

Study on Achievements and Perspectives towards a Green Economy and Sustainable Growth in Serbia

National Report for
the World
Conference on
Sustainable
Development, Rio
de Janeiro, 20-22
June 2012



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in Serbia

NA PUTU **TOWARDS**
ODRŽIVOG **A GREEN**
RAZVOJA **ECONOMY**
I ZELENE **& SUSTAINABLE**
EKONOMIJE **GROWTH**

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Green Economy

“An economy that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities.”

UNEP, in the Green Economy Report (2011)

...one whose growth in income and employment is driven by investments that:

- Reduce carbon emissions and pollution;
- Enhance energy and resource efficiency;
- Prevent the loss of biodiversity and ecosystem services.

“Green Economy Study” - content outline

- The Future Serbia Wants -

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- Basis for development of green economy strategy through a transparent process of multi-stakeholder consultation;
- Business + state + industry to develop national green economy roadmap for respective sectors;
- recognizing voluntary national commitments and actions by State actors as well as stakeholders;
- innovative partnerships incl. PPP;
- new investments; new skills formation; technology development, transfer and access; capacity building; green jobs;
- Defining the need for innovative financing instruments;



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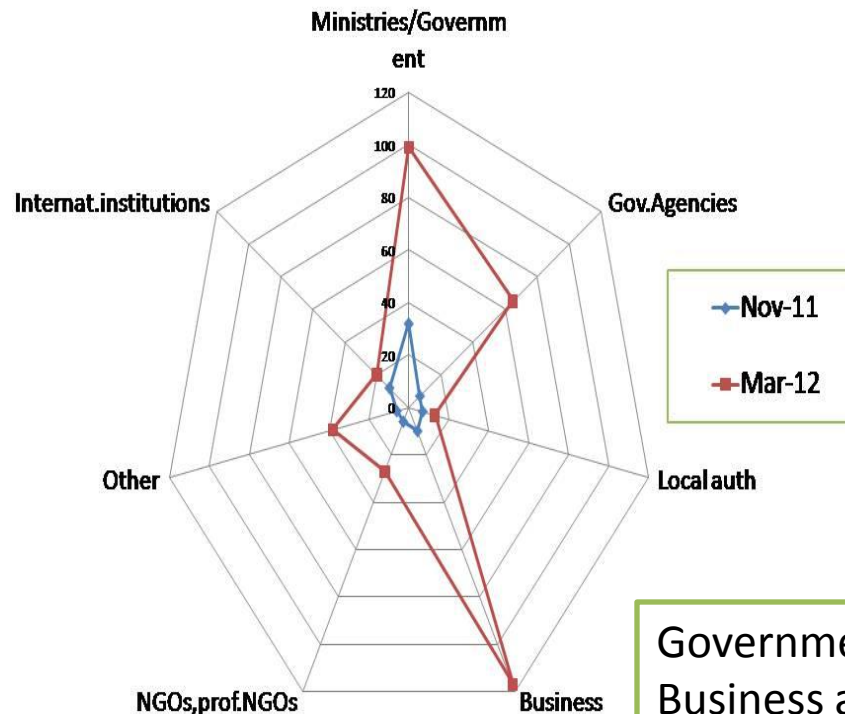


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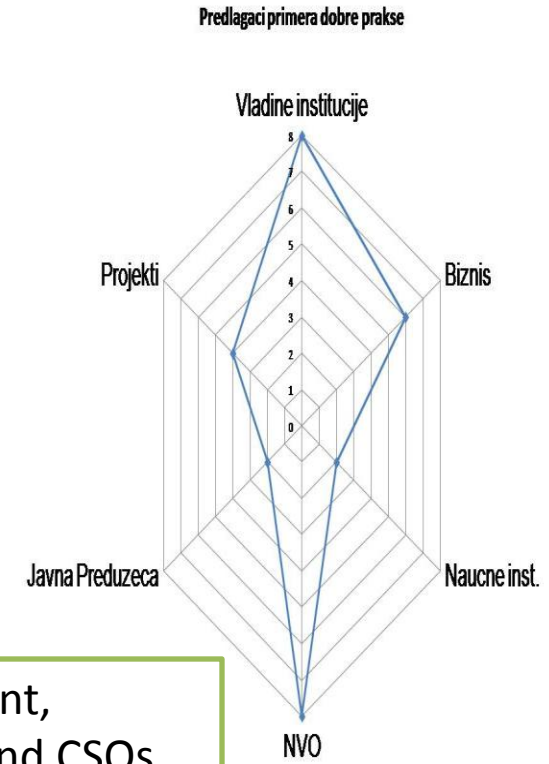
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Multi-stakeholder consultation approach



Government,
Business and CSOs
have ownership



Strategic goals for sustainable development and green economy

1. Harmonising socio-economic development with the European Union's Resource-Efficient and Low-Carbon Policies

Elaborated by:

- the efficient use of natural resources and energy,
- sustainable consumption and production patterns,
- a 'green public procurement' policy, IPP
- economic and fiscal policy reforms (towards an economy with a lower carbon footprint),
- education and innovation for sustainable development, etc.

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The Government has defined the following vulnerable population groups in the Republic of Serbia: disabled persons, children, young people, women, adults above the age of 65, the Roma minority population, uneducated, unemployed, refugees and internally displaced persons and the population in rural areas.

Strategic goals for green economy

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2 Advancing social inclusion and poverty reduction

elaborated by:

- measures to reduce poverty and income disparity,
- fight against inequality,
- support the creation of new jobs and reduce unemployment, with special emphasis on inclusion of vulnerable groups

-The Government has defined the following **vulnerable population groups** in the Republic of Serbia: disabled persons, children, young people, women, adults above the age of 65, the Roma minority population, uneducated, unemployed, refugees and internally displaced persons and the population in rural areas.

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Strategic goals for green economy

3. Empower the environment sector

by:

- promoting investment in infrastructure that supports all aspects of sustainable development, from social wellbeing, socially sensible job creation to environmental protection,
- support the strengthening of expert capacities, etc.

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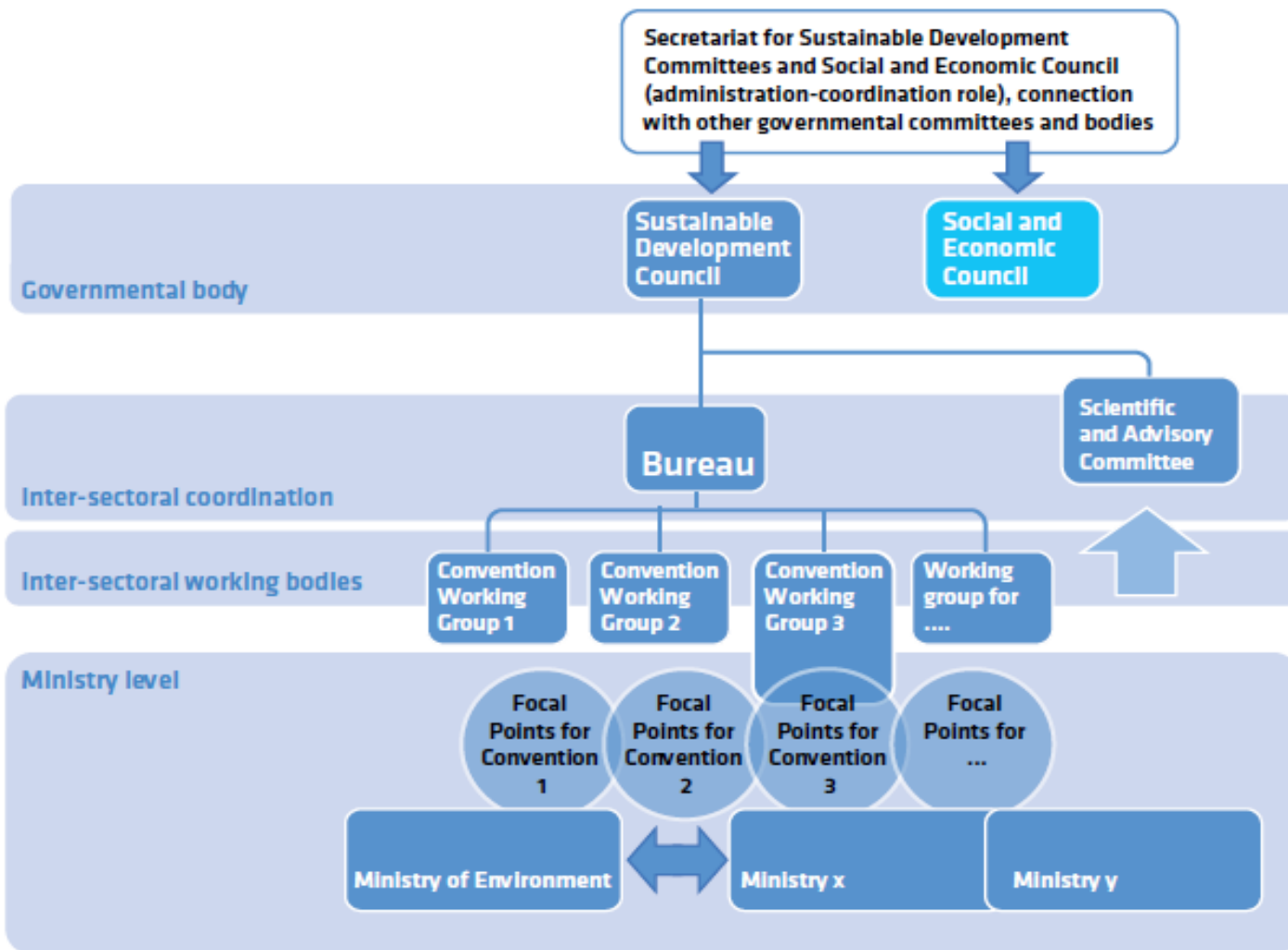
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Strategic goals for green economy

4. Establish a long-term institutional and financial framework in support of sustainable development

which includes:

- a mandatory “budget line for sustainable development” in every key institution,
- introduction of a sustainable development impact analysis,
- promotion of a stable institutional set-up with a financial framework for sustainable development).



Instituting a Long-Term Institutional and Financial Framework for Sustainable Development

The Committee on Finance, State Budget and Control of Public Spending	Joint session	Groups of Sustainable Development Committee
Committee on Labour, Social Issues, Social Inclusion and Poverty Reduction		
Environmental Protection Committee		
Committee on Economy, Regional Development, Trade, Tourism and Energy		

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Strategic goals for green economy

5. Promotion of sub-regional cooperation

- capacity building and knowledge/information sharing platforms
- processes **regional Adriatic-Ionian Initiative**, cooperation in the Danube-Carpathian region, the Energy Community Treaty, bilateral knowledge and expert exchange schemes among EU candidate countries, etc.)

Catalogue of good examples

Sustainable tourism in Serbia as a demonstrative example of a green economy

Cleaner production and responsible business and financing as demonstrative examples of a green economy

- ...

Development of a can recycling collection network

Improving lignite exploitation technology in Kolubara Mining Basin

Renewing the vehicle fleet for public transport in cities in the Republic of Serbia

Solving the legal status of individual collectors of secondary raw materials

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Scenario analysis

Energy demand (energy efficiency) in buildings (including residential, commercial and services energy use) industry and transport.

Energy supply (renewables): with emphasis on power generation, including the use of renewable energy.

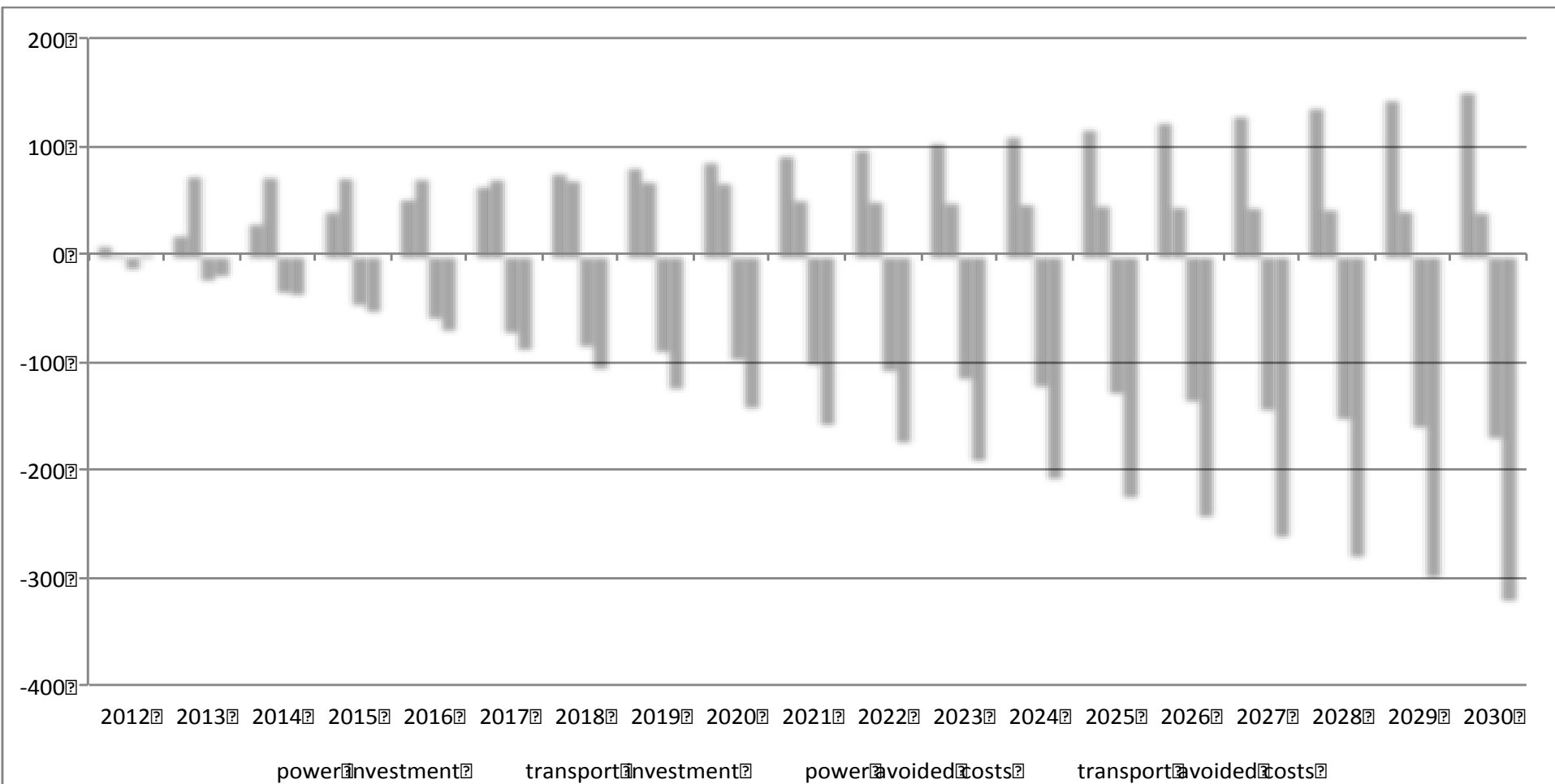
Agriculture: with a focus on the potential to transition to ecological agriculture practices.

❖ **Green Economy** (GE) scenarios that simulate additional interventions

❖ **Business as Usual** (BAU) case that assumes the continuation of historical and present trends

Comparison of annual investments (positive values) and avoided costs (negative values).

• ...



Energy Demand

Energy Efficiency Scenarios:

- 10% by 2030 -weaker and
- 30% by 2030 -more aggressive- improvement in energy efficiency by 2030

Allocation of energy efficiency improvements:

- Industry (45%),
- transport (36%),
- residential and other sectors (19%)

Renewable energy scenarios (renewables in final energy consumption)

- 5% by 2015.
- 10% by 2030

Energy demand would decrease as far as 8 to 12% comparing to the BAU scenario;

Energy Demand



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Investments (in the GE scenario for energy efficiency)

- a total amount of 2.7 billion euro by 2030,
- average annual investment is 147 million euro
- transport projections - 1.05 billion euro - lowering consumption and emissions by 17% below BAU by 2030;
- residential, commercial and industrial projections - 1.7 B Euro in total - improve efficiency by 12% across sectors relative to BAU, lowering emissions for 11% by 2030;
- Avoided costs EE investments (residential, commercial & industrial sectors) = in total 1,8 B eur by 2030 (95 M/year opposite to 89 M/year in BAU)
- Positive returns in 3-5 years except for transport 7-10.

Employment

- potential to create 5,000-8,000 jobs by 2030;
(2,000 to 3,000 in residential, commercial and industrial sectors)
- Transport most of the potentials (public transport)

Energy Supply

- Electricity supply is projected at **11.3% below BAU in 2030**
- Energy mix in GE Scenario against BAU by 2030:
 - thermal (61% instead of 73%),
 - hydro (26% and 25%),
 - new renewables (such as solar, wind and cogeneration, 13% against 2%)
- investment required by 2030 = 1.5 billion (5% scenario) to 2.5 billion (10% scenario).
- Avoided coal power generation - 5,000 to 10,000 GWh in 2030 = capital savings of up to 1.3 billion euro.

Employment

- potential to create 1,600-2,600 jobs;
- for all energy sources utilized incl. construction as well as operation and management);
- renewables are more labor intensive for the manufacturing of capacity comparing to thermal power capacity; also depending on import of construction components;

Agriculture



Organic agriculture to concentrate on:

- crops and fruits that provide higher yield
- market segments that guarantee a higher price

Two GE scenarios:

- Org land = 150.000 ha by 2030 (inv. 1-2,7 M eur/year)
- Org land = 96.000 ha by 2030 (inv. 0,5-1,5 M eur/year)

✓ Org agriculture lead to the increase in revenue through the increase in market price, increase of yield, revenue from carbon sequestration etc;

✓ Market price of org products must be at least 9% higher than conventional;

✓ Positive return of investments in 10 years;

✓ Access to EU market is crucial;

Agriculture



Other benefits of organic agriculture in GE scenario:
Sequestration of CO₂ (up to 2 t/ha/year) – total value of carbon sequestered by 2030 = 0,6-1,7 M eur (ambitious scenario);
Avoided health costs from prevention of pesticide utilization

Subsidies and incentives are needed in order to ensure market access for organic products;

Employment

- No sufficient data
- e.g. developing countries 30% more jobs than BAU

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Recommendations

Generally, there are several main ways to influence future trends in order to reach the stated goals:

- (1) voluntary behavioural change,
- (2) public private partnerships,
- (3) capital investment (environment),
- (4) public targets mandated by laws and strategies, and
- (5) incentives (such as tax reductions or displacement and introducing/eliminating subsidies).

Also innovative financing mechanisms should be explored
Support from UN bodies, IFIs and through regional cooperation

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Thank you!

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