

The European Union – Turkmenistan Sustainable Energy Days

International Conference

Sustainable Energy in Turkmenistan: prospects and challenges

State Energy Institute of Turkmenistan, Mary, 14 December 2023

Overall policy and legal framework for the promotion of end-use energy efficiency in the EU

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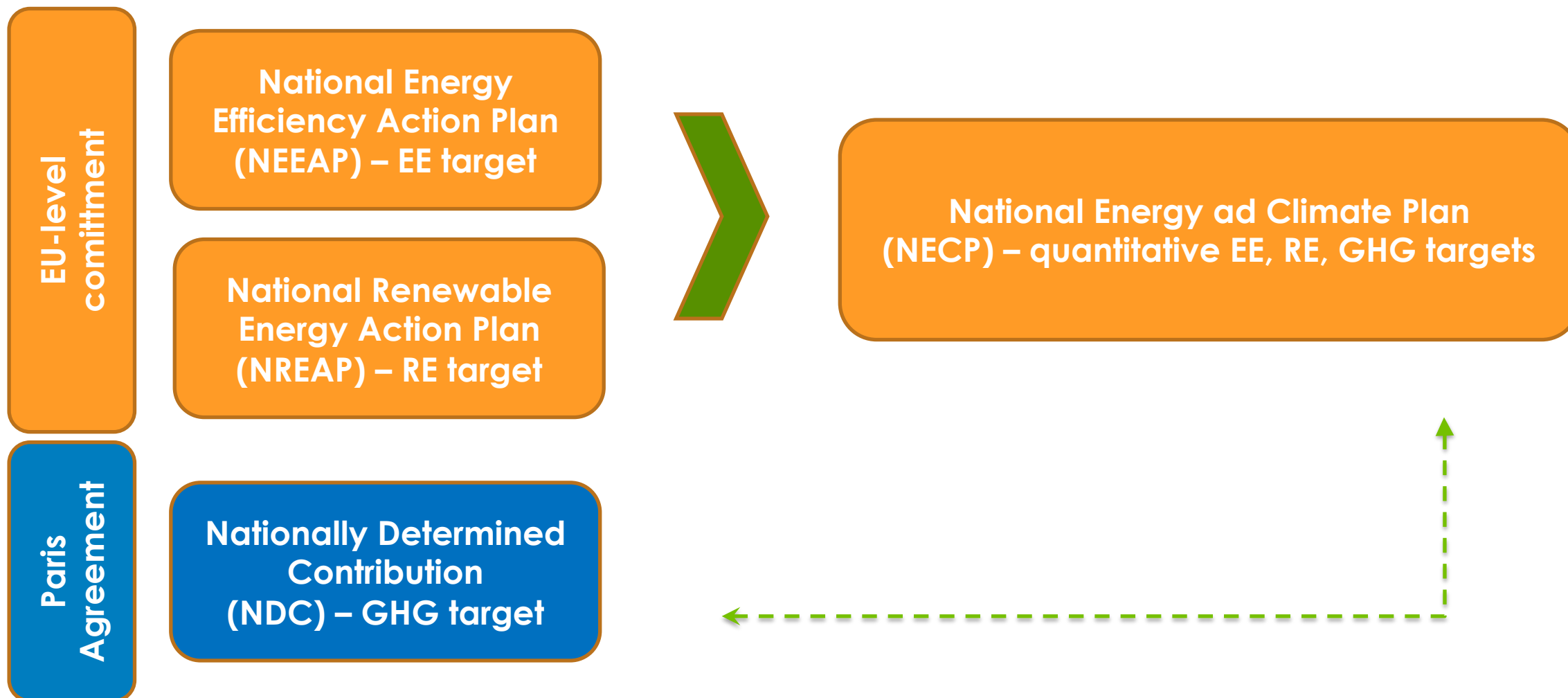
Energy efficiency first principle (1)

- **Energy Efficiency** is one of the key pillars not only to meet EU's climate objectives but also to reduce dependence on fossil fuels and increase security of supply and the use of renewable energy
- **Energy efficiency first (EE1st) principle** is generally understood as a **guiding principle** for energy-related policymaking, planning, and investments
- The principle aims **to treat energy efficiency as a source of energy** in its own right in which the public and the private sector can invest ahead of other more complex or costly energy sources
- This includes **giving priority to demand-side solutions** whenever they are more cost-effective than investments in energy infrastructure to meet policy objectives

Energy efficiency first (EE1st) principle (2)

- The EE1st principle was formally introduced into EU legislation in the Governance Regulation (European Union 2018), which includes a formal definition and **requires Member States to report on the implementation of EE1st in their National Energy and Climate Plans (NECPs)**
- In essence, it is meant to **consider and prioritise** investments in both:
 - demand-side resources (end-use energy efficiency, demand response, etc.)
 - supply-side energy efficiency**whenever these cost less or deliver more value** than default energy infrastructure

Evolution of energy policy planning process in EU



National Energy and Climate Plans

NECP for 2021 – 2030
with the outlook to 2050



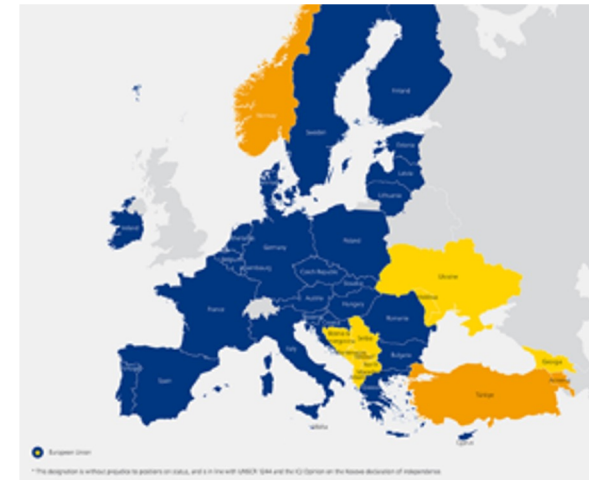
Five (5) dimensions:

- **Energy Security**
- **Energy Efficiency** as a primary fuel
- **Decarbonization** and **Renewable Energy** development
- **Market integration**
 - Cross-border connections
 - Harmonized Market rules
 - Addressing **energy poverty** and vulnerable customers
- **Research and Innovation** for new technologies

This approach requires **close coordination across all ministries**

Dimension 1: Energy security

- **Medium- to long-term objectives** and **standards** relating to **security of supply**, including with regard to diversification of energy sources and supply countries, infrastructure, storage, demand response, readiness to cope with constrained or interrupted supply of an energy source, and the deployment of alternative domestic sources
- The objectives should include **regional cooperation** and the policy measures to achieve these objectives should be **regionally coordinated**



Dimension 2: Energy market

- **Policies and plans** related to **infrastructure development for connectivity** with other **EU Member States** and **Energy Community Contracting Parties** (*The Energy Community is an international organisation consisting of the EU, represented by the European Commission, Albania, Bosnia and Herzegovina, Georgia, the Republic of North Macedonia and Kosovo*. Moldova, Montenegro, Serbia, and Ukraine are known as the contracting parties*)
- **Policies and objectives** related to **market integration**, deployment of flexibility in the power sector, roll-out of smart technologies, and smart grids

Dimension 3: Energy efficiency

- **Existing and planned policies and measures** related to achieving the future **energy efficiency targets in the EU**
- **Special attention** to measures and plans **to** reduce energy consumption in the **building sector** (i.e. building renovation, and investment programmes)
- **Development and quantification of a trajectory** towards 2030 including planned energy savings and final consumption
- The trajectory should specify the national contribution towards the EU energy efficiency targets

Dimension 4: Decarbonisation of the economy

- **Policies and measures** related to the **reduction of GHG emissions** in all key emitting sectors to meet 2030 targets:
 - in the EU (e.g. renewable energy targets), and
 - Nationally Determined Contributions (NDCs) under the Paris Agreement
- These should also contain an outlook towards becoming a low-carbon economy in 2050, including **the trajectory for the share of renewables**, projected electricity demand, relevant electricity producing technologies
- National policies and measures planned to support the **decarbonisation of transport**

Dimension 5: Research, innovation and competitiveness

- **Policies and measures** for accelerating the energy sector transformation, including funding programmes for R&D and subsidy schemes



Content of NECP

Narrative part

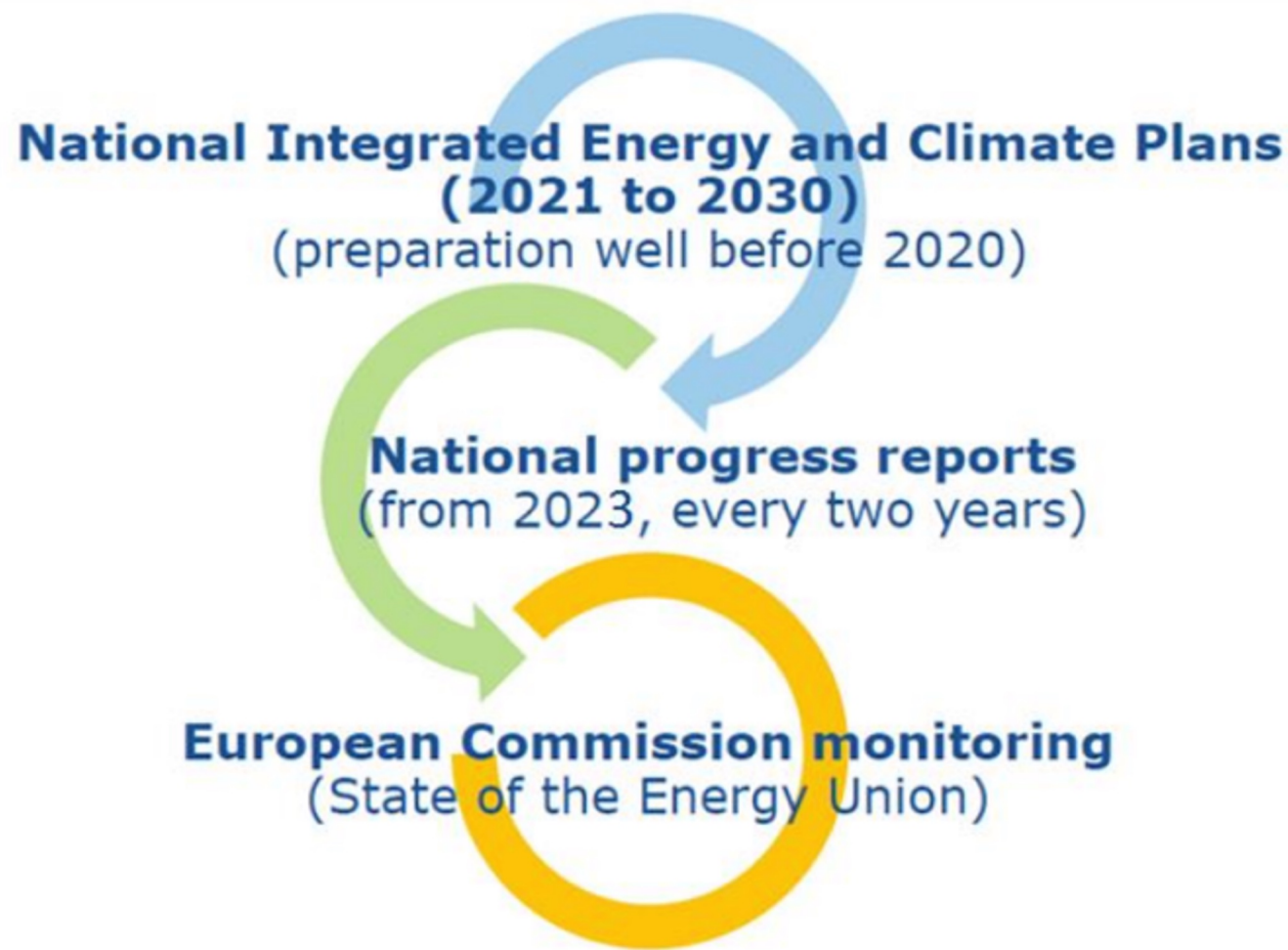
Current situation - overview of the national energy system and policy context of the national plan across the five dimensions

Objectives, policies and measures for the five dimensions

Analytical basis

Integrated projections and indicators - **a separate section on projections as an analytical basis of the plan**, including reference and policy scenarios assessing the relevant impacts of the policies and measures proposed

Continuous monitoring of implementation progress and results



NECP is not a burden but an opportunity!

- For public sector entities - **save public expenses**
- For enterprises - **become more competitive**
- For people - **live in more comfortable conditions**
- For all - **attract more funding**
for project implementation
by bundling small projects into programs
that become more attractive
to IFIs and donors

