

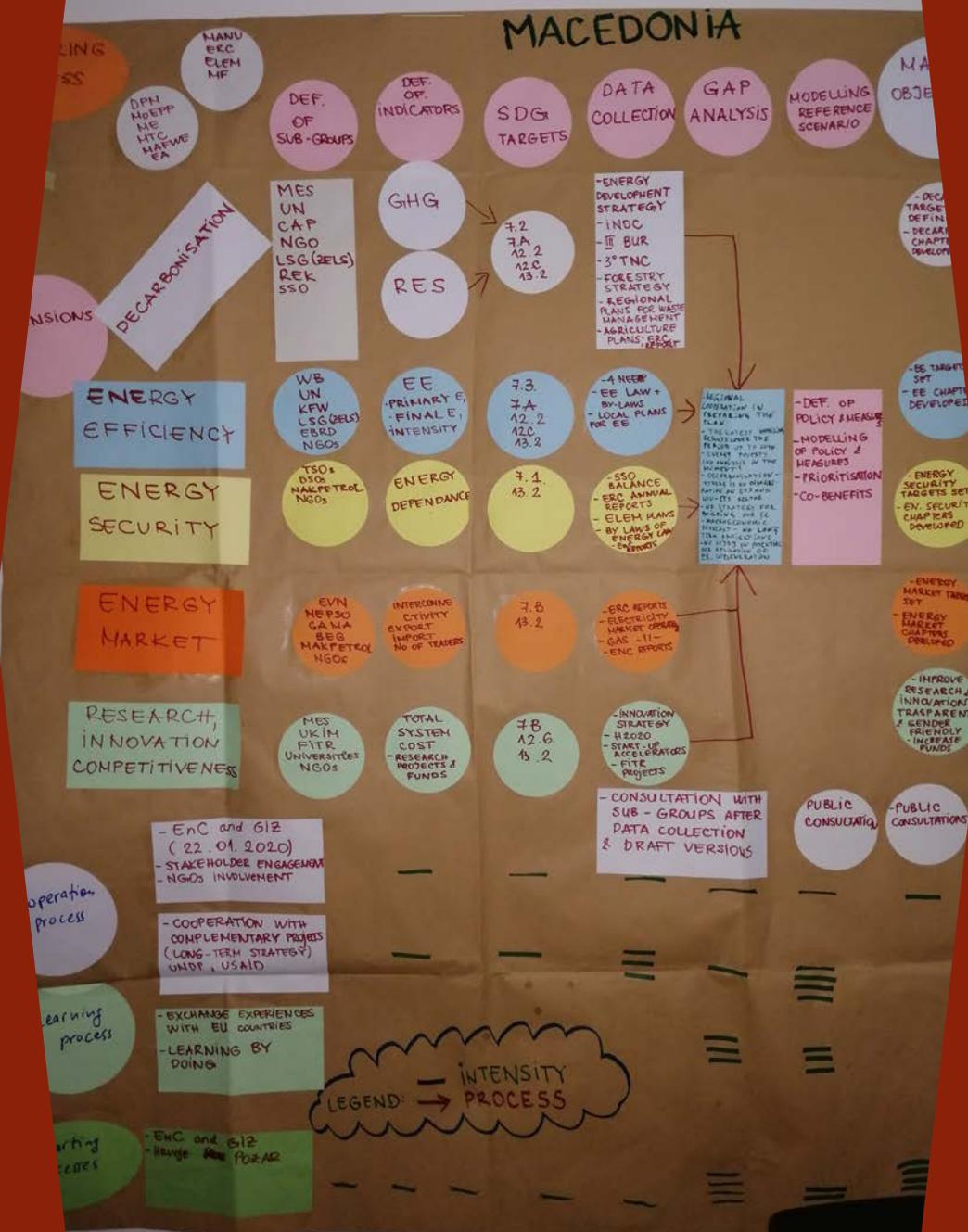


# 25th Energy Community Electricity Forum

## Pushing decarbonisation forward

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Date 16.06.2020

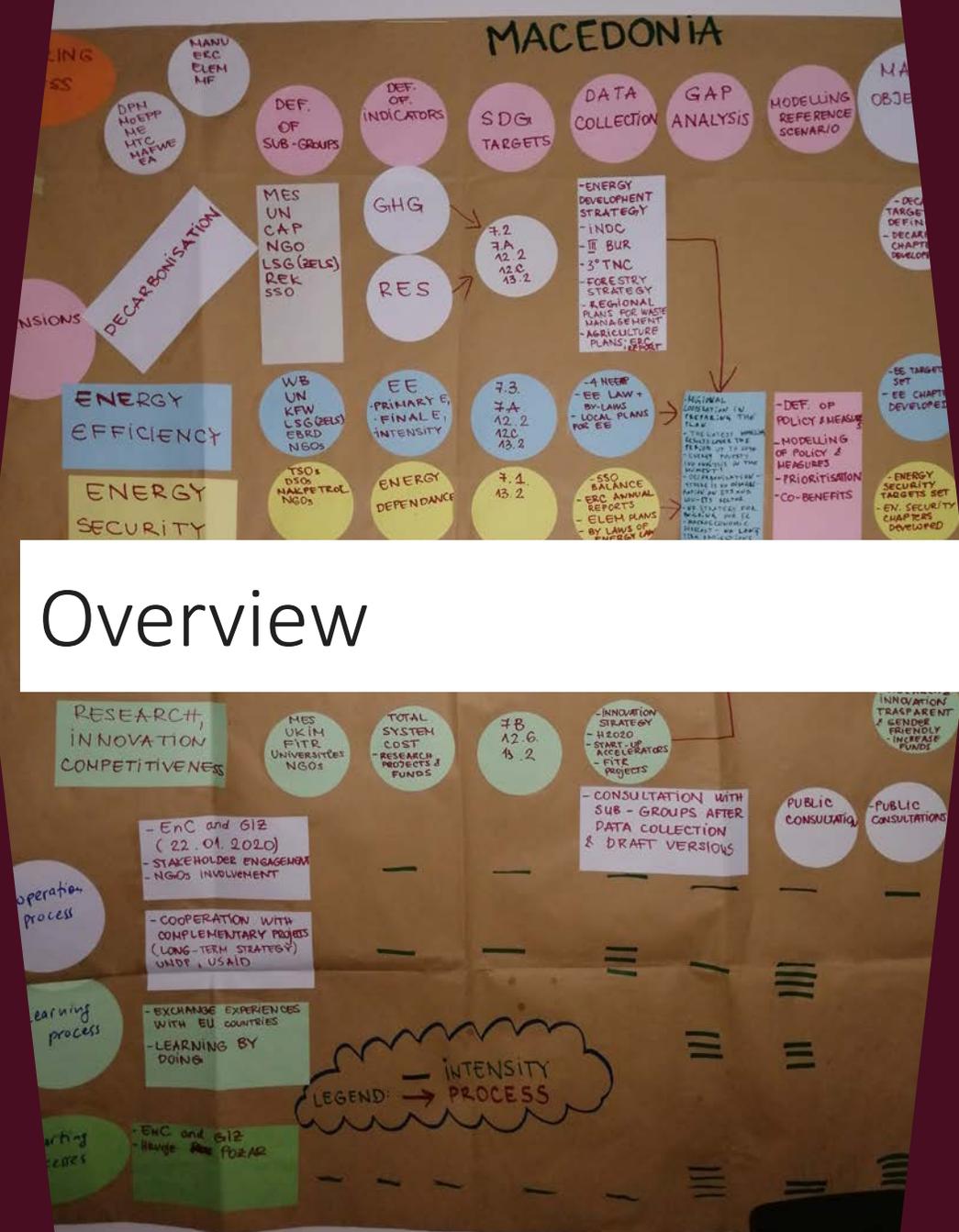


# Overview

- Where are we now
- Targets and objectives
- Costs and benefits

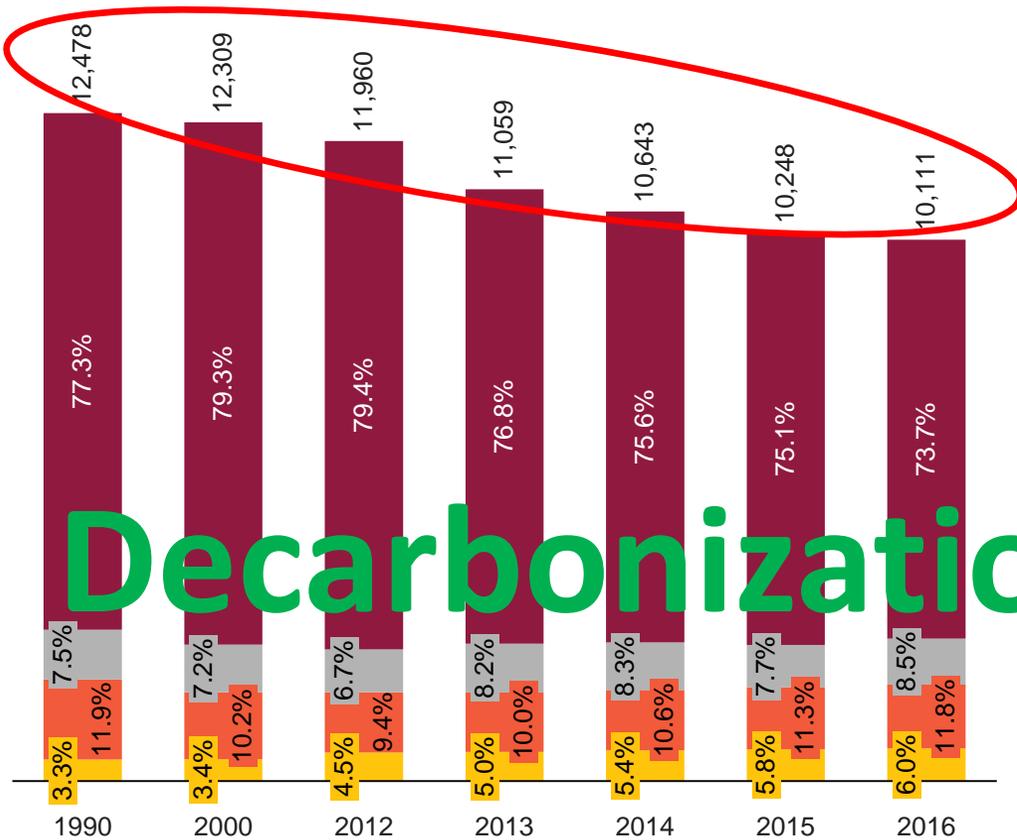
“The world as we have created it is a process of our thinking. It cannot be changed without changing our thinking”

Albert Einstein

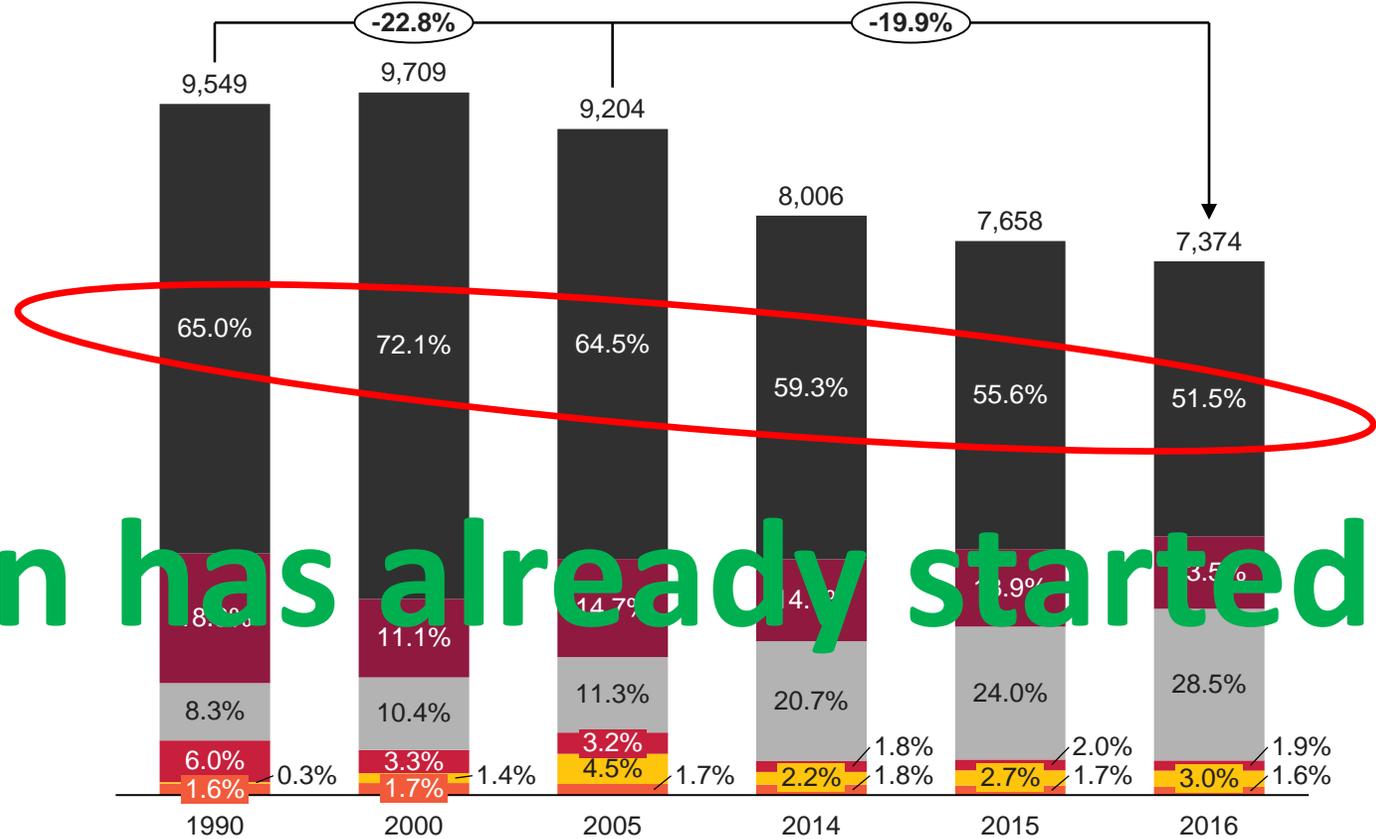


# Where are we now

Total GHG emissions by Sectors (in Gg CO<sub>2</sub>-eq)



GHG emissions in Energy sector, by category (in Gg CO<sub>2</sub>-eq)



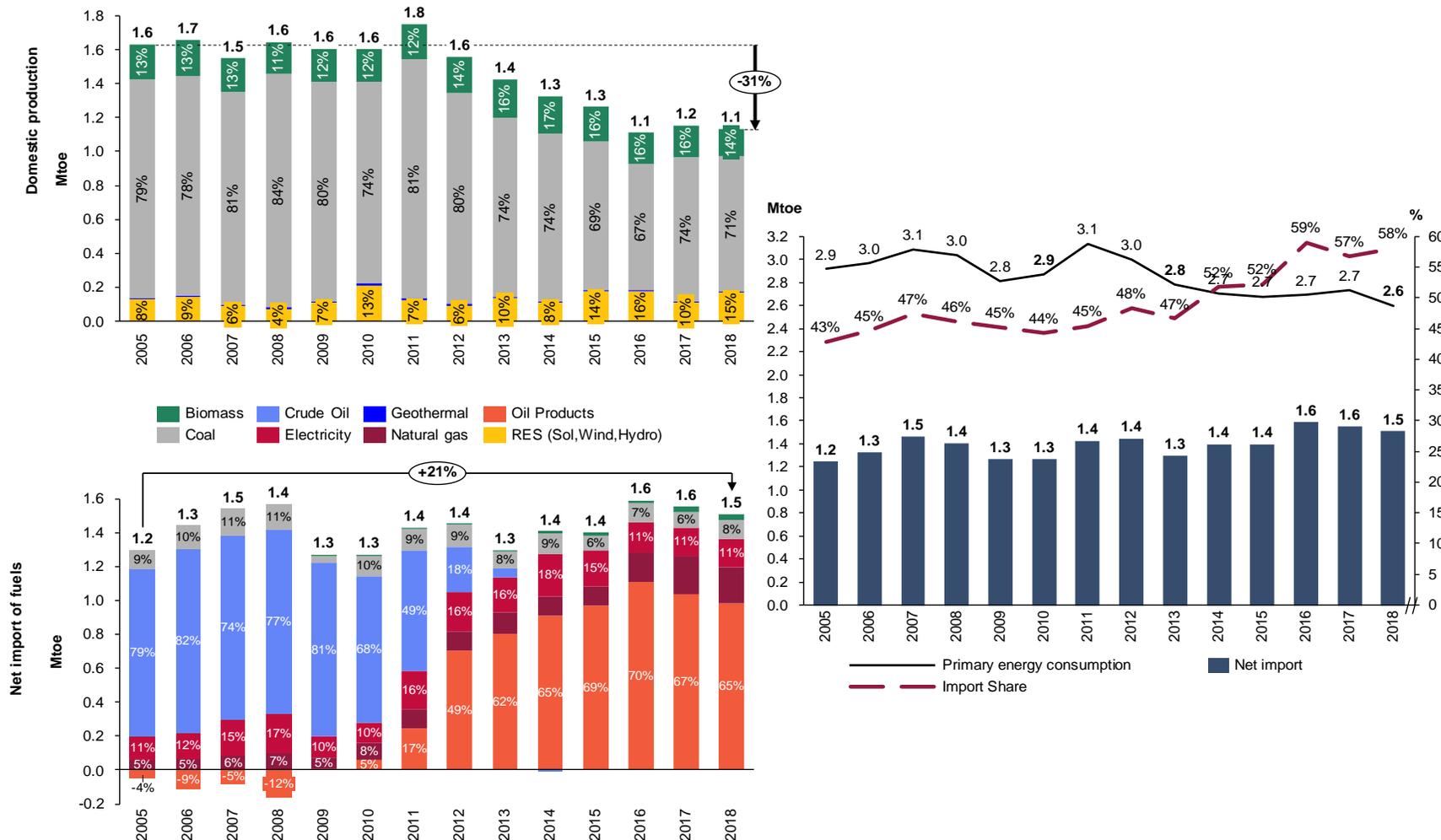
Decarbonization has already started?

- Energy
- Industrial Processes and Product Use
- Agriculture (excl. FOLU)
- Waste

- Energy Industries
- Manufacturing Industries and Construction
- Transport
- Other Sectors
- Non-Specified
- Fugitive emissions from fuels - Solid Fuels
- Fugitive emissions from fuels - Oil and Natural Gas

# Where are we now

Current energy mix by domestic resources and imports, as well as import dependence, 2005-2018

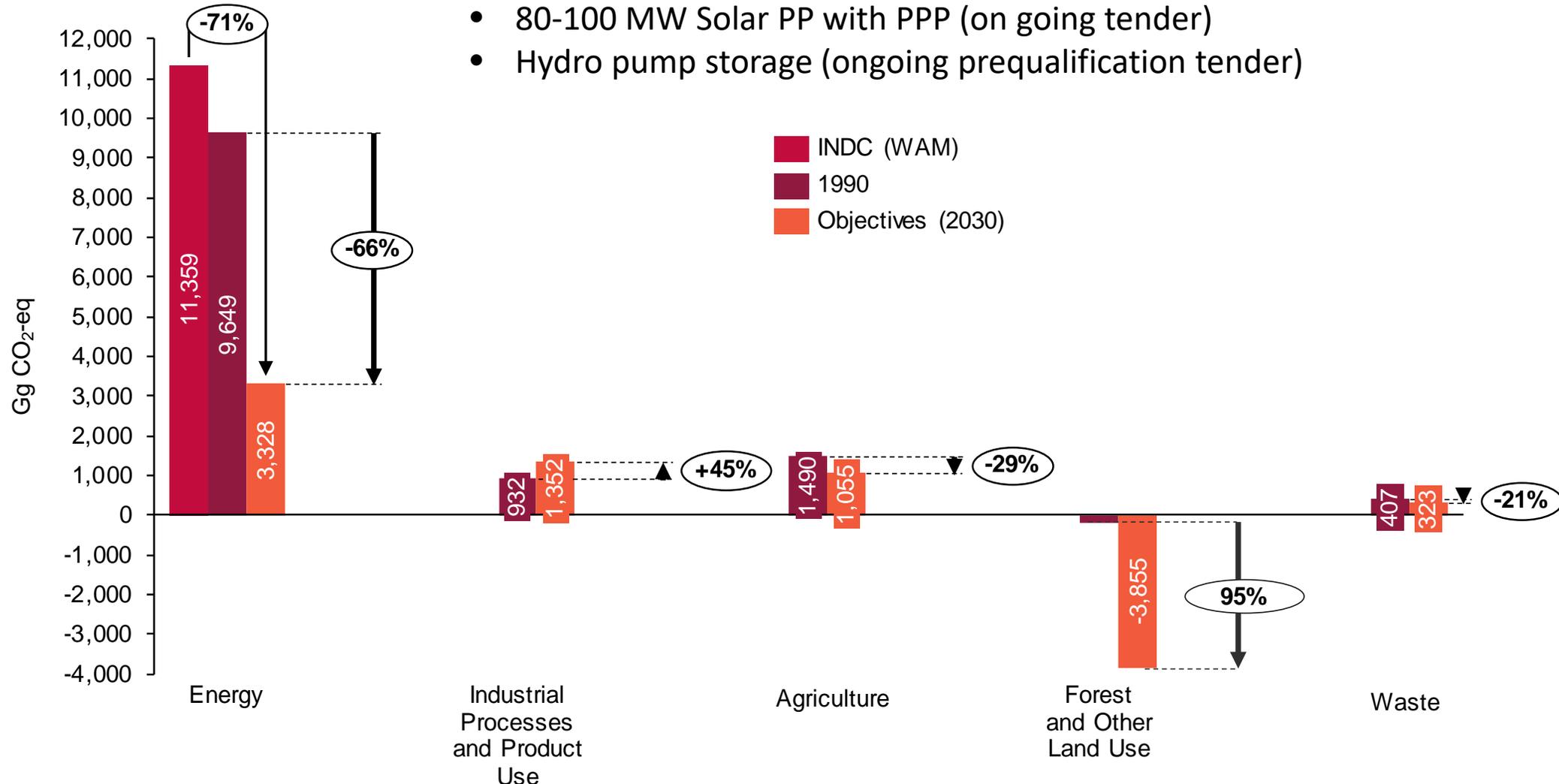


- The import of electricity is increasing because most of the companies participate in the open market and are not obliged to buy electricity from domestic production.
- 2005-2015 the electricity import  $\uparrow$ 60%, 2015-2018  $\downarrow$ 24% higher CHP production,
- Import dependence is almost 60% in the last three years of the analyzed period, which is around 17% points more than 2005

# Targets and objectives - Sectoral targets

82% reduction of GHG emission in 2030 compared to the 1990 level

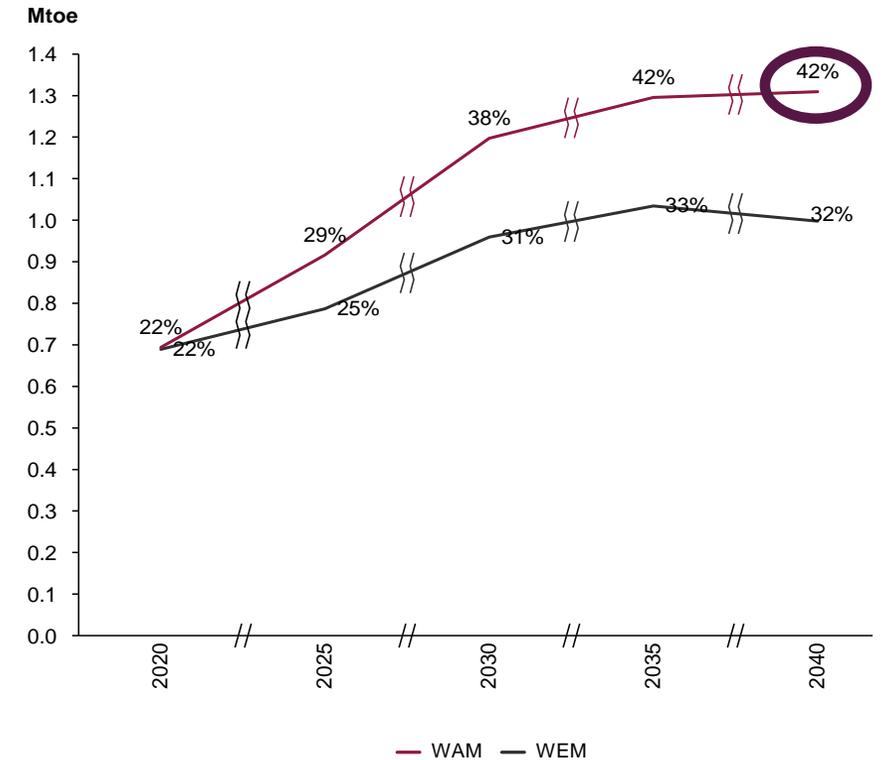
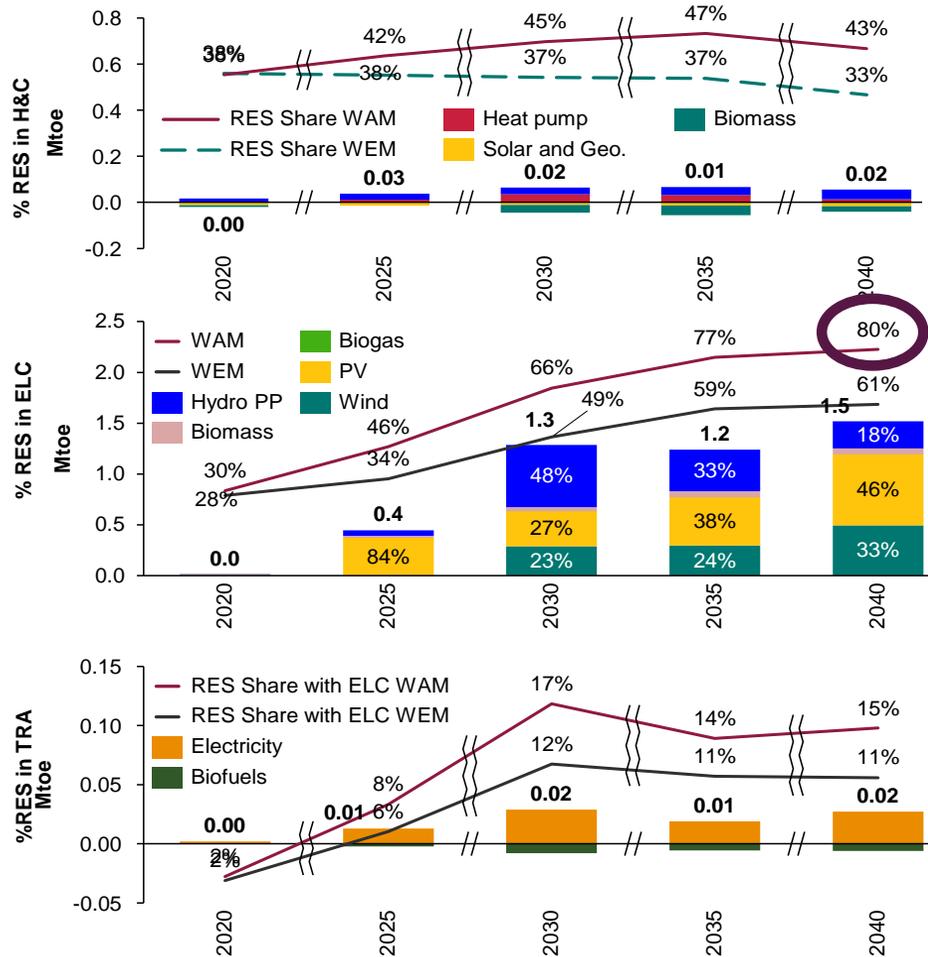
- Feed-in premium (on state and private land ~60 MW)
- 10 MW under construction (at least 30MW more)
- 80-100 MW Solar PP with PPP (on going tender)
- Hydro pump storage (ongoing prequalification tender)



# Targets and objectives

Difference between WEM and WAM in indicative projections of **RES share in gross final energy consumption** and in different sectors (heating and cooling, electricity and transport) as well as per technology in each of these sectors

- Electrification of the heating and cooling sector

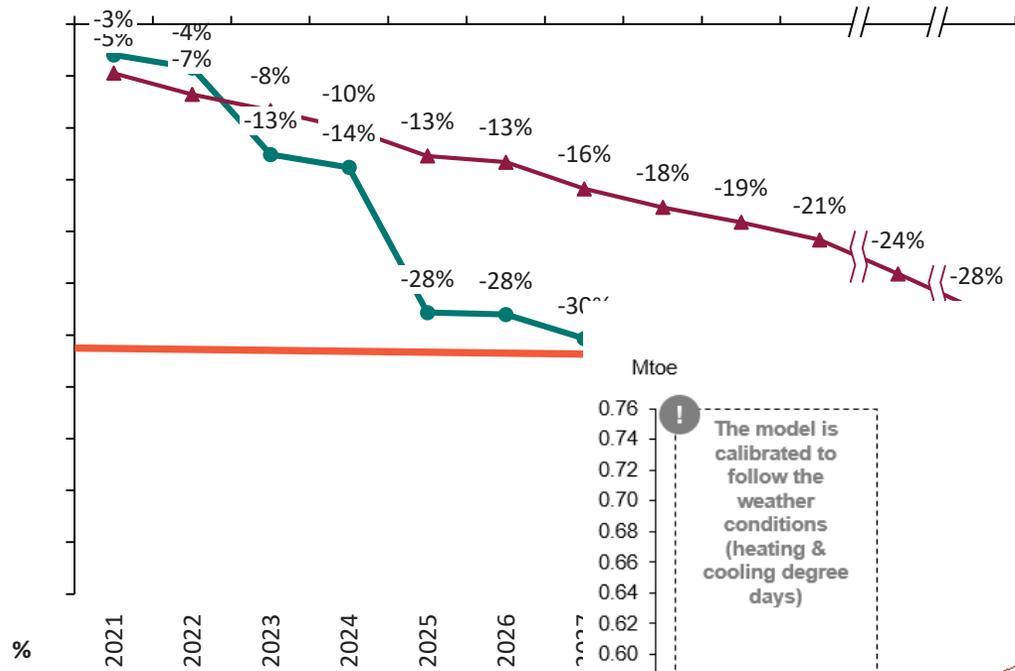


- Electrification of the transport sector

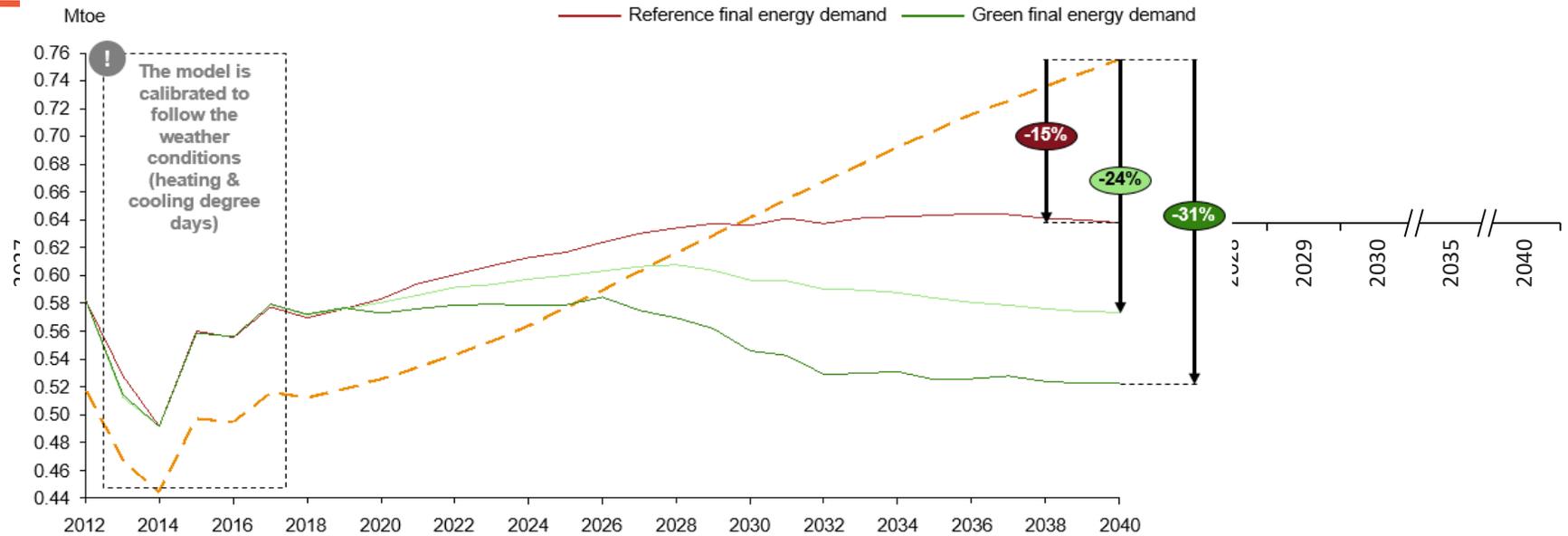
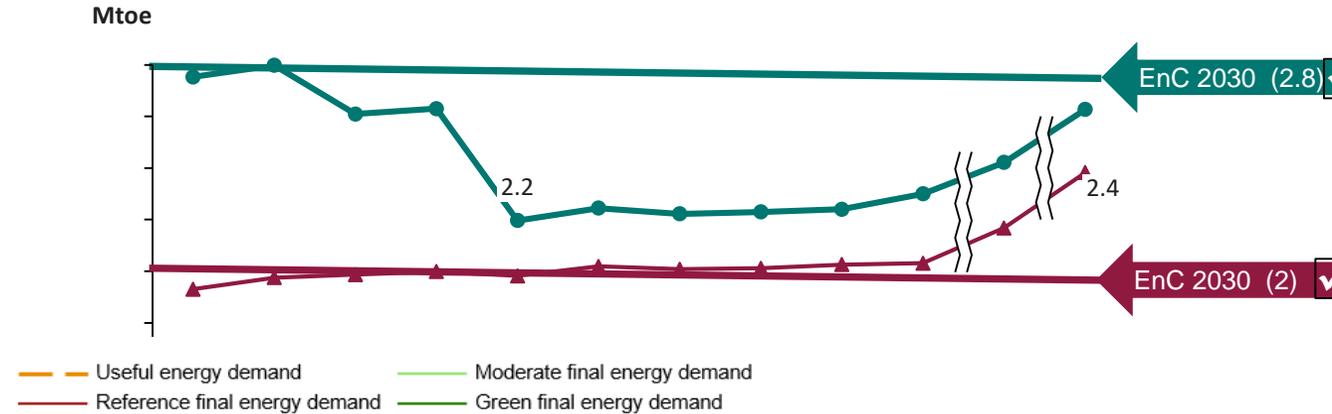
# Targets and objectives – energy efficiency

## Energy efficiency first

Energy efficiency trajectory primary energy savings compared to BAU scenario

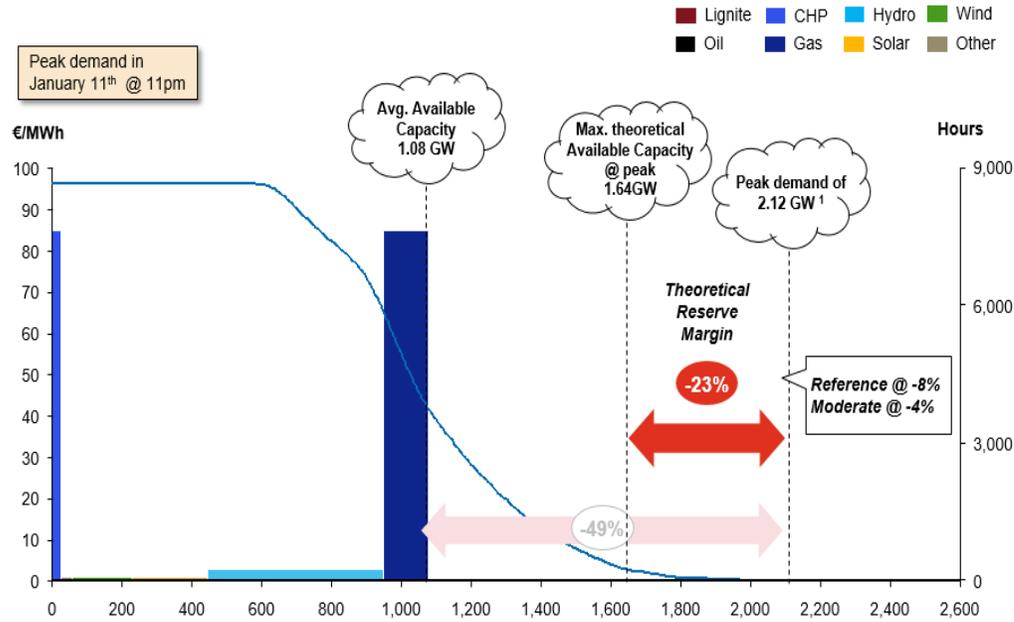


Energy efficiency trajectory final energy savings compared to BAU scenario

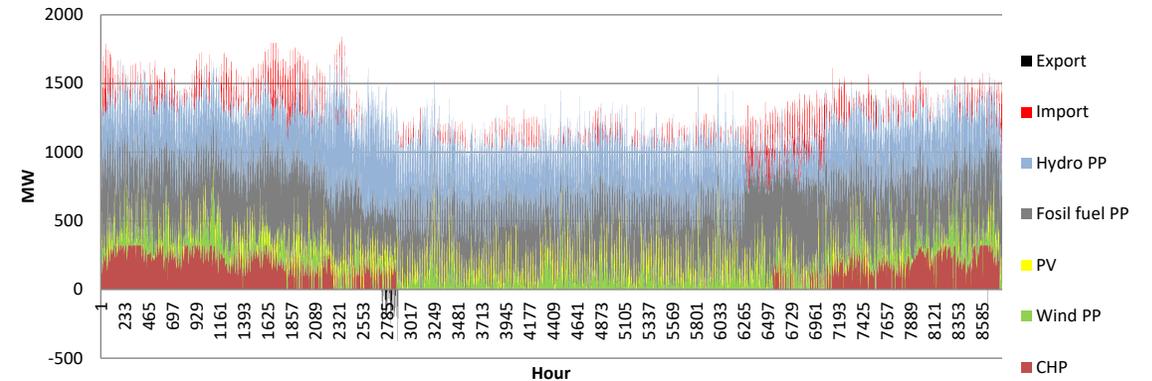
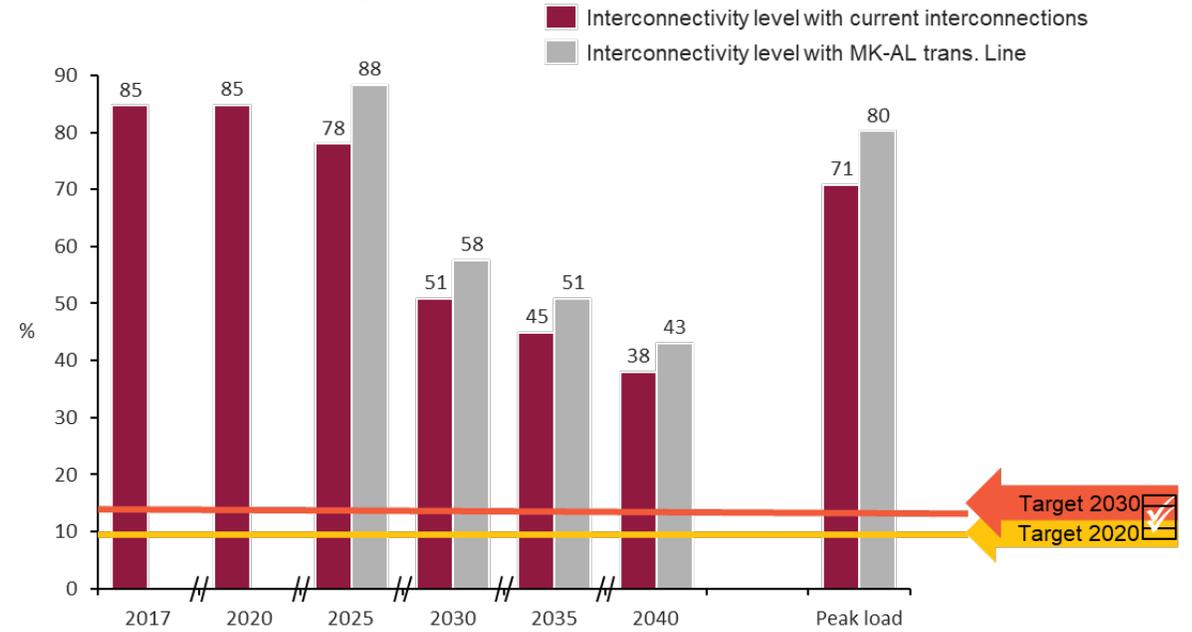


# Energy security potential problems

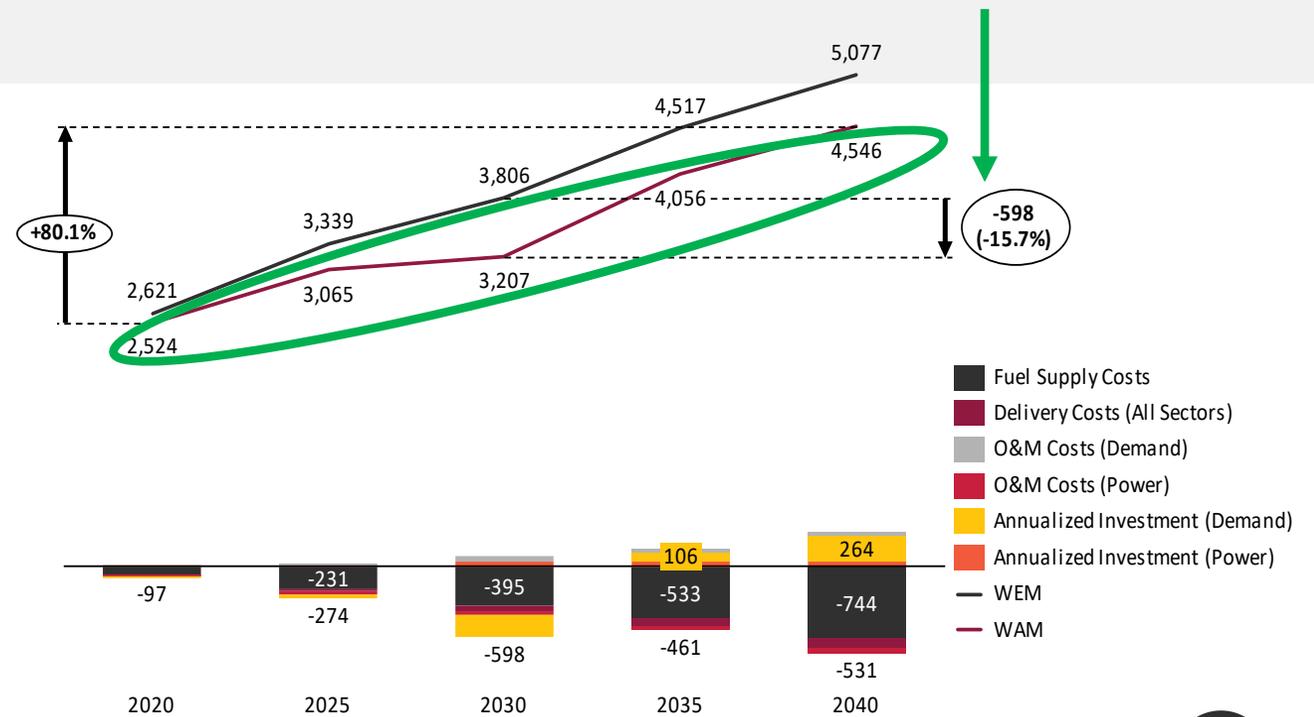
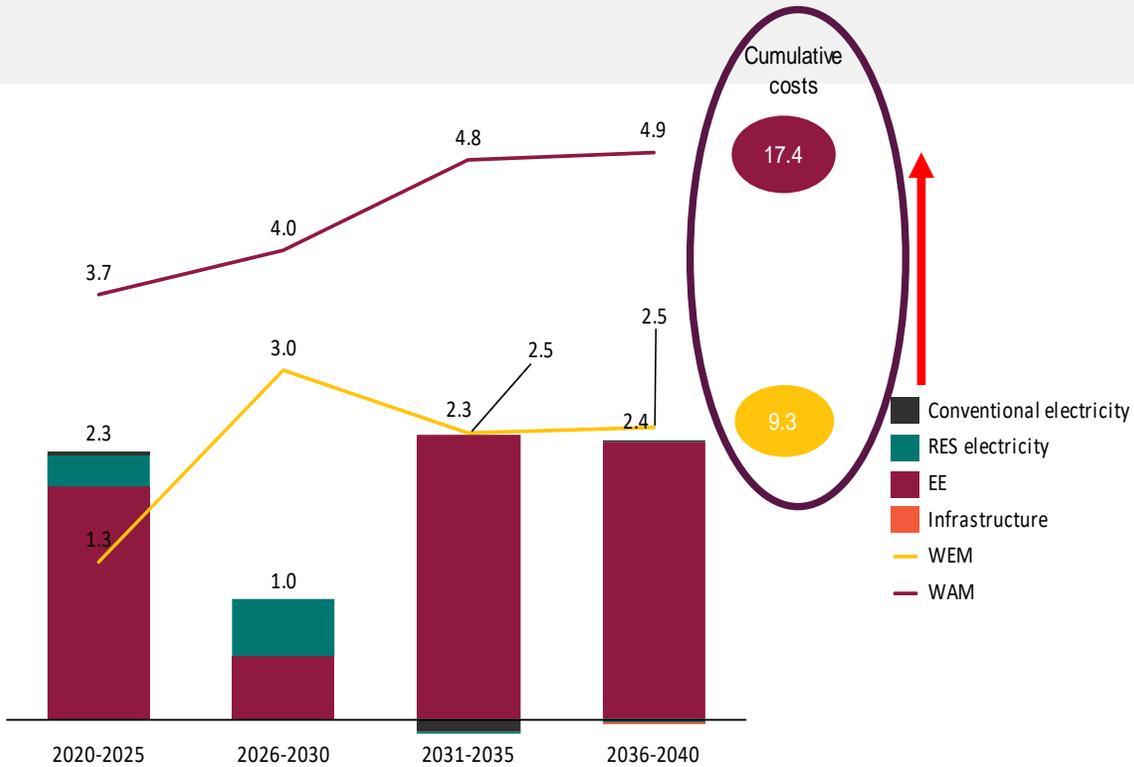
## Capacity



## Interconnectivity

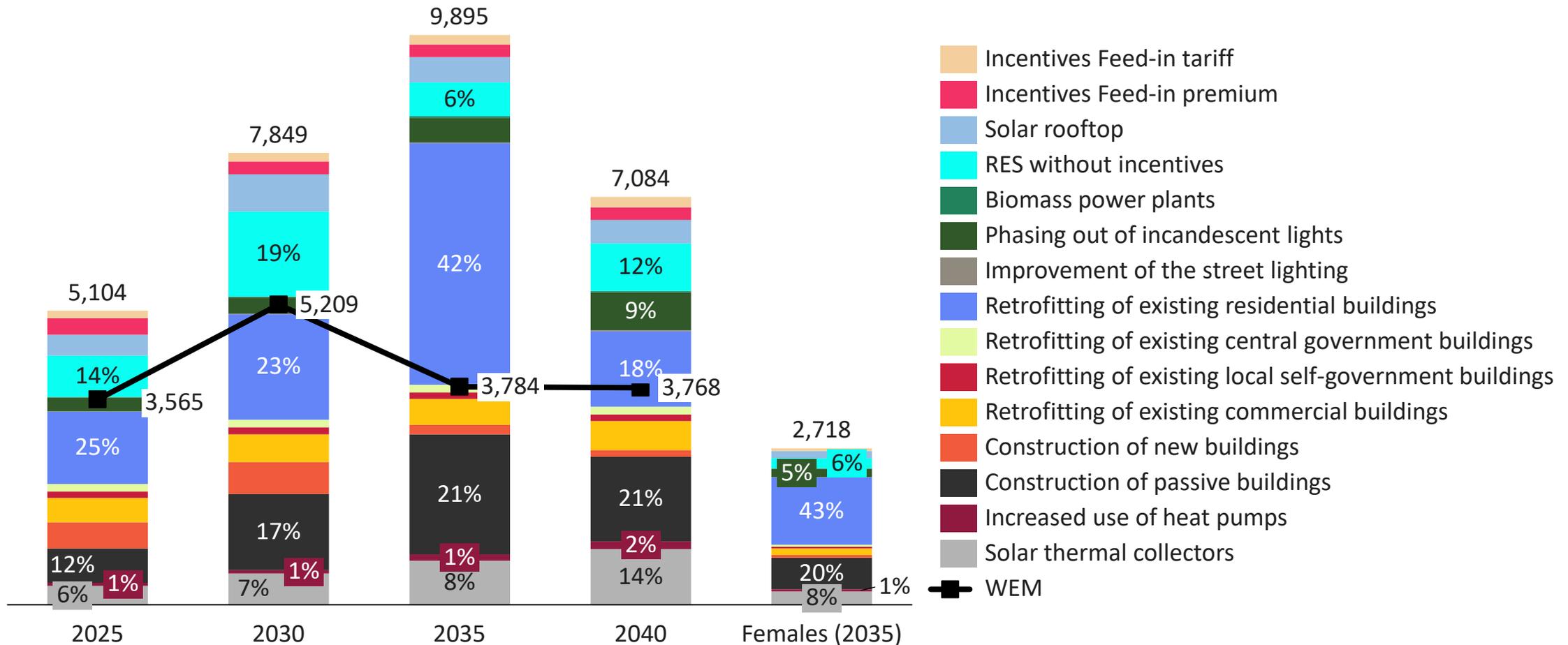


# The cost of decarbonization

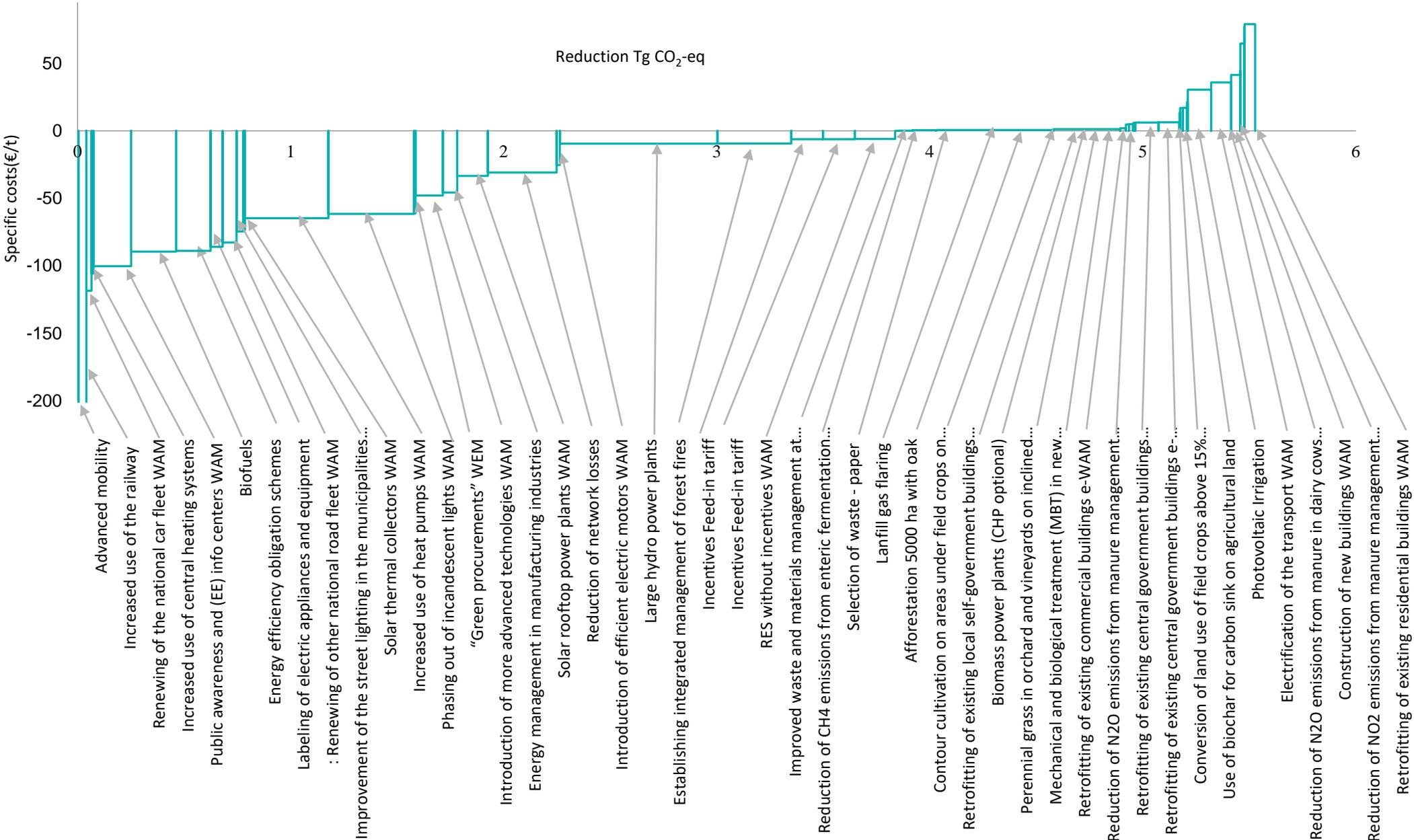


# Benefits from decarbonization

## Green jobs



# Benefits from decarbonization



# MACEDONIA



Thank You



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# The cost of decarbonization

