

EUROSAI Working Group on Environmental Auditing  
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## Auditing sustainable energy



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# Content of the presentation

- Project objectives
- Final output
- Project methodology
- Guidance structure
- Discussion



## **Sustainable Energy Guidance has been written to**

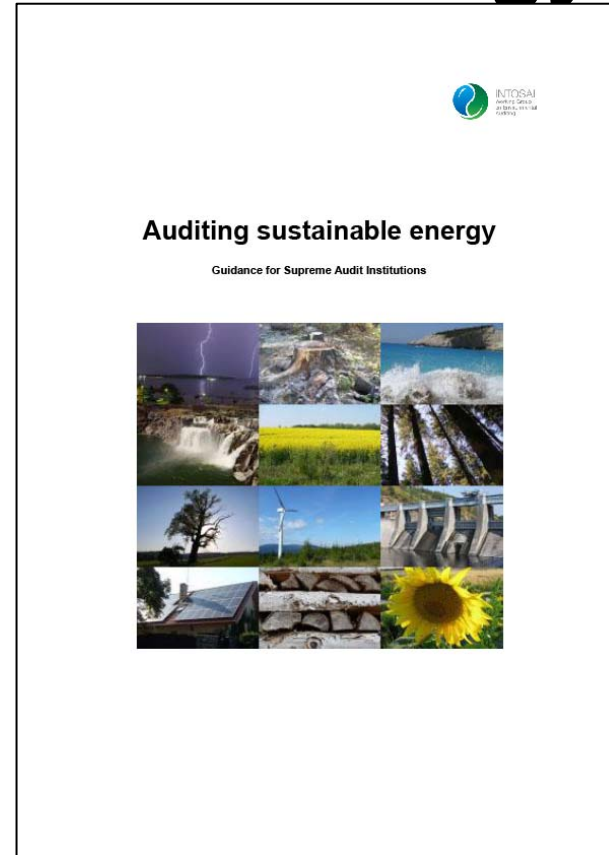
- provide useful background information on energy issues
- be of assistance to auditors preparing audits in this area
- to provide examples of audit criteria and approaches



## Auditing the Sustainable Energy

In form of

- handbook
- CD
- website



# Project Methodology

- Guidance is based on
  - background information gathered from various sources
  - the audits performed
  - the data collected from the questionnaire, sent to all INTOSAI members, received 60 answers
- Internal experts and external experts



# Sustainable Energy - definition

- energy which, in its production or consumption has minimal negative impacts on human health and the healthy functioning of ecosystems, including the global environment, and that can be supplied in a sufficient amount not only to present, but also to future generations without putting a burden on them
- an issue covering two main fields – energy generation and energy efficiency



## Obstacles to be overcome

- inadequate and imprecise legislation/policy
- high costs
- poorly functioning state system
- poor public awareness
- insufficient competitiveness of energy from renewables
- scepticism of investors



# Structure of the Guidance

1. Basic information on energy issues
  2. Understand the governmental response to the SE issue
  3. Approach to choosing audit topics
  4. How to design the audit
  5. Audit execution and reporting
- + Annexes





## Structure follows the audit process

Step 1 – Understanding the issue of energy



Step 2 – Choosing potential audit criteria



Step 3 – Choosing audit topics



Step 4 – Audit planning and preparation



Step 5 – Audit execution and reporting



## Basic information on energy issues

- Energy resources



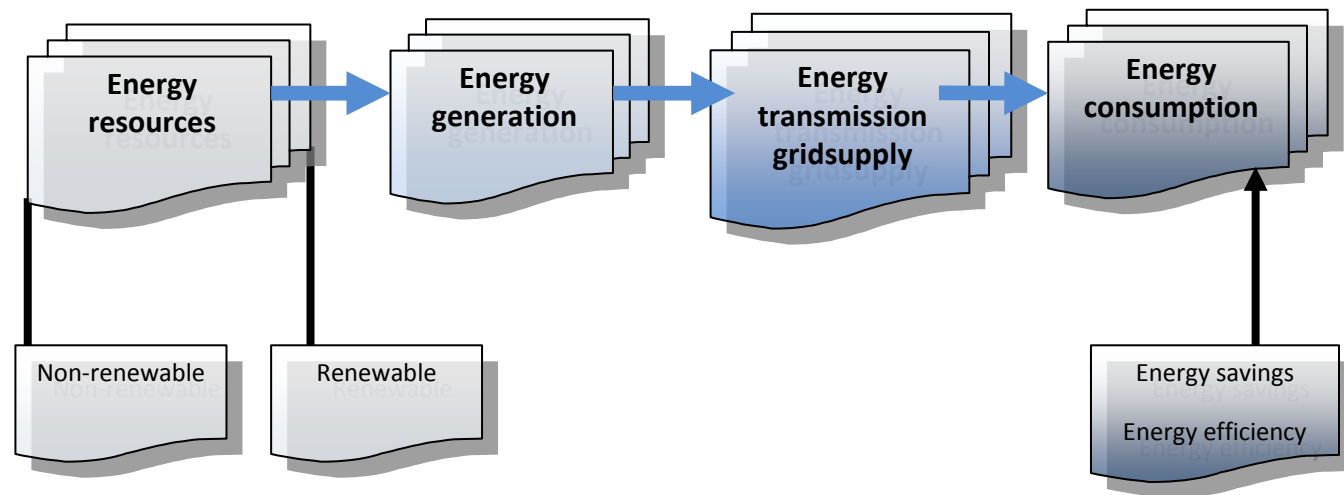
- Energy supply



- Energy consumption, energy savings and energy efficiency



## Energy chain



→ logical linkage of colours in the whole document



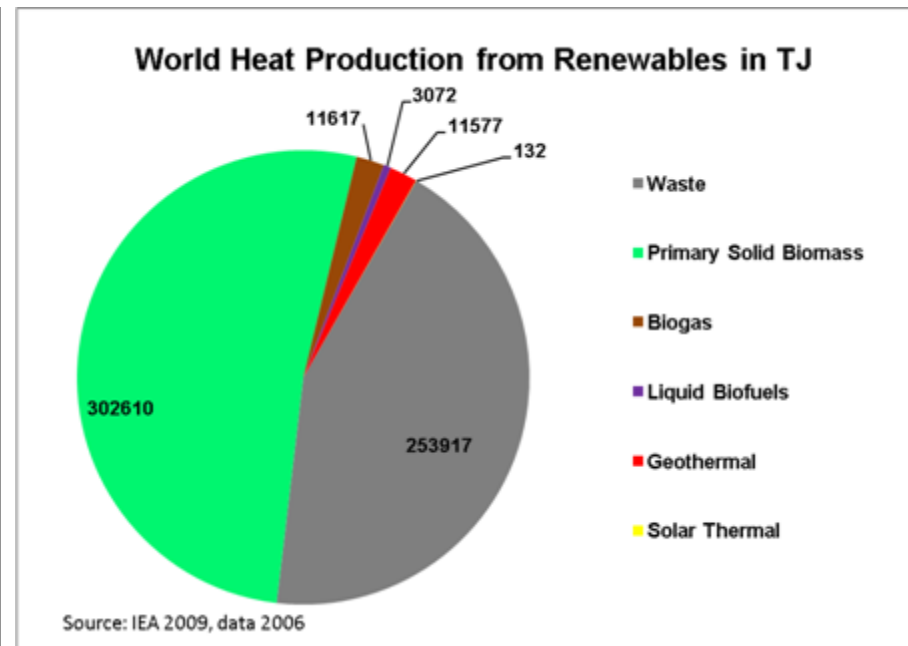
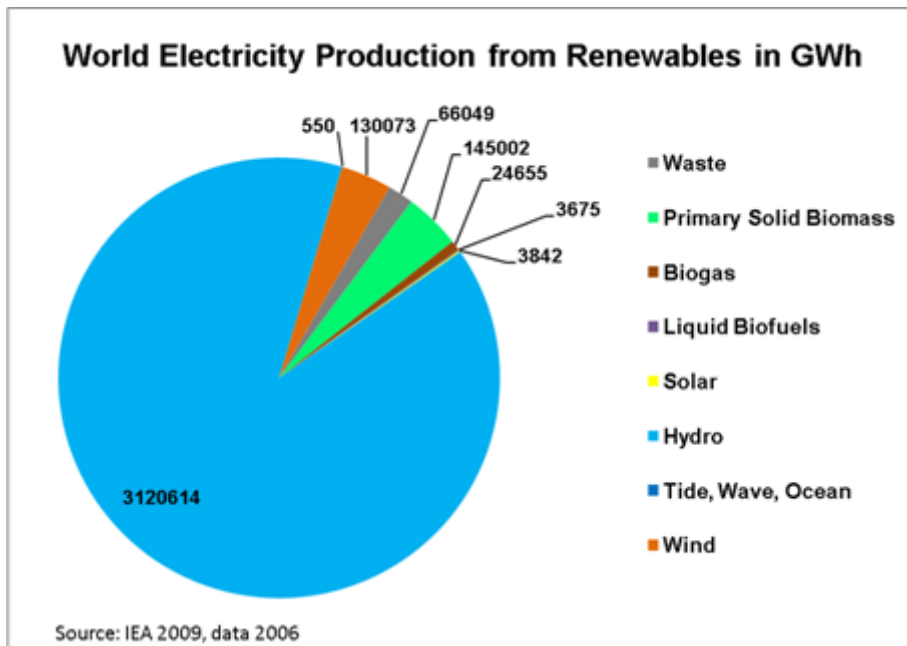
## Renewable energy resources

- biomass
- hydropower
- wind energy
- solar energy
- geothermal energy



# Step 1 – Chapter 1

## Use of renewable energy resources



## Non-renewable energy resources

- coal
- natural gas
- crude oil
- nuclear power



## Energy supply

- substantial issue
- limitation on the transmission of energy
  - ◆ power losses
  - ◆ negative impact on certain types of renewable energy resources
  - ◆ capacity of transmission grid
  - ◆ availability and stability in energy supply



## Energy consumption

- in principle, the energy is consumed in three basic forms
  - ◆ electric energy
  - ◆ thermal energy
  - ◆ combustion of fuels in transport
- the biggest energy consumer – industry





# Step 1 – Chapter 1

- the main factors influencing energy consumption
  - ◆ energy savings
  - ◆ energy efficiency
- other selected factors



# Understand the governmental response to the sustainable energy issue



- international agreements
  - national legislation
  - energy policies/programmes and possibilities of their management
- potential sources of audit criteria



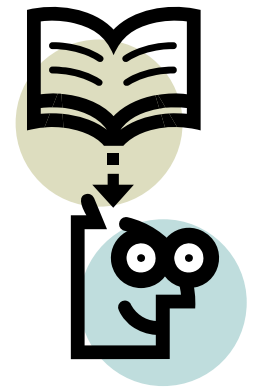
### **International agreements/treaties**

- no international agreements/treaties directly addressing the sustainable energy field
- international agreements/treaties indirectly concerned the sustainable energy field
  - ◆ UNFCCC (1992)
  - ◆ UNFCCC Kyoto Protocol
  - ◆ Political declaration from Johannesburg (2002)



## National legislation

- Acts
- ◆ in the area of environmental protection
- ◆ support to sustainable energy
- ◆ state budget, accounting, taxation
- ◆ public procurement
- implementing provisions/executive
- regulations
- governmental policies/programmes in sustainable energy area



### **Energy policies/programmes**

- define priorities and objectives in the sustainable energy area
- existence or non-existence of energy policies/programmes



# Instruments used to influence energy management

- direct support
  - ◆ state programmes
  - ◆ support of R&D and innovations
- investments incentives
- indirect support
  - ◆ tax system
  - ◆ Public Private Partnership



## Step 2 – Chapter 2

- energy-related services
- regulation of the energy sector
  - ◆ price regulation
  - ◆ other regulatory measures
  - ◆ feed-in tariff
  - ◆ supplier obligations
  - ◆ net metering
  - ◆ green certificates



## Step 2 – Chapter 2

- energy efficiency and energy savings measures
  - ◆ in the area of energy transformation
  - ◆ the end-consumer areas
  - ◆ further potential instruments to achieve energy savings
- other instruments



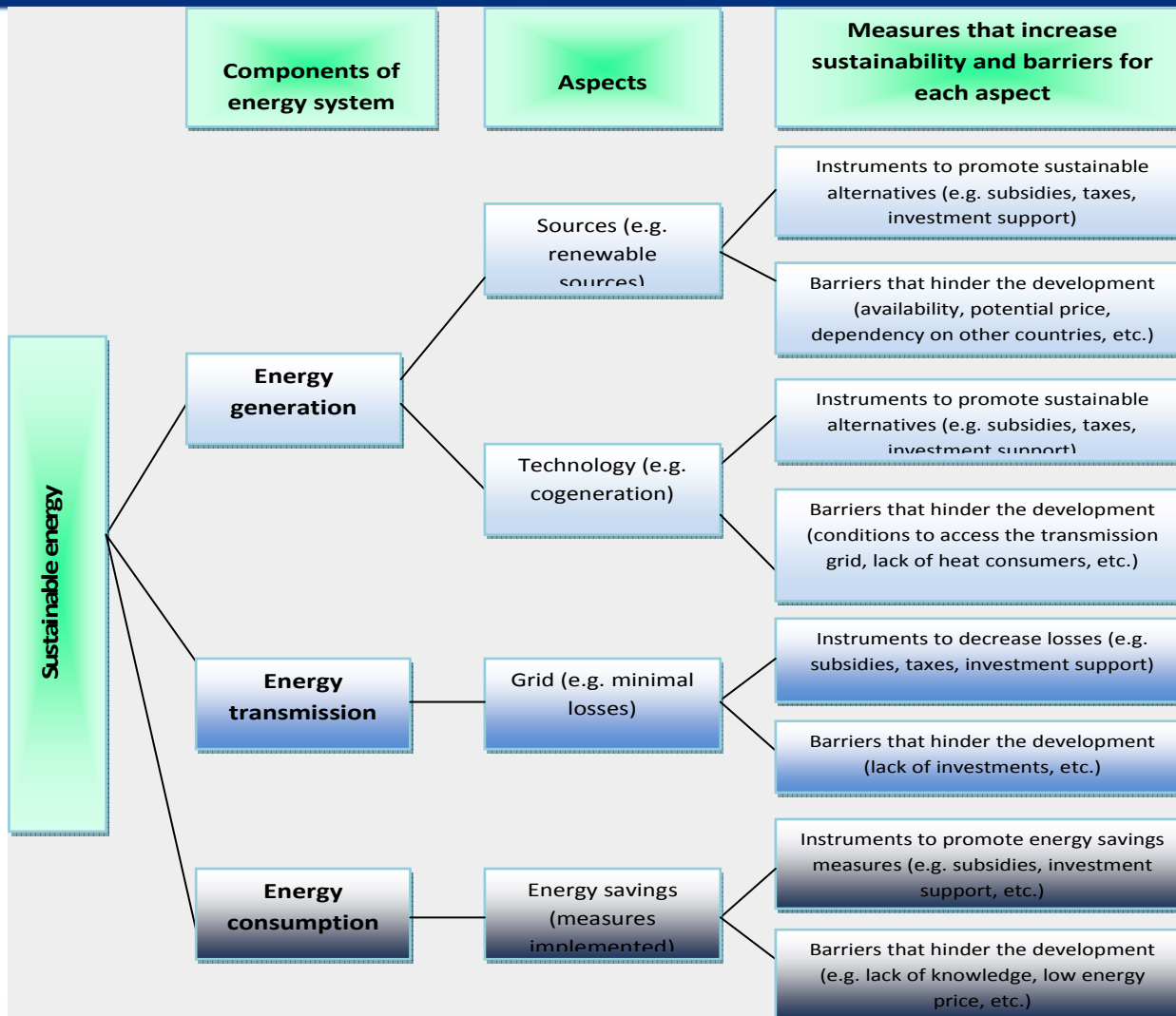


# Approach to choosing audit topics

- many possibilities how to approach the field of sustainable energy
- audits can be
  - ◆ energy sector oriented
  - ◆ aspect oriented
  - ◆ oriented to measures increasing sustainability



# Step 3 - Chapter 3



# What to focus on when auditing

...energy generation instruments

- ◆ e.g. auditing state programmes, support of R&D and innovations, tax system, regulation on energy prices

...energy supply instruments

- ◆ e.g. investment incentives, PPP projects

...energy consumption instruments

- ◆ e.g. programmes relating to energy consumption issues



## Dealing with risks

- reviewing the risk analysis existence of an auditee
- risk analysis of a planned audit
  - ◆ external risks
  - ◆ internal risks



## How to design the audit

- Design the audit – audit planning and preparation

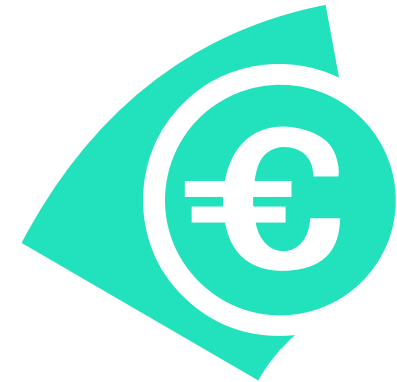


## Audit execution and reporting

- the process of auditing and



- reporting



# Annexes

- Annex 1 - Case studies on audits performed
- Annex 2 - Examples of criteria from international agreements
- Annex 3 - Examples of criteria from EU legislation
- Annex 4 - Guide how to carry out audit on grants
- Annex 5 - Issue analysis
- Annex 6 - Summary of information from the questionnaire survey
- Annex 7 - List of sustainable energy audits
- Annex 8 - SE Questionnaire Template



Thank you for your attention!

Questions?

