

REGIONAL
CONSULTATION
04/09/19



BELGIAN
INTEGRATED NATIONAL
ENERGY- & CLIMATE PLAN 2030



OVERVIEW

I. Preparation of the draft NECP

- I. Institutional context
- II. Integration exercise

II. Content of the draft NECP

- I. Overview priorities and measures of all dimensions

III. Steps towards the final NECP

- I. Where are we now?
- II. What's next?

IV. Cross border aspects

- I. Common Penta chapter
- II. BE elements



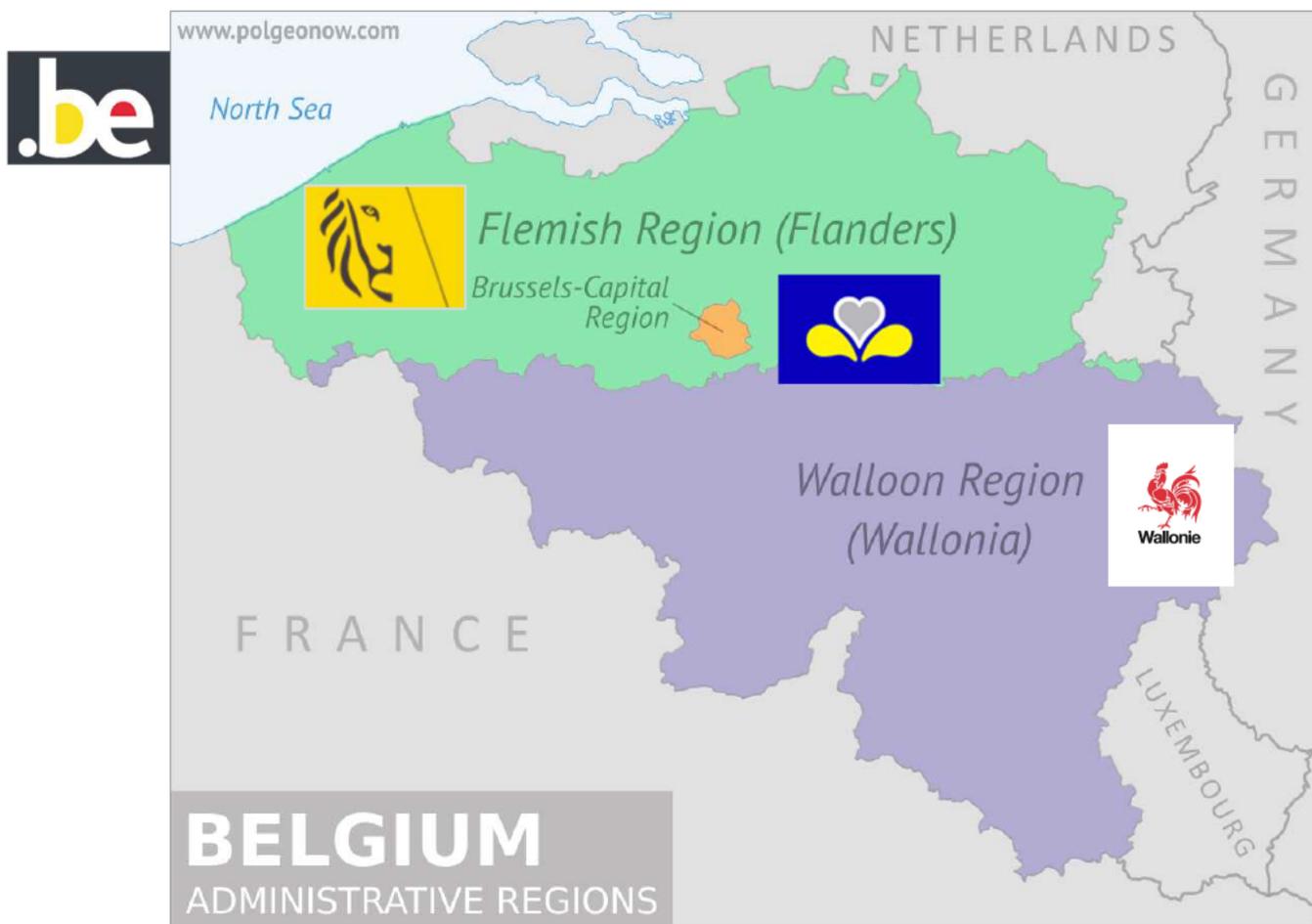


- I. Institutional context
- II. Integration exercise

I. PREPARATION OF THE DRAFT NECP



BELGIAN INSTITUTIONAL CONTEXT



Source: <http://www.polgeonow.com>



INTEGRATION ON MANY LEVELS

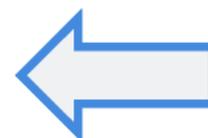
ENOVER
CONCERE



NKC
CNC



NECP
Steering
group



BOTTOM UP APPROACH & INTEGRATION

6

Entity plans form the basis of the draft NECP
overarching plan



Most important measures are included in the overarching
NECP, of which the entity plans are an integral part

FED

.be

klimaat

energie

WG



BHG



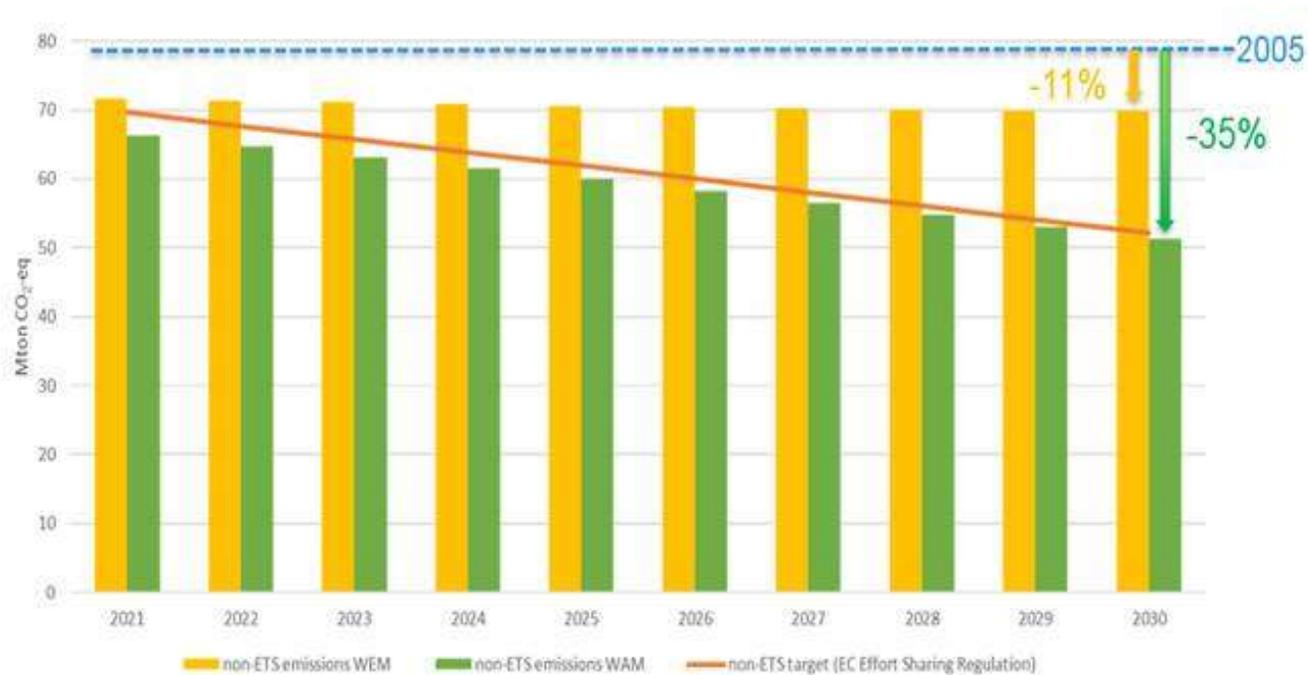


DIMENSION DECARBONISATION

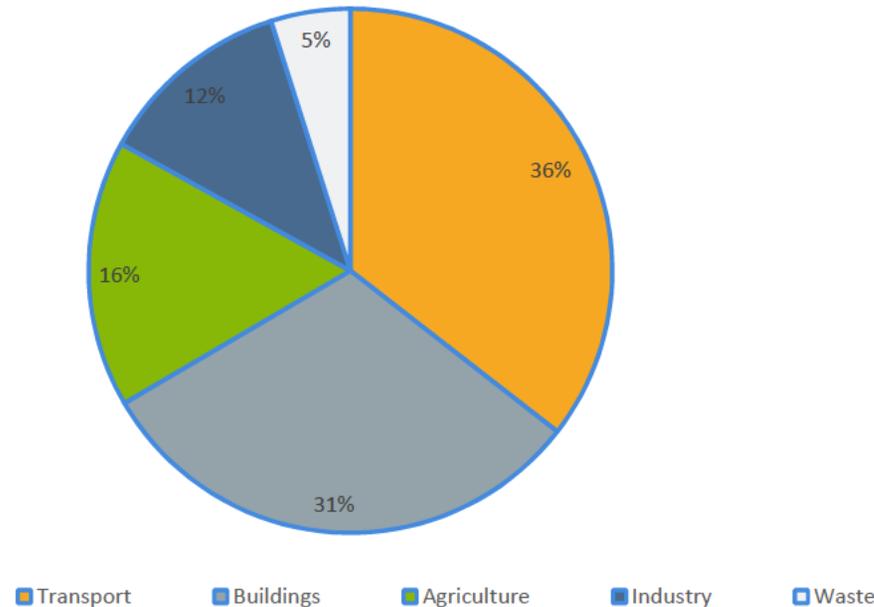
II. CONTENT OF THE DRAFT NECP



DECARBONISATION FOCUS ON NON-ETS EMISSIONS



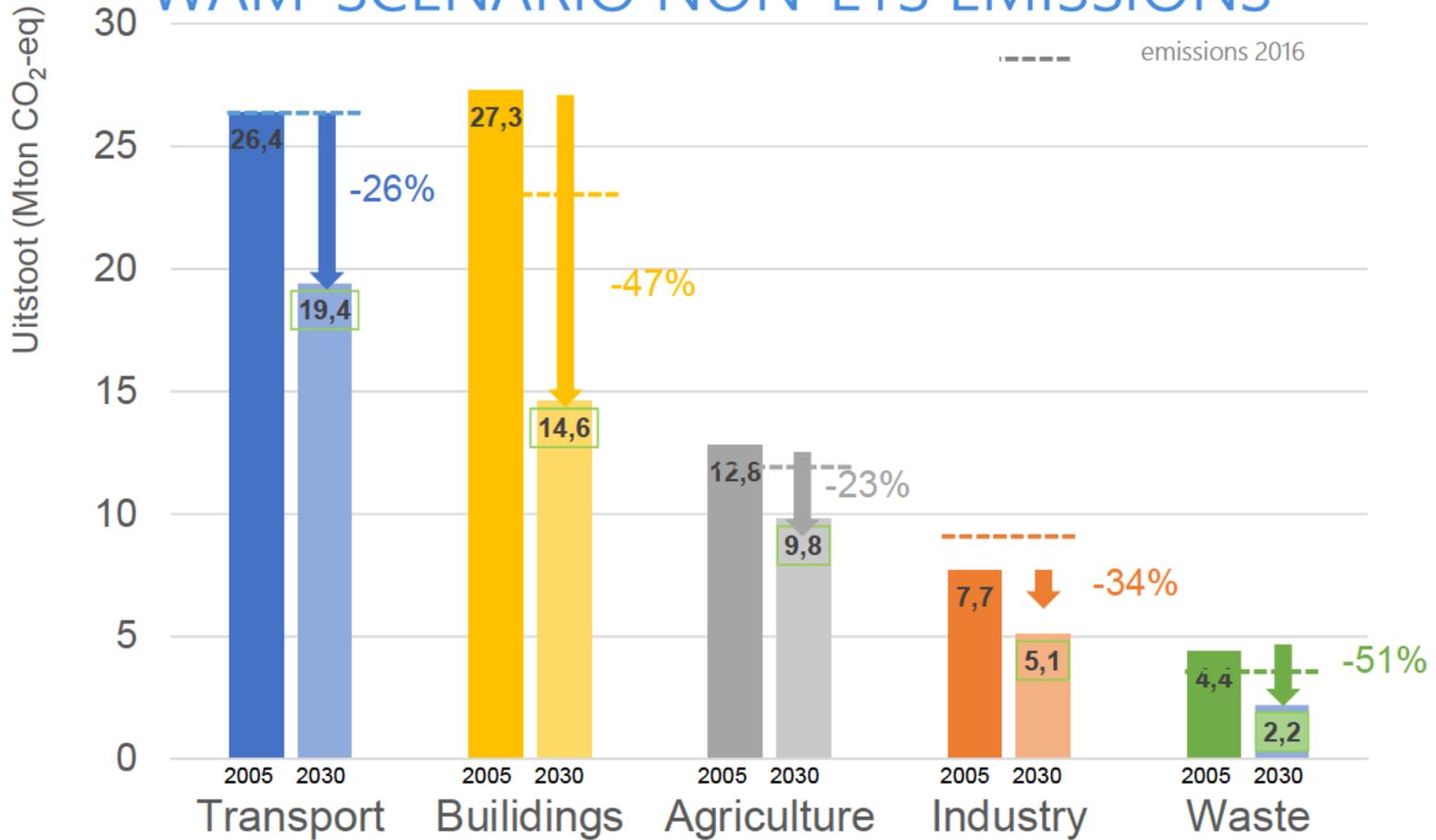
STARTING POINT: NON-ETS EMISSIONS IN 2016



→ Sectors with the largest shares (transport and buildings) must make important efforts



WAM-SCENARIO NON-ETS EMISSIONS



HORIZONTAL POLICIES AND MEASURES

3. Policies and measures

3.1 Dimension decarbonisation

Only the **main policies and measures (PaMs)** included in the 'with additional measures' (WAM) scenario are summarised in this chapter. Existing PaMs or those not directly relevant to the quantification presented in the WAM scenario are not described in this section. Therefore, this is not a comprehensive list of all PaMs. All PaMs adopted by the federal and regional authorities can be found in the annexes. The purpose of the NECP is not to list all of the entities' PaMs; these can be found in the annexes and represent the official list for each entity.

It should be noted that the PaMs applied in the 'residential' sector (buildings) are presented in the 'Energy efficiency' chapter.

3.1.1 GHG emissions and removals

i. GHG emissions and removals

A. Horizontal policies and measures

By definition, horizontal PaMs cover a wide range of sectors.

At national level, all Governments are committed to developing new PaMs on the principles set out below.

Environmentally friendly taxation

Environmentally friendly taxation consists of developing a new tax regime or new fiscal instruments to identify price signals that are not compatible with decarbonisation targets and the 'polluter pays' principle. A plan for environmentally friendly energy taxation will be developed jointly with the Federal and Regional Governments by 2021. This new system or these new instruments must be consistent with any other tax reforms in order to maintain the international competitiveness of companies and provide for a policy that supports citizens. Each Region will conduct a review of the future greening of (para)fiscal taxes and the elimination of subsidies that are harmful to the climate.

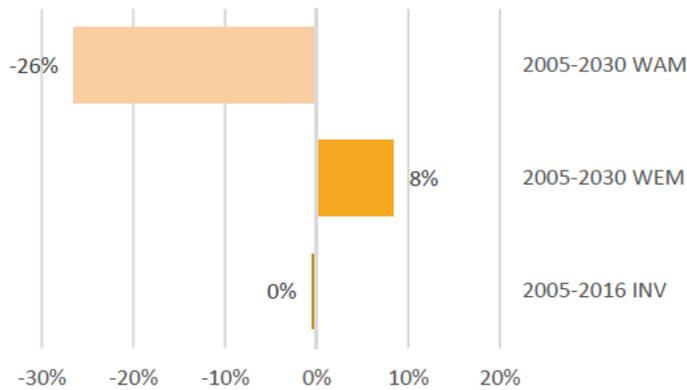
At federal level, the report resulting from the Belgian national debate on carbon pricing was published in late June 2018. It includes exploratory research on options for carbon pricing (such as a carbon tax). This fiscal instrument

Different axes, i.a.

- Environmentally friendly taxation (BE)
 - National debate on carbon pricing
- Spatial planning policy (FL)
- Stimulating behavioural change (WAL, BR)
- Circular economy



TRANSPORT



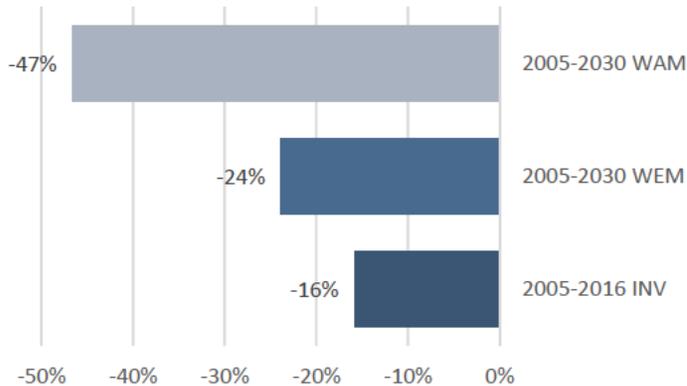
- 2030 Ambitions, i.a.:
- 14 % biofuel rate in 2030 (FED)
- 40 % sustainable commuters transport (FL)
- 21 % reduction in vehicle-kilometres by 2030 (BR)

• Measures

- Reducing demand of mobility through spatial planning
- Incentivising a modal shift
- Decarbonisation of remaining road transport



BUILDINGS



• 2030 Ambitions :

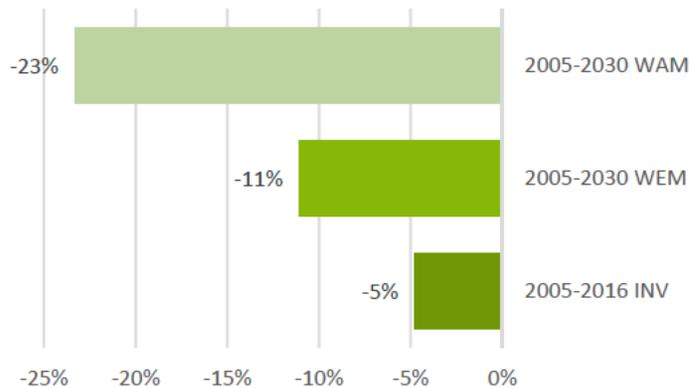
- - 47 % GHG emissions in WAM-scenario
- Significant increase of renovation rate

• Measures

- Renovation strategies
- Energy standards
- Financial incentives



AGRICULTURE



• 2030 Ambitions :

- - 23 % GHG emissions in WAM-scenario
- Focus on both energy and non-energy emissions

• Measures:

- Developing energy crops (WAL)
- Green deal with the agriculture sector (FL)
- Tackling food loss (FL)



RENEWABLES

Targets

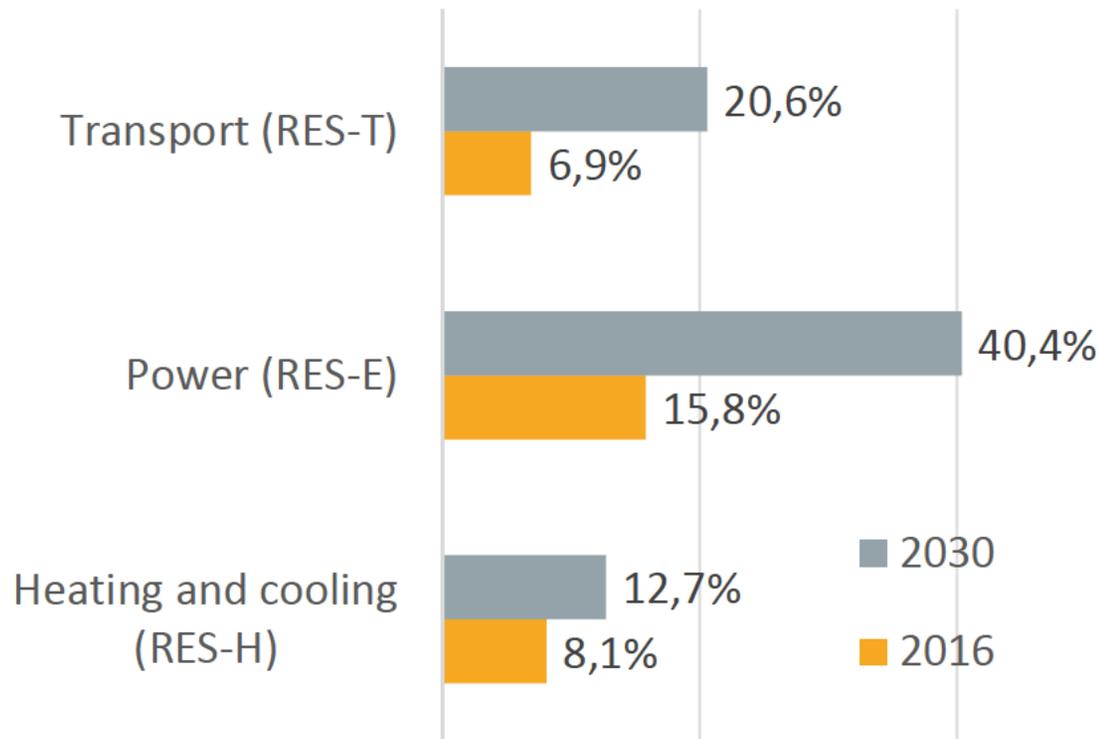
- BE contribution to EU target = 18,3% (vs 13% 2020 target)
- Offshore: 4GW (vs 1,86 GW end 2018)
- percentage biofuels: 14%
 - 1G: 7%
 - 2G: 2% by 2021-2024; 5% by 2025-2029 and 7% by 2030

Measures

- Guiding principle = cost-efficiency
- Cfr. entity specific plans:
 - FED: offshore, biofuels
 - FL: Green power: solar, wind, biogas, environmental friendly vehicles; green heat
 - WAL: green certificates, green heat
 - BRU: solar, heat pumps



RES SHARE IN GROSS FINAL ENERGY CONSUMPTION (WAM SCENARIO)





DIMENSION ENERGY EFFICIENCY

II. CONTENT OF THE NECP



ENERGY EFFICIENCY

Targets

- BE contribution to the EU target of 32,5%:
 - - 22% or 39Mtoe primary
 - - 17% or 33,1 Mtoe final

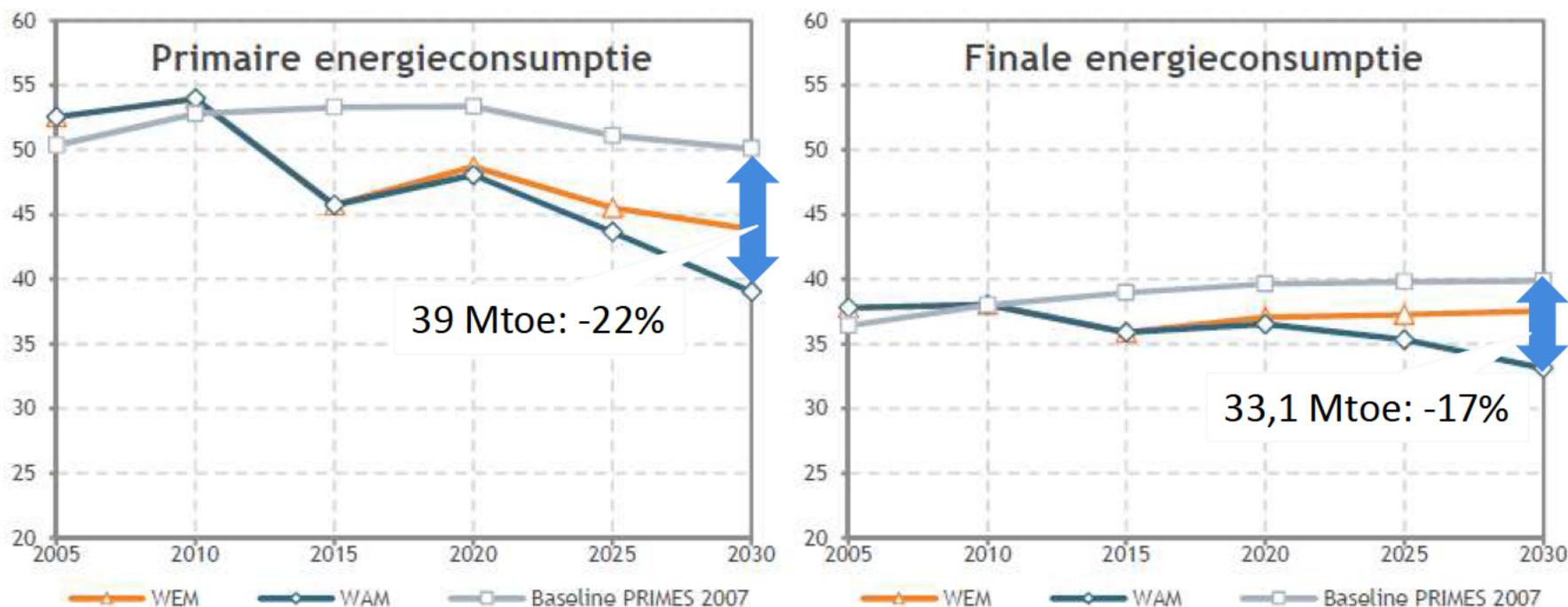
For comparison: for 2020 there is an indicative target of 18%

Measures

- Cfr. entity specific plans
- Long term renovation strategy: cfr. different regional renovation strategies
- Art. 7: specific measures per region; all focussing on alternative measures



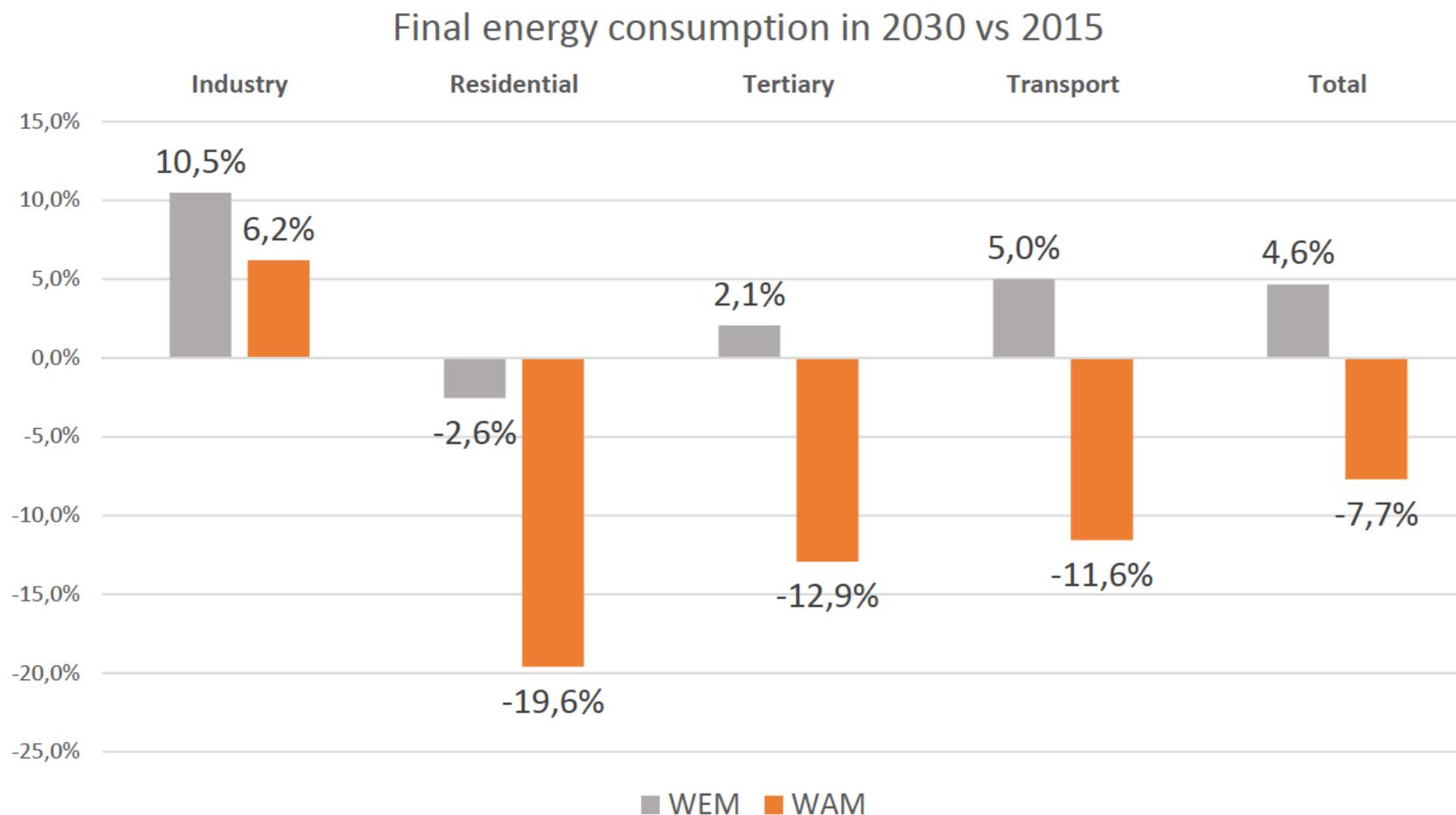
ENERGY EFFICIENCY: PRIMARY AND FINAL ENERGY SAVINGS



Bron: Eurostat (juni 2018) voor 2005-2015 (weliswaar aangepast voor vaste brandstoffen); compilatie van regionale en federale prognoses voor 2020-2030; European Energy and Transport - Trends to 2030 - Update 2007 (EC, 2008).



ENERGY EFFICIENCY BY SECTOR





DIMENSION ENERGY SECURITY

II. CONTENT OF THE NECP



ENERGY SECURITY

Policy Focus

- Policy based on system adequacy in context of nuclear phase out (loss of 5.918 MW or +/- 1/4th of total installed capacity in 2017), and need to attract necessary investments focusing on:
 - Flexible production
 - Interconnections
 - Storage
 - Demand Side Management
- Challenge: transition from L to H calorific gas between 2017 – 2029 > 1,6 mio connections



Measures

- Installing a Capacity Remuneration Mechanism: 2022-2025
- Stimulating power-to-x, new technologies such as hydrogen, electrification of transport
- Dismantling of nuclear units and radioactive waste management
- Conversion plan 2018 - 2029



ENERGYMIX WAM SCENARIO

SOURCE: EUROSTAT (JUNE 2018) FOR 2005-2015 (UPDATED FOR SOLID FUELS); COMPILATION OF REGIONAL PROJECTIONS FOR 2020-2030.

Energy source	2015	2020	2030
Solid fuels	5,9	5,2	5,9
Oil	44,6	40,8	41,9
Natural gas	25,7	23,5	35,9
Nuclear heat	12,4	18,6	0,0
Electricity	3,3	1,0	1,1
Renewable energy	6,8	9,5	13,8
Waste	1,3	1,3	1,3





DIMENSION INTERNAL MARKET

II. CONTENT OF THE NECP



Targets/priorities

- EU Interconnection goal of 15% will be surpassed > interconnection rate of +- 30% by 2030
- Energy transmission infrastructure:
 - Brabo - NL
 - Nemo – VK
 - Alegro – DE
- Market integration in framework of PLEF
- Deployment of smart meters
- Flexible energy system
- Reducing Energy Poverty

Measures

- Evaluation existing electricity and gas infrastructure
- Continuation and enforcement of regional cooperation in context of PLEF and NSEC
- Better attune demand and use and attracting the right investments to obtain a balanced energy mix
- Consumer protection policies and energy poverty plans





DIMENSION R&D, INNOVATION and
COMPETITIVENESS

II. CONTENT OF THE DRAFT NECP



Targets/priorities

- 3% R&D target (as % of BNP)
- EU: SET-plan via BE BELSET platform
- Hydrogen:
 - essential technology in the energy transition > power-to-gas
- Maintaining and enhancing competitiveness



Measures

- Investmenttools/funds:
 - Energy transition fund
 - 20 mio €/y until 2030
 - National Investment pact:
 - 60bn € until 2030 for energy projects via public-private financing
 - Regional initiatives and financing instruments
- Competitiveness: "energienorm/norme énergétique" (~ energy standard) & monitoring of energy bills





- I. Where are we now?
- II. What's next?

III. STEPS TOWARDS THE FINAL NECP



III. STEPS TOWARDS THE FINAL NECP

Where are we now?

> DONE/ongoing

- Common recommendations strategic advisory councils
- Public consultation: 4/6 – 15/7
- EC recommendations
- Regional consultation, 4/9



What's next?

> TO DO/ongoing

- Results/analysis public consultation
 - NECP website
- Modifications entity specific plans and proposals for adaptations draft NECP
- Drafting and political deliberation process and approval final NECP *by 31/12*





- I. Common Penta chapter
- II. BE elements



IV. CROSS BORDER ASPECTS



IV. CROSS BORDER ASPECTS

...An Iterative process towards a structural dialogue and common chapter:

1. Benelux Declaration, 11/6/18
2. Kick-off meeting regional dialogue energy & climate, 26/6/18
3. Penta Declaration, 4/3/19:
→ <http://www.benelux.int/files/8115/5179/5132/politiekeverklaring4maart.pdf>

>>> *resulting in common Penta chapter agreed on by energy ministers on 6/6/19*

4. NSEC, ministerial 20/6/19:
> common chapter under 1.4. NECPs



IV. CROSS BORDER ASPECTS: COMMON PLEF

CHAPTER

✓ *DECARBONISATION OF THE ELECTRICITY SECTOR*

- ✓ Common vision on decarbonized electricity in Penta by 2050
- ✓ Start cross-border cooperation on renewable electricity
- ✓ Integration of electro-mobility options and services without regional restrictions
- ✓ Explore the options for carbon pricing and their cross-border impact on electricity prices

✓ *INTERNAL ELECTRICITY MARKET*

- ✓ Market integration
- ✓ Flexibility

✓ *SECURITY OF SUPPLY*

✓ *FINANCING INSTRUMENTS FOR THE ENERGY TRANSITION*



IV. CROSS BORDER ASPECTS: BE FOCUS

- Security of Supply
 - CRM, L-H conversion
- Crisis management
 - Pentex exercise
- Electricity market functioning
 - Flow-based market coupling
- Flexibility options
 - Hydrogen, storage, DSM, power-to-X, Evs

➔ *Guaranteeing that the PLEF contributes fully to the energy transition and the integration of renewable energy into the electricity grid at a regional level*

