

Readiness of the Electricity Systems for Future Challenges

Karol Kósa
Executive Director of the Electricity System Development
Slovenská elektrizačná prenosová sústava, a.s.

Future challenges

National Energy and Climate Plans:

Current 2030 emissions reduction target



Expected emissions reductions under existing targets



Proposed new 2030 emissions reduction target



Current 2030 renewable energy target



Planned and existing measures



Share of renewables needed to achieve 55%



Current 2030 energy efficiency target



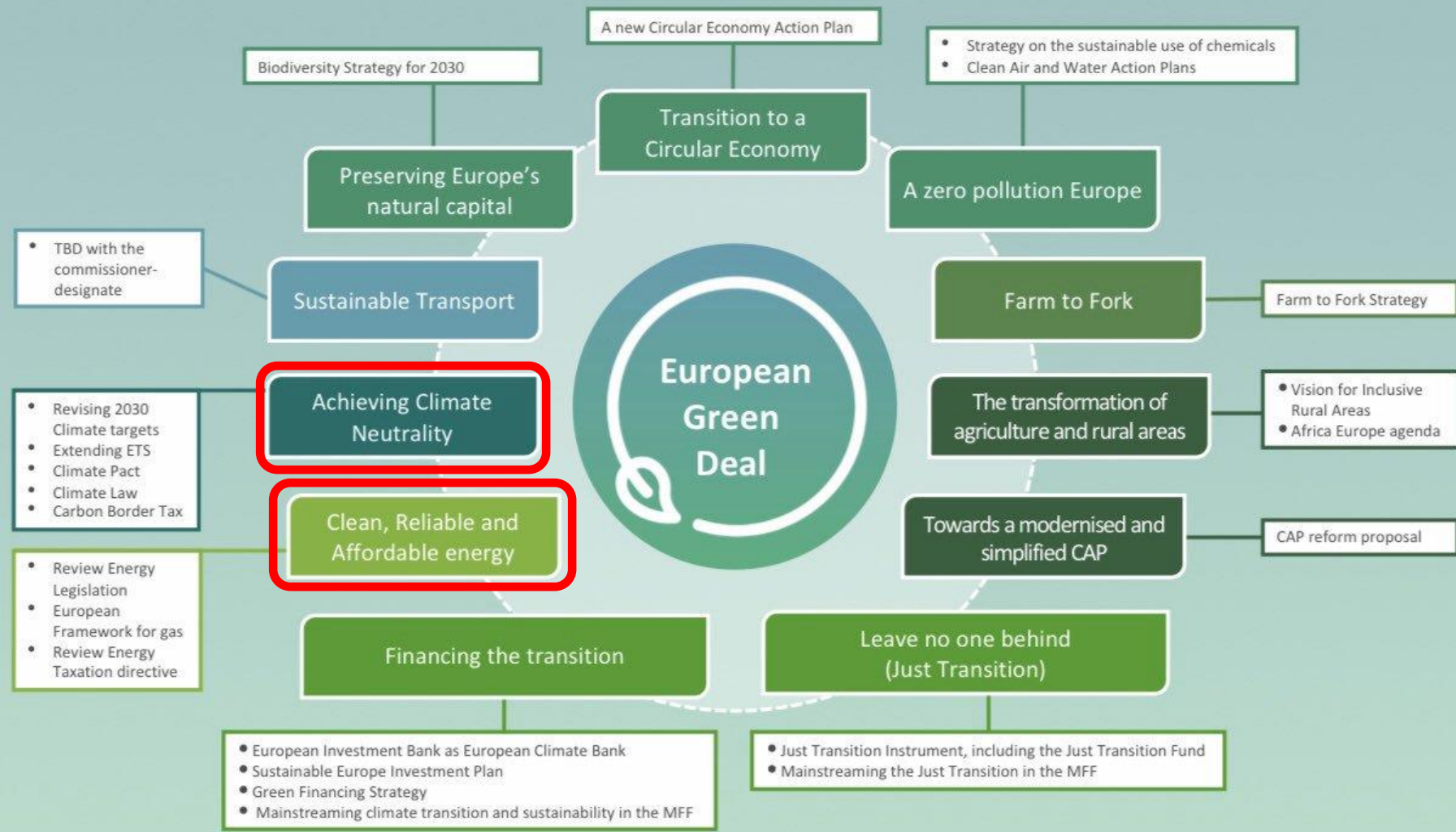
Planned and existing measures



Improvement in energy efficiency needed to achieve 55%



Future challenges



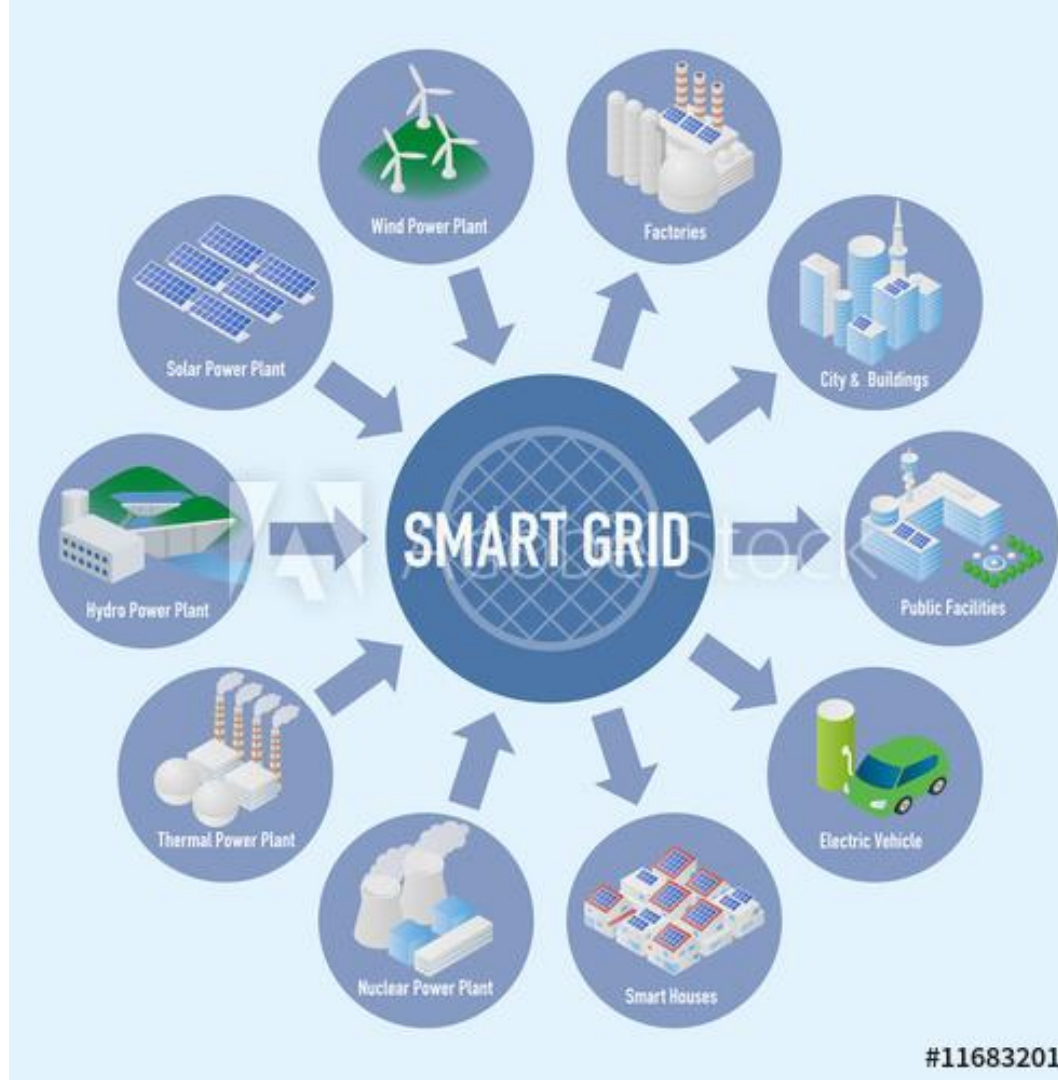
Carbon - free economy

Basic precondition for electricity sector transition

Modern and smart grid is inevitable

- Enough capacity in each time
- Enough flexibility in each time
- Affordable electricity in each time

How to reach that?



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Actions – Invest to the grid modernization



Capacity increase, Interconnection target 2030

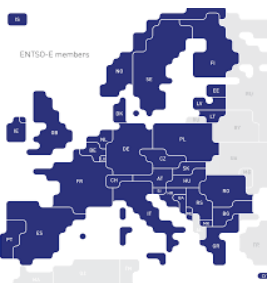
Voltage control equipment

Asset replacement, Modernization

Digitalization

Electrification

Action - Increase the system flexibility



- Aggregation of grid users
- Refurbishment of existing thermal power plant
- Using of ancillary services from wind and photovoltaic power plant
- Using of missing ancillary services from abroad
- Implementation of storages (bateries, el. boiler, hydro pumped storage)
- Implementation of power to gas technology
- Demand Side Respond



Questions

Are we ready for future challenges?

How long will the energetic transition last?

How big impact can we expect on existing environment?

How it will affect the end users?

Thank you for your attention

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