATORS

Product Name	units	2015, actual	Forest plan indicator, 2015	Plan implemen- tation 2015, %	2017, actual	Forest plan indicator, 2017	Plan implemen- tation 2017, %
Lumber	1000 m ³	270.2	1,500	18.0	312.9	1,700	18.4
Plywood	1000 m ³	238.9	290.0	82.3	233.6	310.0	75.3
Chipboard	1000 con. m ³	24.8	150.0	16.5	37.7	250.0	15.1
Fiberboard	1 million m ²	12.5	14.5	86.2	10.3	15	68.6
Paper and cardboard	1,000 tons	38.1	87.0	43.7	46.8	90.6	51.6

On April 9, 2018, the Ministry of Natural Resources and Ecology of the Russian Federation issued Order No. 692, dated December 20, 2017, “On the Approval of the Standard Forest Plan Format and Composition for Territorial Subjects of the Russian Federation, Preparation Procedures and the Introduction of Changes” Appendix 1 (the standard forest plan format for a territorial subject of the Russian Federation).

CRUCIAL POINTS OF THE NEW FOREST PLAN FORMAT:

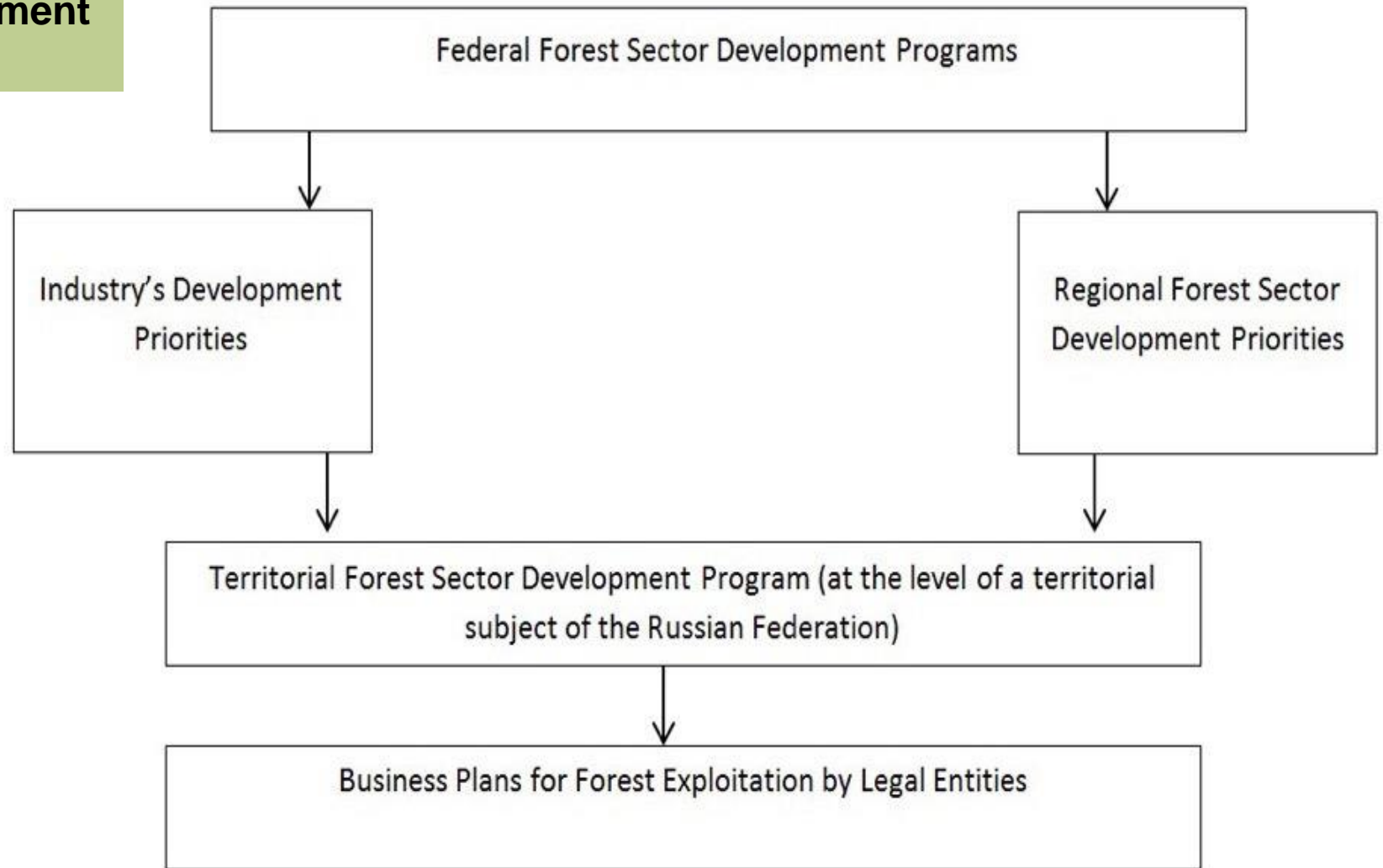
- 1) Has a subsection in the forest plan's economic section based on accounting trends in the forest products market, and an analysis on the congruity of raw materials to projects to increase timber processing capacity and forecast the competitive distribution of sales markets;**
- 2) Provides a cost comparison for activities with the expected results (projected revenue, projected expenditures broken down by various budgeting levels);**
- 3) Introduces the following items: the market value for forest resources used, the market values for processed forest products, and transport accessibility of forests;**
- 4) Presents a section on the environmental component of forest planning.**

Now, it has become imperative to create a system of strategic forest planning in the Russian Federation that meets the requirement of Federal Law No. 172-FZ “On Strategic Planning in the Russian Federation” and replace existing forest plans with the territorial forest sector development programs, which would essentially become business plans oriented towards achieving economic results.

Based on domestic and foreign experience, forest planning should not replace forest inventory, which has its own goals and objectives (see Article 68 of the RF Forest Code), but become economic planning based on the following principles:

- plan indicators must be tasks for mandatory execution;
- planned tasks should have the appropriate resources;
- planned tasks should be addressed, i.e. specify persons who perform them;
- planned tasks should be performed within a time frame that accounts for the influence of external factors (approved budgetary allocations, for example).

Concept Approach to Elaborating Territorial Forest Sector Development Programs




The forest plan as a strategic document for economic forest planning should consist of the following components:

- 1. Forest potential of the region**
- 2. Requirement assessment for timber products by monitoring demand in domestic and export markets**
- 3. Economically accessible resources – types, zones, and their uses**
- 4. Manufacture of industrial products and services provision**
- 5. Forest security and protection**
- 6. Forestry production**
- 7. Creation and development of forest transport and social infrastructure**
- 8. State measures to support competition in the forest sector in the production and consumption of forest products**
- 9. Generalized economic development indicators for the forest sector**

The role of generalized indicators as a criterion to evaluate the efficiency may increase with the introduction of several of these indicators, for which the federal budget has allocated a number of subsidies to each region.

Among these generalized indicators to evaluate efficiency, there are:

- gross revenue (total);**
- gross revenue from exported timber products;**
- added value;**
- profits;**
- forest income from the budgetary system and insurance funds (taxes, insurance premiums, export and import fees, forest usage costs);**
- investments (total);**
- private business investments;**
- employment (total);**
- number of newly-created jobs;**
- average salary;**
- and the forest sector's share in gross revenue, gross revenue for exported products, added value, profits, and budgetary revenue streams at all levels.**



**The forest plan should become
a strategic tool that provides
a comprehensive set of goals
and objectives to effectively
develop the forest sector as a whole,
bridging the gap between forestry
and the timber industry.**

Thank you for attention!

