



Federal Ministry
for Economic Affairs
and Energy



The Governance Regulation and how it Interacts with the 3 Directives

Focus on the Interaction between Provisions that
Require Coordination and Promote Better Regulation

Joint Workshop Concerted Action RES / EED / EPBD
30th January 2020

Agenda

1. General Overview on National / EU Energy Policy
2. Energy Efficiency Strategy (EffSTRA)
3. Market Incentive Programme for Renewable Heat Generation (MAP)
4. Energy Efficiency Strategy for Buildings (ESG)
5. Regional Cooperation

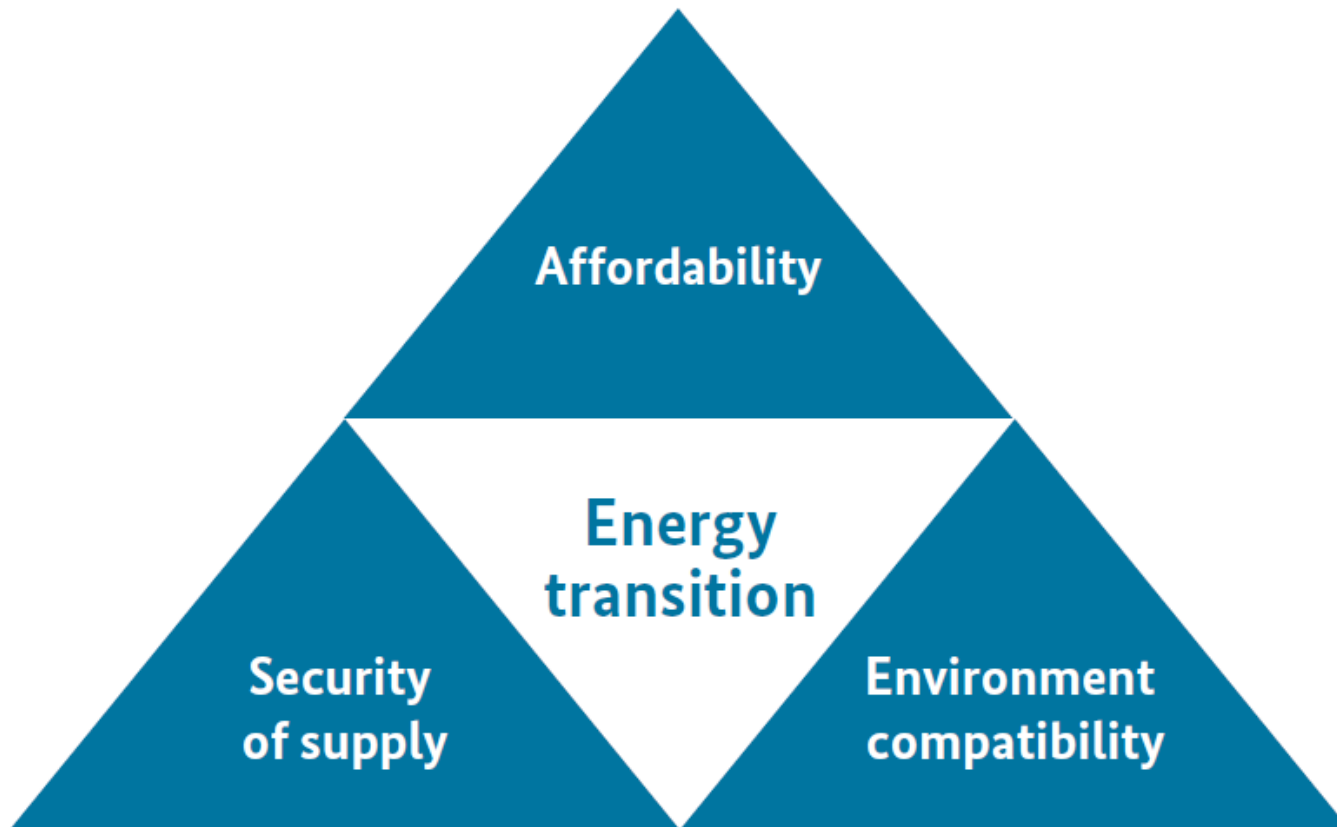


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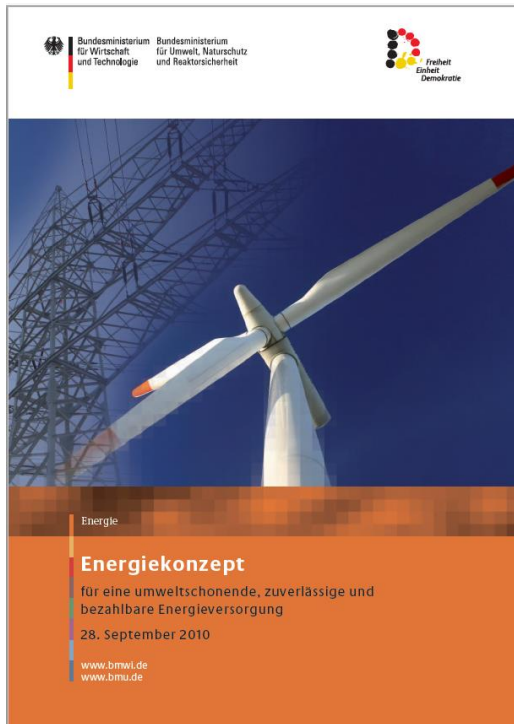
1. General Overview on National / EU Energy Policy

1. General Overview on National Energy Policy

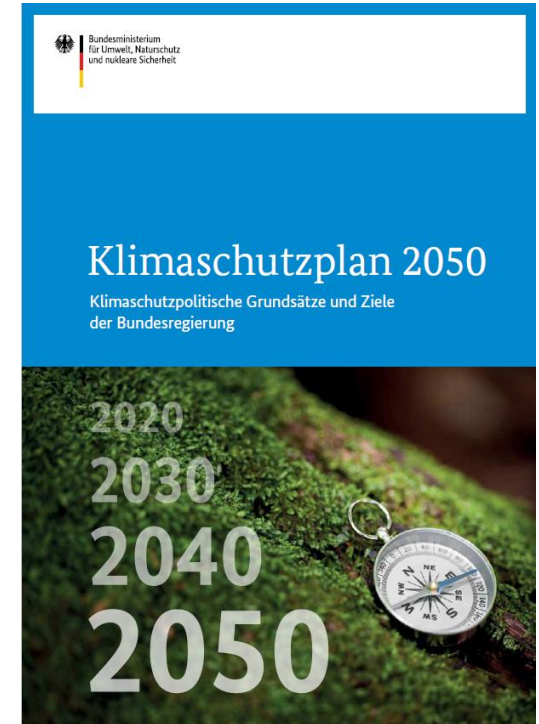


1. General Overview on National Energy Policy

- Main Targets -



Establish main targets



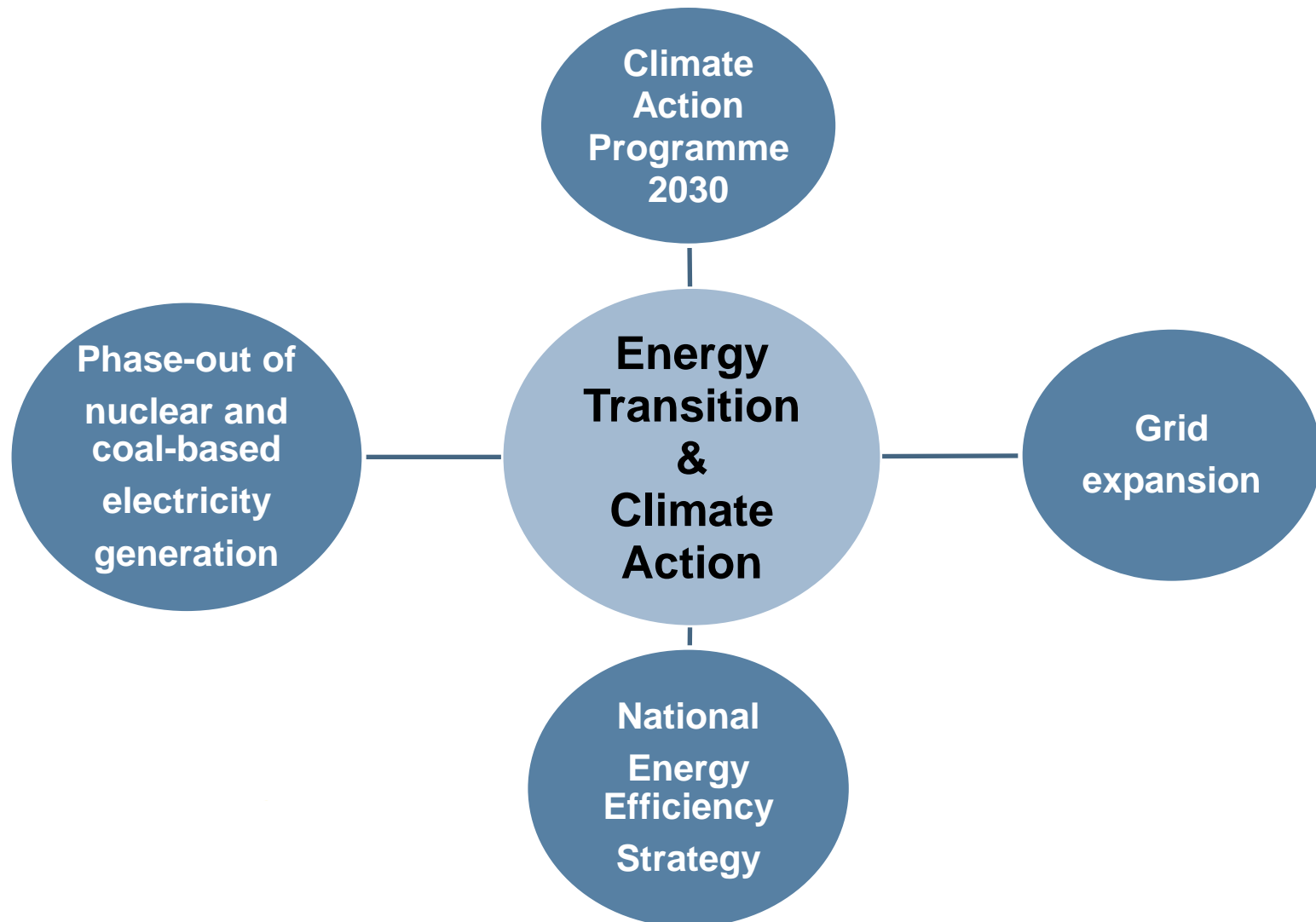
at least -55% GHG reduction in 2030 as compared to 1990

30% share of renewables of total energy consumption by 2030

**reduce primary energy consumption by 30% in 2030 and
by 50% in 2050 as compared to a business as usual scenario**

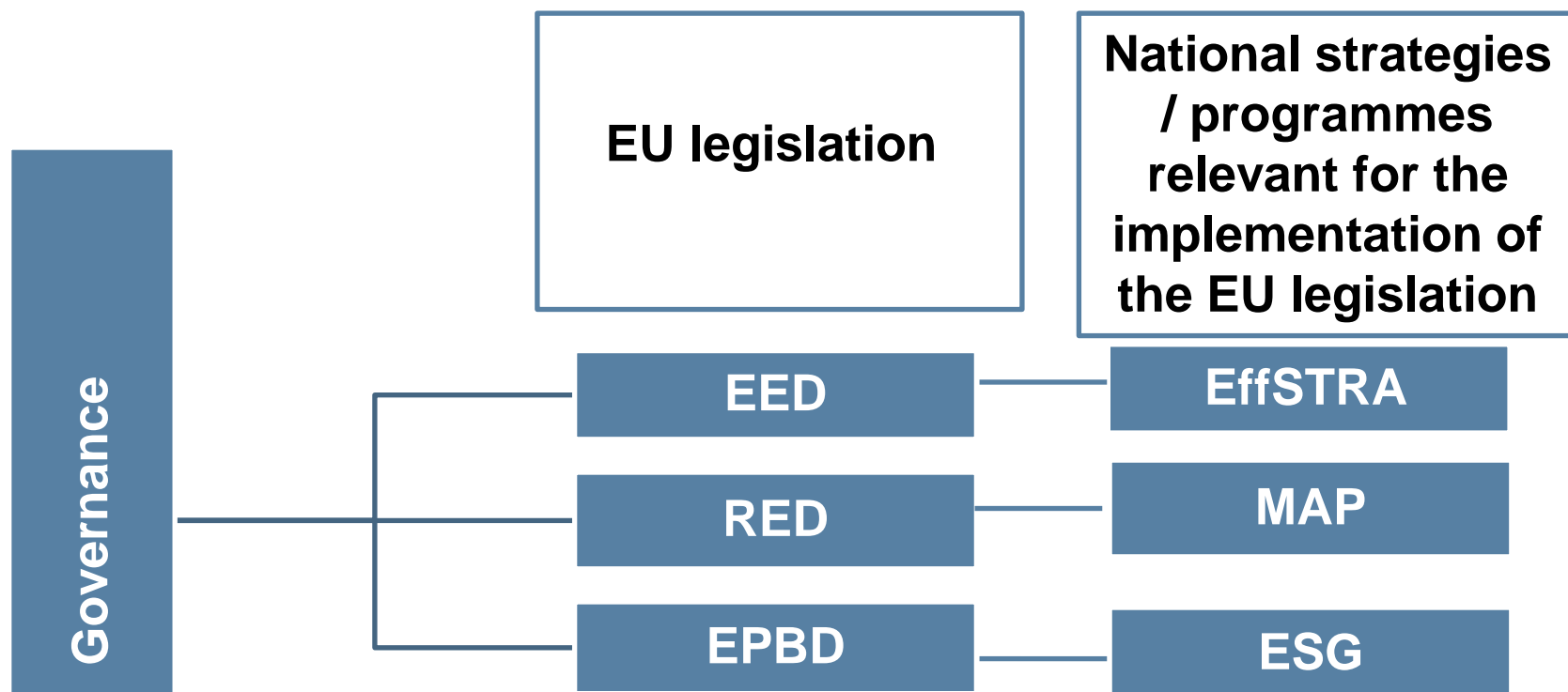
1. General Overview on National Energy Policy

- Main Measures -



1. General Overview on National/EU Energy Policy

- Interaction between national and EU legislation -

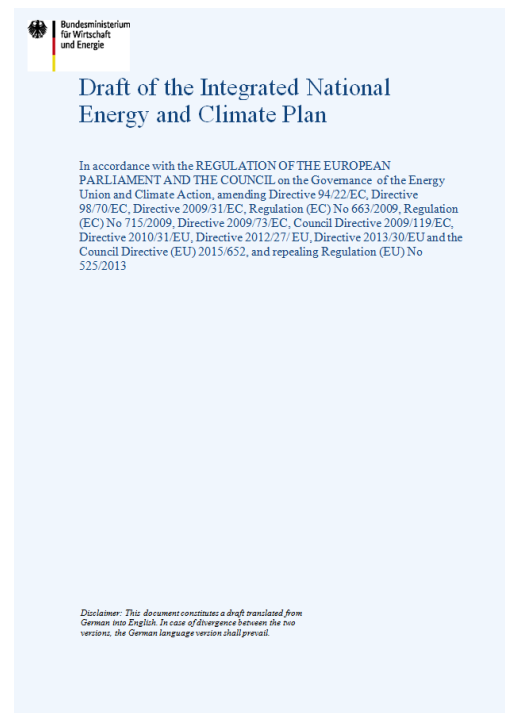
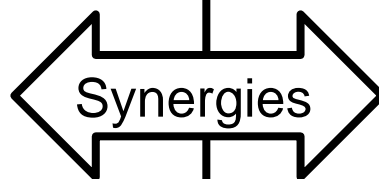


1. General Overview on National/EU Energy Policy

- National and EU Monitoring -

National Monitoring - National targets:
Monitoring Report (yearly)
Progress Report (every 3 – 4 years)

European Monitoring - EU targets:
NECP (every decade)
Progress Report (every 2 years)





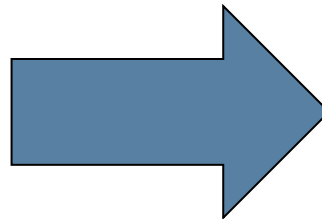
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2. Energy Efficiency Strategy 2050 (EffStra)

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From the Greenbook Energy Efficiency
to the Energy Efficiency Strategy 2050



2. Energy Efficiency Strategy 2050 (EffStra)

Contents of the Energy Efficiency Strategy 2050:

The Energy Efficiency Strategy 2050

1. sets a medium-term **energy efficiency target for 2030**
2. bundles and specifies energy efficiency measures in a new **National Energy Efficiency Action Plan (NAPE 2.0)**. This incorporates the energy efficiency measures of the climate cabinet and other measures
3. launches a **dialogue process** for a long-term roadmap to halve primary energy consumption by 2050

2. Energy Efficiency Strategy 2050 (EffStra)

Content 1: Efficiency target for 2030

- The target
 - aims at
 - a reduction of **primary energy consumption (PEC)**
 - by **30% by 2030** (compared to 2008)
 - ensures compliance with the climate target (reducing GHG by 55% by 2030),
 - represents an appropriate contribution to the EU target for 2030 and
 - defines the direction of efficiency policy in the next decade
- Review to be undertaken by mid 2022 with respect to long-term GHG target.

2. Energy Efficiency Strategy 2050 (EffStra)

Content 1: Efficiency target for 2030

- The Energy Efficiency target 2030
 - corresponds to a reduction of PEC of approx. **1,200 TWh by 2030**
 - can be reached by the following implementing measures with the following planned impact (forecast, approximately):
 - **700 TWh** in the conversion sector:
 - phase-out of coal and
 - 65% share of renewable electricity by 2030
 - **200 TWh**: measures and instruments that are already implemented today
 - **300 TWh**: new additional measures in the National Energy Efficiency Action Plan (NAPE 2.0)

2. Energy Efficiency Strategy 2050 (EffStra)

Content 2: National Energy Efficiency Action Plan (NAPE 2.0)

- Aim: Meeting the primary energy consumption target in 2030
- Focus: Reduction of final energy consumption in all sectors
 - Buildings
 - Industry, trade and services
 - Traffic
 - Agriculture
 - Cross-sectoral
- Measures stemming from:
 - the Climate Protection Program (Climate Cabinet)
 - additional measures

2. Energy Efficiency Strategy 2050 (EffStra)

Content 2: National Energy Efficiency Action Plan (NAPE 2.0)

Examples for strategy-based measures:

- **Cross-sectoral approach:** introduction and gradual raising of carbon pricing
- **Improvement of funding and information**
 - Tax incentive for energy-efficiency retrofits
 - Federal funding for efficient buildings
 - Funding for serial retrofits in the building sector (planned)
 - Renewal of heating systems
 - Expansion of funding programmes for industry
 - Further development of funding for heating networks (planned)

2. Energy Efficiency Strategy 2050 (EffStra)

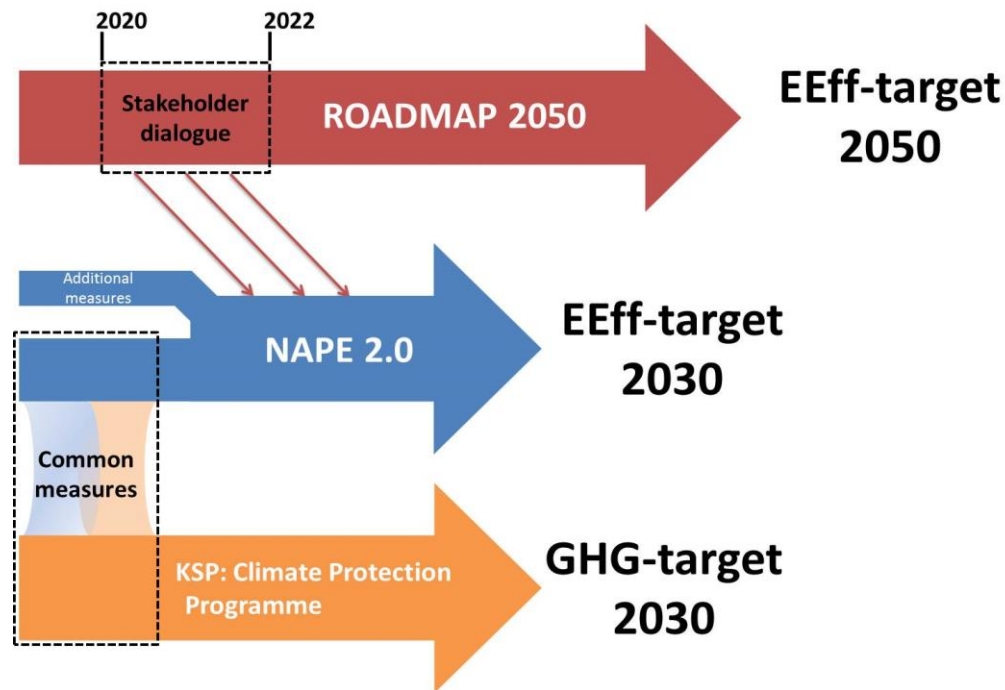
Content 2: National Energy Efficiency Action Plan (NAPE 2.0)

Further Examples for strategy-based measures:

- **New standards** and further initiatives added, e.g.
 - Act on Energy in Buildings,
 - function of the public sector as a role model
- **Meter and sensor technology** for new heating and air-conditioning/ ventilation systems
- **Expansion of energy-saving contracting (ESC)** for the public sector
- **Asset Class Energy Efficiency (ACE II)**

2. Energy Efficiency Strategy 2050 (EffStra)

Content 3: Roadmap Energy Efficiency



2. Energy Efficiency Strategy 2050 (EffStra)

Aims of the Roadmap Energy Efficiency

- Identify paths towards 2050
- Development of possible solutions

Structure:





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3. Market Incentive Programme for Renewable Heat Generation (MAP)

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- Programme Objectives
 - Main Focus: promote the installation of RES based heating and cooling systems to increase the share of RES used for heating and cooling
 - Promote technology progress / innovation for further efficiency gains (Grants are only available if installations comply with ambitious standards)
 - Induce cost reductions in RES technologies
- Financial data
 - In 2018, € 215 million for the promotion of RES heating installations have triggered investments of € 901 million.

3. Market Incentive Programme for Renewable Heat Generation (MAP)

Small Scale installations

- **Gas fuel value “Renewable Ready”:**
 - Gas fuel value prepared for combination with renewable energies within 2 years
- **Gas Hybrid fuel value**
 - Gas fuel value combined with renewable energies
- **Solar thermal Installations**
 - Solar installations in single-/double family houses
 - Solar installations in non-residential buildings
 - Solar installations for process heating & cooling
- **Biomass**
 - Pellet boilers, pellet stoves with heat reservoir
 - Firewood gasifier boilers
 - Secondary measures (e.g. Emission reduction)
- **Heat pumps**
 - e.g. soil/water, water/water, air/water, gas heat pumps
- **Combinations of renewable energies**
 - e.g. Heat pump and solar thermal

3. Market Incentive Programme for Renewable Heat Generation (MAP)

Large Scale installations

- Large **Solar thermal** installations
- Large **Biomass** installations
- Large **Heat pumps**
- biogas pipes for non-processed biogas (raw biogas)
- Deep geothermal installations
- Local Heating Grids for Heat from RES
- Large Storages for Heat from RES

3. Market Incentive Programme for Renewable Heat Generation (MAP)

- Aid scheme; percentage subsidies or low-interest loans with deletion share
 - Small scale: Grants are a percentage of the costs (incl. periphery).
 - Subsidies typically range from 20-35% for small scale units
 - Additional bonus for removing an oil-based heating system: +10pp.
 - Large scale: Grants are calculated depending on the size, efficiency and type of technology used.

3. Market Incentive Programme for Renewable Heat Generation (MAP)

Target implementation by the MAP

- Increase the share of RES in final energy consumption for heating and cooling by reducing the price gap to conventional heating solutions.
- Set incentives for the development of highly efficient heating systems, raising standards by increasing technical requirements and paying higher subsidies for innovative and highly efficient systems.



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4. Energy Efficiency Strategy for Buildings (ESG)

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What is the ESG?

- The Energy Efficiency Strategy for Buildings is a paper setting out a strategy for bringing about the energy transition in the buildings sector.
- Aim: CO₂ emissions are to be cut by 67% compared to 1990 by 2030
- In order to reach this goal, a key focus will be placed on the energy transition triad, with '**Efficiency first**' at its heart.

4. Energy Efficiency Strategy for Buildings (ESG)

- The ESG also focuses on a range of technical and energy-related aspects; and increasingly also on **economic** and, in the longer term, **social-policy** aspects which are linked to buildings.
- The Buildings Strategy **reflects the state of knowledge at the time it was adopted (2015)**.
- A **regular and flexible update** of the Strategy that takes into account new information is therefore required.

4. Energy Efficiency Strategy for Buildings (ESG)

Measures:

- **Energy conservation law:**

Aims to strengthen energy conservation in buildings of all kinds and to foster the use of renewable sources of energy.

- **Financial Incentives:**

- Market Incentive Programme (MAP)
- CO₂ Building Rehabilitation Programme

4. Energy Efficiency Strategy for Buildings (ESG)

- **Information and advice:**

Germany offers a **holistic and stringent information and advisory system** that caters to the specific needs and capabilities of those asking for advice (private households, municipalities, non-profits and SMEs).

Main elements:

- **For private households:**

- Energy consultations **for residential buildings** (On-site audits, development of a customised rehabilitation plan); around 11,000 audits per year
- Energy consultations organised by **consumer protection agencies**; around 145,000 audits per year

4. Energy Efficiency Strategy for Buildings (ESG)

- **Energy consultations for SMEs;** around 3,700 per year
- **Municipalities and NGOs:**
 - Energy consultations for non-residential buildings owned by municipalities and non-profits; around 800 audits per year (rehabilitation of buildings plus new buildings).
- **The list of energy efficiency experts (EEE list) allows interested parties to find a qualified energy auditor across Germany (post-code search included).**
 - In addition, the EEE list contributes to ensuring that energy auditors regularly update their qualifications – a criterion to make sure they remain on the list.

4. Energy Efficiency Strategy for Buildings (ESG)

- **National energy efficiency campaign - “Germany makes it efficient”:**
 - provides information about all available funding programmes and tools for improving energy efficiency and the use of renewables.
- **The national label for old heating systems** provides home owners with information about the energy efficiency of their heating system.
- **Energy research:** a wide range of programmes and initiatives exists

4. Energy Efficiency Strategy for Buildings (ESG)

New measures for the building sector as agreed by the Climate Cabinet (Sept. 2019):

- **CO₂ pricing for the heating sector** starting with 25 Euro/t in 2021
Thereafter, the price will gradually rise to **55 Euros** in 2025. For the year 2026, a price corridor of at least 55 and at most 65 Euros will apply.
- **Exchange premium** of up to 40 percent for changing from oil to a more climate-friendly heating system
- **Tax break** for energetic refurbishment of buildings - 20 percent
- From 2021 on: Federal subsidies for efficient buildings (BEG) as holistic programme for energy efficiency measures and renewable energy
- Funding programme for **serial retrofitting**



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5. Regional Cooperation

5. Regional Cooperation

- in the context of the Governance Regulation -

- Regional cooperation was strengthened with the Governance Regulation and the NECP process.
- Pentilateral Energy Forum and the North Seas Energy Cooperation agreed on **joint chapters** appearing in the final NECPs
 - **Pentilateral Energy Forum:** founded in 2005 by BEL, DEU, FRA, LUX; 2011: NDL, AUT CHE joined.
 - **North Seas Energy Cooperation:** established 2016 FRA, BEL, NDL, LUX, IRE, SWE, DNK, DEU, UK



**North Seas Energy
Cooperation**

Danish Presidency 2018-2019

5. Regional Cooperation

- Pentalateral Energy Forum -

- **Main target: foster integration** of regional electricity markets,
- **Joint NECP-chapter** with framework of future tasks,
 - monitoring of flow-based market-coupling
 - methodology for the regional adequacy assessment
 - regional scenarios for crisis situations
 - common vision for flexibility options such as demand response or hydrogen
 - common vision of a decarbonised electricity sector 2050
 - Start cross-border cooperation on renewable energies
 - Facilitation of e-mobility options and exchange on carbon pricing



5. Regional Cooperation

- in the context of the Governance Regulation -

- **Main goal:** establish synergies, exchange knowledge and bringing forward joint strategies for offshore wind projects
- **Support Groups and topics**



North Seas Energy
Cooperation

Danish Presidency 2018-2019

SG 1

Hybrid
and joint
projects

SG 2

Maritime
Spatial
Planning

SG 3

Support
framework
& finance

SG 4

Delivering
2050

**Ad hoc
working
group on
alignment**



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Thank you!