Revised regional outlook for 20/20/20 goals

Central and Eastern European Perspective

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Transition …
TRANSFORMATION

- System
- Society
- Economy (markets, households, companies)
- Governance – political, governmental

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Outline

- Background: EU energy policy
- Missing the target on energy efficiency (EE Plan 2011, New EE Directive)
- Status of RES deployment in CEE

  - meeting the 20-20 target and beyond

  - deeper penetration of renewables with lower overall demand
- Gaps/needs
- Concluding remarks

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Europe 2020 – a strategy for smart, sustainable and inclusive growth

Europe faces a moment of transformation.

The crisis has wiped out years of economic and social progress and **exposed structural weaknesses** in Europe's economy.

In the meantime, the world is moving fast and long-term challenges – **globalization**, pressure on resources, ageing – intensify.

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EU energy policy goals for 2020

Energy Strategy 2020 - A strategy for competitive, sustainable and secure energy supporting 20-20-20

Priority 1: Achieving an **energy-efficient** Europe

Priority 2: Building a pan-European **integrated energy market**

Main drivers: GHG emission, decrease import dependency, increase energy security

All sides of the political debate agree on:

- Need to increase **energy efficiency** (EEAP, old 2006-2012, new adopted in March 2011)
- Increased role of **renewables** (solar, wind, biomass, hydro)

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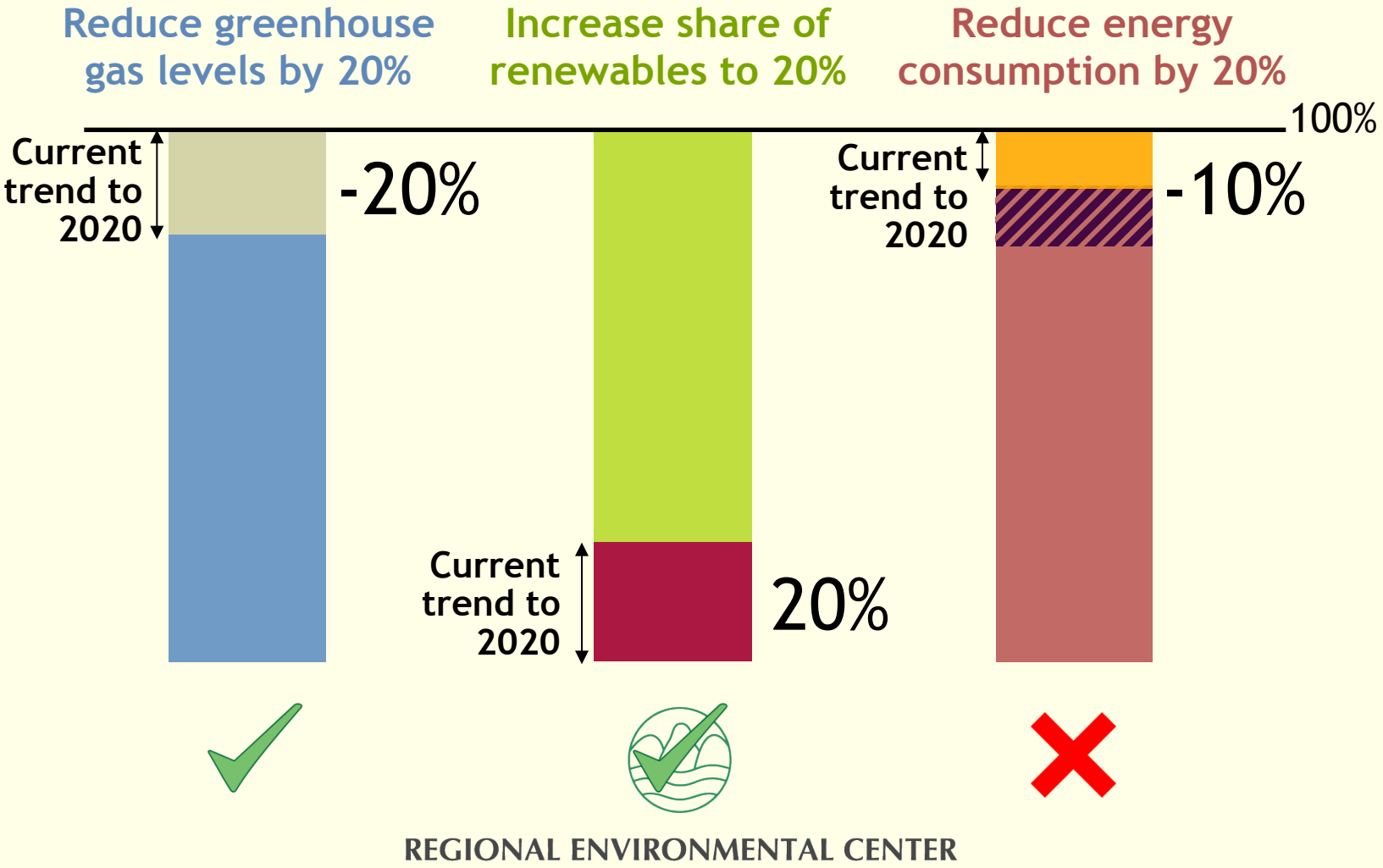
Meeting the “20-20-20 by 2020” goals



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Background Information for the European Council, 4 February 2011

Energy Efficiency Plan 2011

- EE is the heart of the EU Energy Strategy
- In spite of progress, significant additional efforts are needed to achieve the - 20% energy consumption target. (only a 10% cut will be achieved)
- Responding to the call of the European Council of 4 February 2011 to take **'determined action to tap the considerable potential for higher energy savings**, the Commission has therefore developed this comprehensive new Energy Efficiency Plan.

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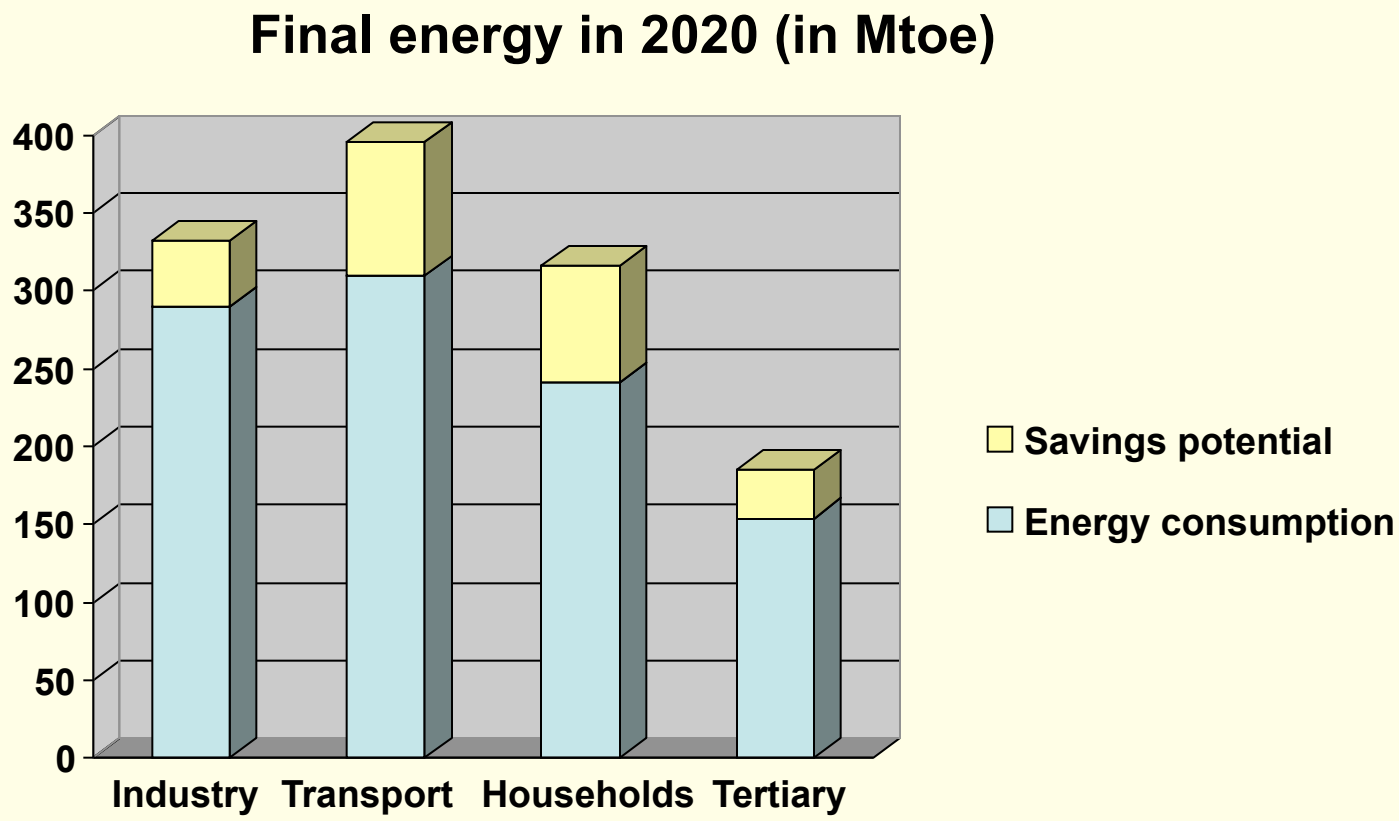
Energy savings potential can be tapped



Transport and households, in particular buildings, are two sectors with great potential for energy efficiency gains.

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Source: European Commission

Main elements of EE Plan 2011

Transport: will be addressed by the upcoming White Paper on Transport.

Industry:

- Large companies have to complete **regular and independent energy audits**
- improved information **provision for SMEs** and measures to introduce energy audits and energy management systems.
- Improvements to the **efficiency of power and heat** generation are also proposed, ensuring that the plan includes energy efficiency measures across the **whole energy supply chain.**

Buildings: instruments to trigger the **renovation process** in public and private buildings and to improve the **energy performance** of the components and appliances used in them.

Some of the proposed measures

Public sector

- Public authorities should refurbish at least **three per cent of their buildings** (by area) annually – double the current rate
- Each refurbishment should bring the building into the **top 10 per cent** of national building stock
- Public bodies must only rent or buy buildings in the **best available energy** performance class
- **High standards of energy efficiency** must be applied when purchasing energy, goods such as office appliances, and during refurbishments.

Private sector

- **Energy service companies** (ESCOs) shall be supported to renovate properties. ESCOs will make profits from the difference between the energy costs before and after the renovation

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New EE Directive

- Following the EU EE Plan 2011 **new legislative proposal** prepared with the purpose to meeting the EE target
- Transforms relevant elements of EEP into **binding measures**
- June 2012: political agreement on drafting the new Dir
- September 2012: EU Parliament voted
- The new Directive brings forward legally binding measures in MSs to use energy efficiently **at all stages of the energy chain** (from transformation to its distribution to final consumers) and establish
- Measures include legal tool to **establish EE obligation schemes** or policy measures in all MSs

Main pillars of new EE Directive

- **Indicative national** EE targets (set by MSs with the aim of making progress)
- **Sectoral measures** addressing EE (in **public sector**, industry, energy generation, transformation and distribution, and supply as well as households)
- **Cross-cutting measures** to further promote EE through the sectors
- **Monitoring** EE indicators and **reporting** requirements to allow the follow up and the evaluation of the individual efforts of MSs

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Reality in CEE (related to EE)

- Energy
  - Relatively high energy intensity
  - Decades of subsidized energy prices
  - Old and very poor building stock from the energy perspective
    - Large proportion built with industrial technology
    - Use energy inefficiently and contribute to GHG emission
    - District Heating (DH) widespread, but also in need of modernisation both company and user side
- Transport
  - Obsolete public transport infrastructure with extremely old vehicles
  - Low energy efficiency
  - Established network in some countries

The wish list of EU citizens on energy:

- Stability of energy prices: the respondents' first priority (29%)
- Renewable energy: Europeans' second priority (27%)
- Security of energy supply: the third priority (20%)
- **Energy efficiency: the fourth priority (16 %)**

(Eurobarometer results, January, 2011)

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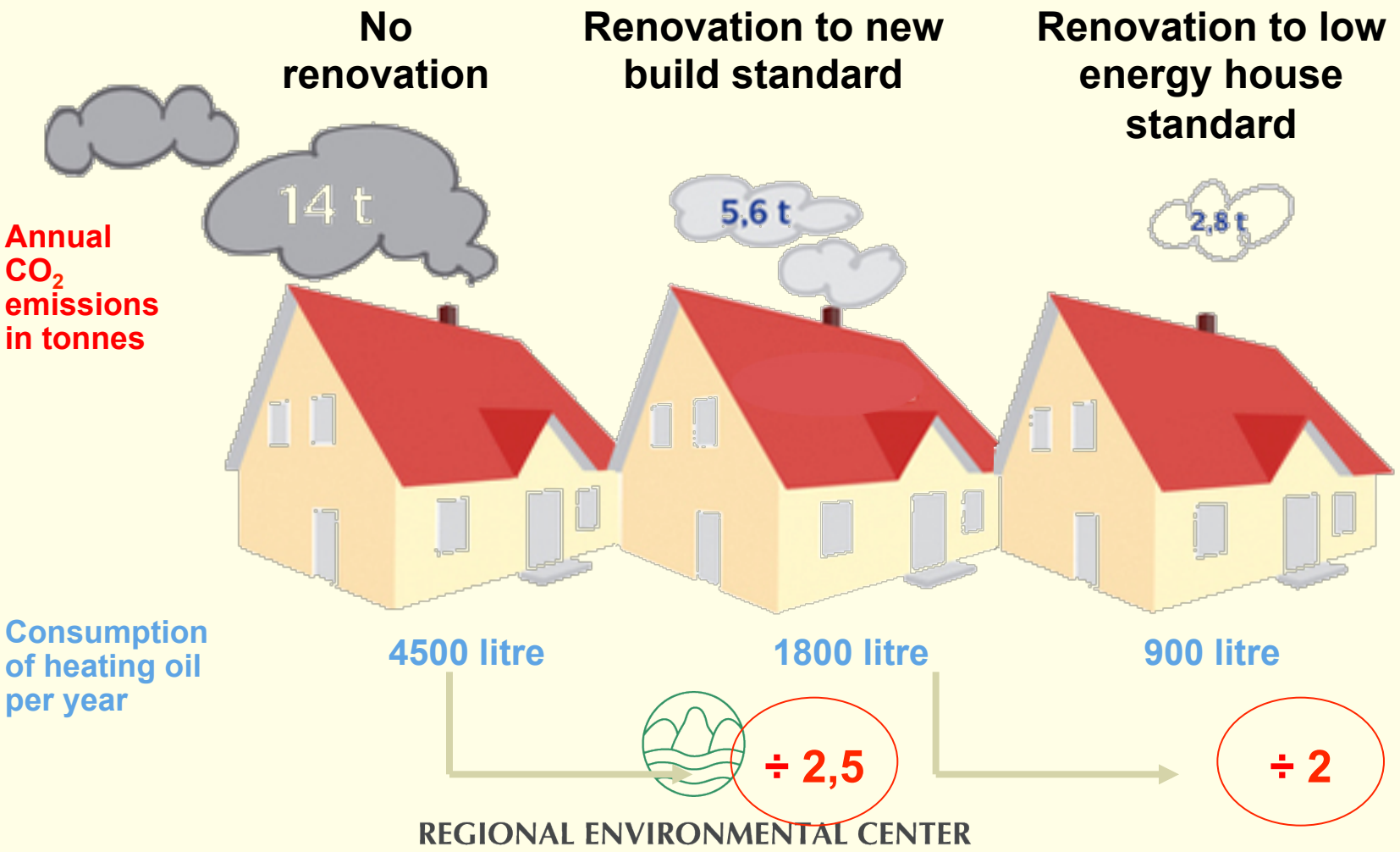
Energy efficiency in old buildings

In CEE region:

- Huge potential for EE improvement
- Refurbishment at relatively low cost
- Expected positive impact is to create green jobs
- Barriers to deep refurbishments: Economic and financial, political and structural, lack of information, market failure, hidden cost/benefits

What improving energy efficiency means for a single family house built in the 70s (150 m²)



RENEWABLES

Promising way for de-carbonization supporting the EU Energy strategy

(used for electricity, heat, transport)

Target for 2020: 20 % share of RES in the energy mix

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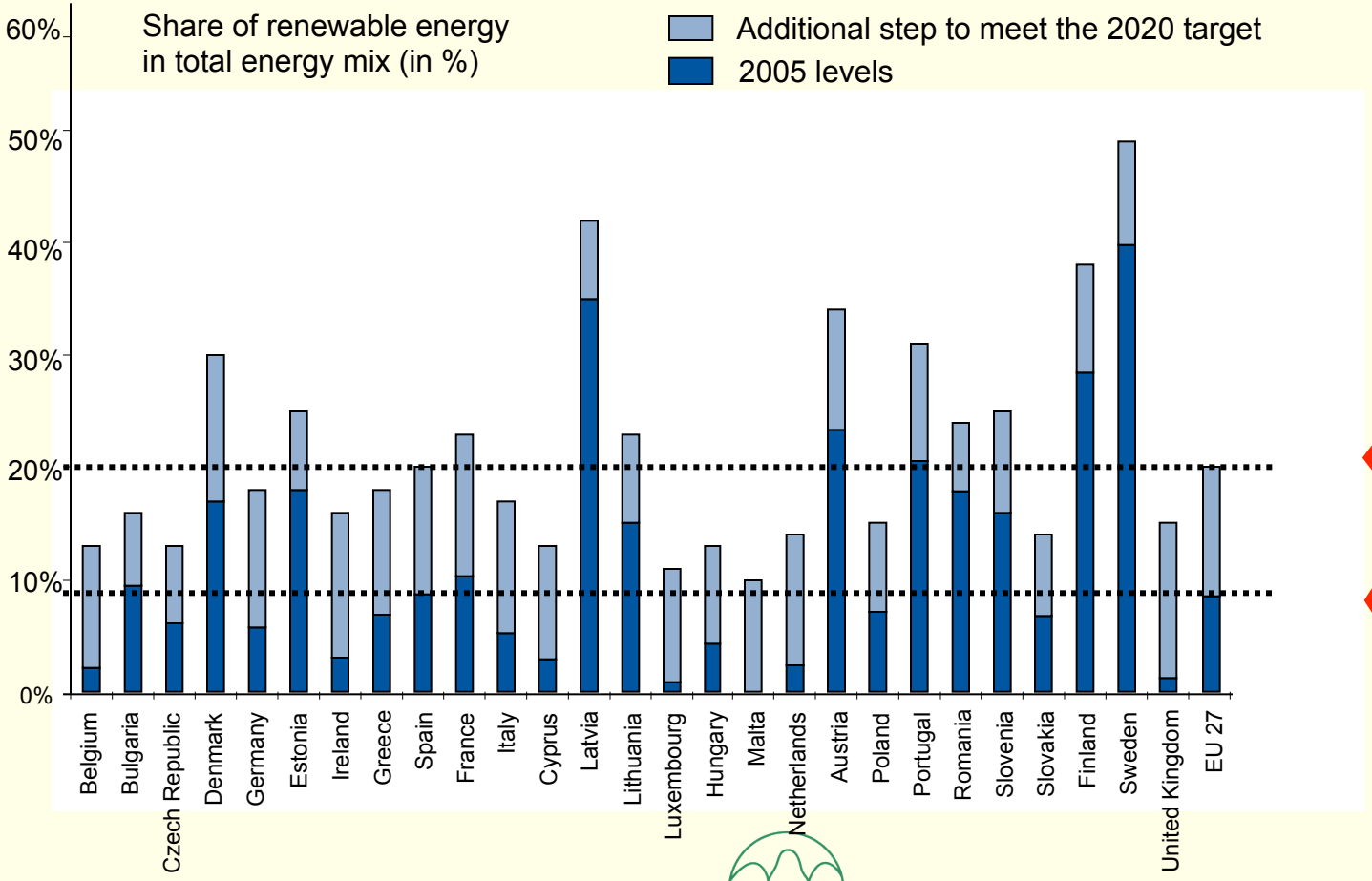
What the EU renewable target means



Each Member State has a binding target - set as a combination of renewable potential and GDP - to increase its share of renewable energy by 2020.

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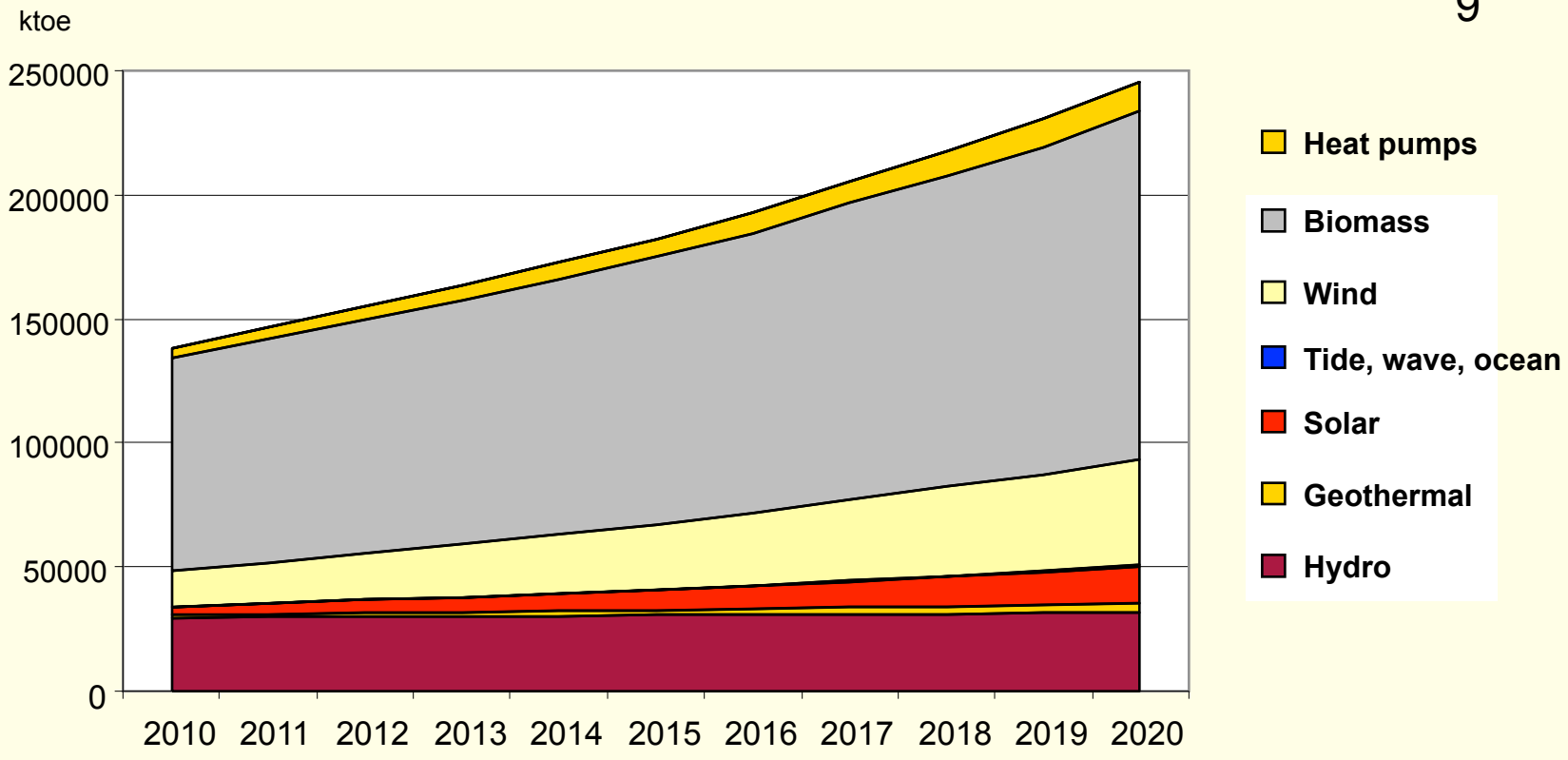
Background Information for the European Council, 4 February 2011

Growth and share of various types of renewable technologies



Solar, wind and biomass are the technologies progressing most rapidly. Solar and wind develop for electricity generation while biomass remains dominant for the heating sector.

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Background Information for the European Council, 4 February 2011

Source: European Commission

Status of RES enhancement in CEE

- Limited –although increasing-use of RES
- Relatively strong agriculture and forestry sectors
- Favorable conditions for wind energy
- Good potential for the utilisation of domestic renewables

- The countries have very good potential to create a large number of ‘green/low carbon jobs’ in their relevant sectors

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Perspective for RES

- **Demand** for electricity is highly correlated with economic growth. At present there is still recession, how long will it last in the CEE region?
- The decommissioning of large facilities over the coming decade will lead to the need to **replace** their capacity. Consequently, opportunity exists for RES-E investments.
- For some of the countries, **energy security/electricity** import problem need to be solved
- Diversification of energy resources needed (RES-E is an option)
- Significant RES potential exists in CEE.

BUT

Main problems/barriers

Political, structural, administrative, financial nature:

- Political will in CEE to move into RES has been limited (Generally, there is little enthusiasm to go beyond the minimum standards set by the EU)
- Getting license for RES-E takes time, is expensive
- At present, the cost for RES-E projects in CEE is very high (no domestic industry?)
- Obsolate grid system
- RES investment climate is uncertain in CEE
- There is a need for increasing private funding

GAPS/NEEDS in CEE

- Enhanced **regional co-operation** in energy production
- Developing a pan-regional view of energy **investments**
- Improving the **connectivity and distribution** of electricity generated by RES (investments needed)
- Supporting **domestic RES** industry (needs national will)
- Supporting **public-private** partnerships to accelerate wider use of RES
- Building capacity of all stakeholders

Concluding remarks

- Relying on fossil energy supply is not the future (harmful effect, scarcity and increasing prices)
- Renewables are extended, but with low speed. Long-term support is needed to promote further boost, ensuring their competitiveness
- Increased EE is needed to decrease the energy demand in the whole energy supply chain and at end users
- EE and RES are the future, together with devoted, motivated market actors for securing a livable planet for the next generation.

Thank you for your attention!

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