



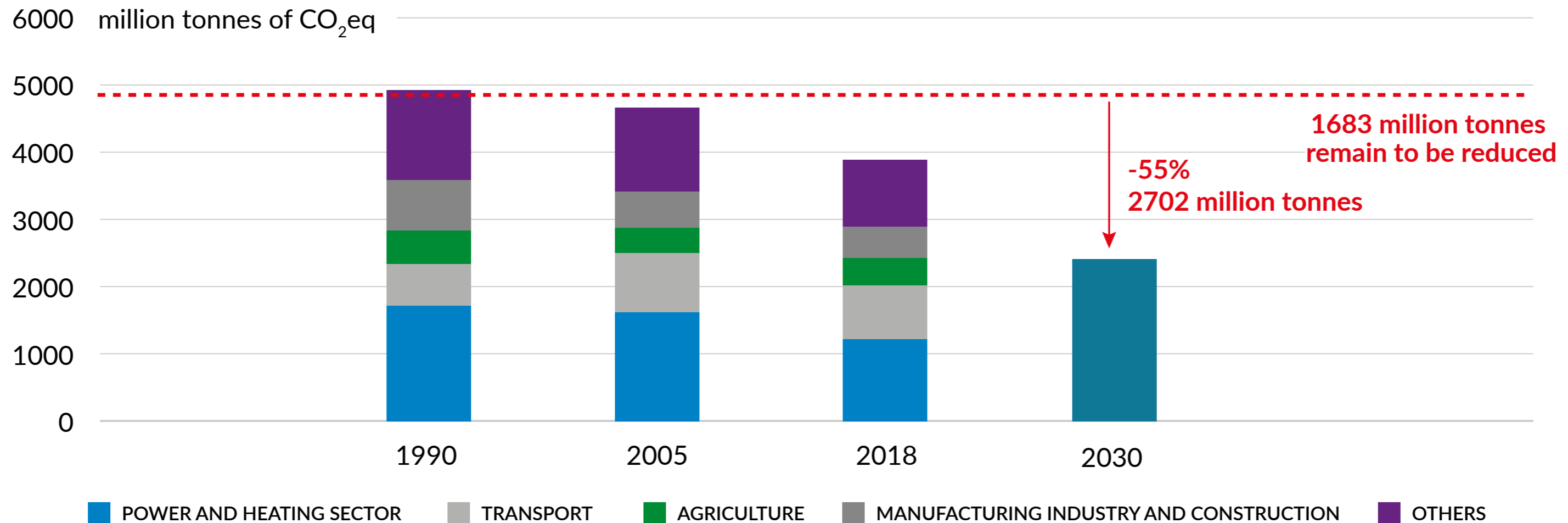
HOW CAN POLAND ACHIEVE INCREASED GHG EMISSION REDUCTION TARGETS BY 2030?

Objectives of the analysis

- We determine the GHG emission reductions resulting from the so-called flagship projects, i.e. actions that are inevitable and around which social and political consensus can be built.
- We estimate Poland's share in the EU's 55% target.
- We count the reduction gap to be supplemented by other, not yet defined projects in industry, agriculture and forestry.

2030–new EU climate target

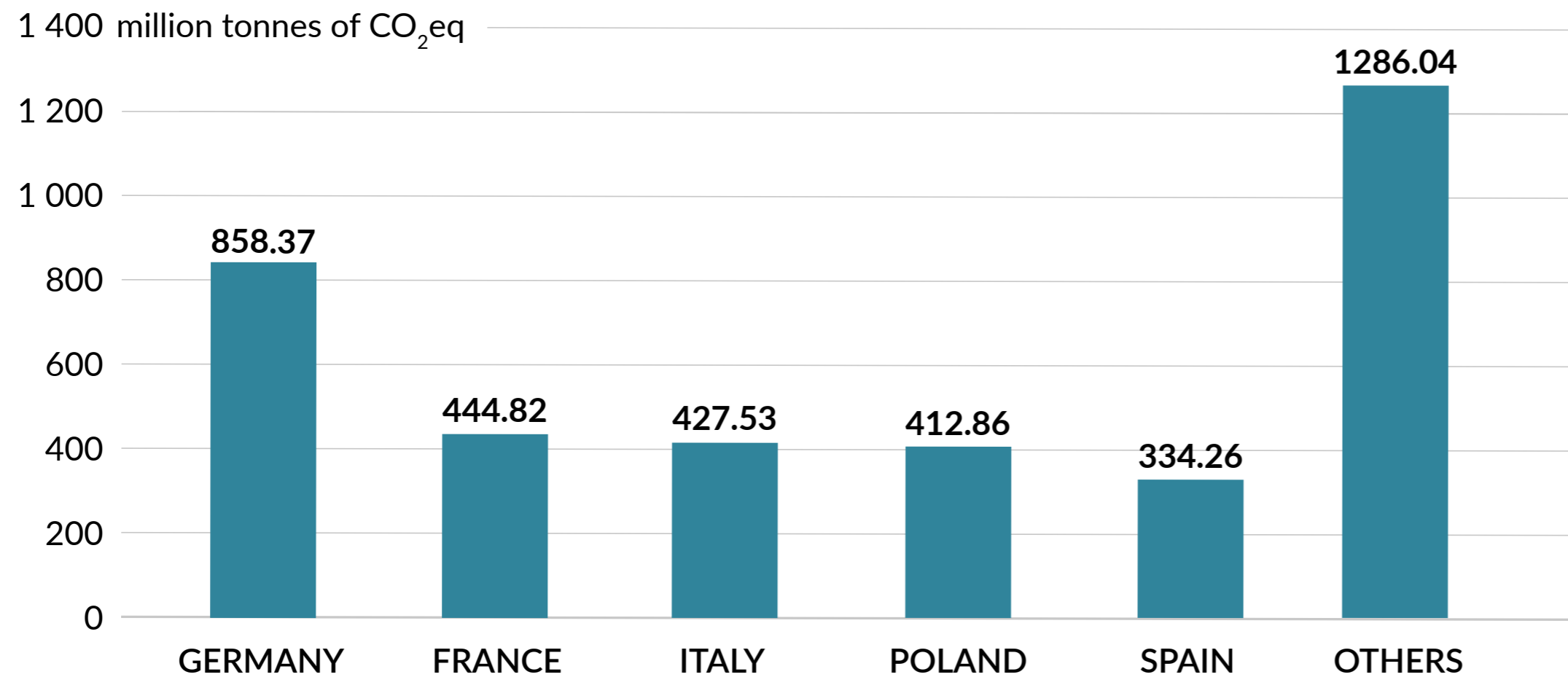
ANNUAL EU-27 GHG EMISSIONS IN RELATION TO THE EU 55% GHG REDUCTION TARGET



Note: the category 'Others' mainly includes combustion of fuels not included in other sectors.
Source: based on data of the Eurostat, EEA.

Total annual GHG emissions in Poland and EU-27 in 2018

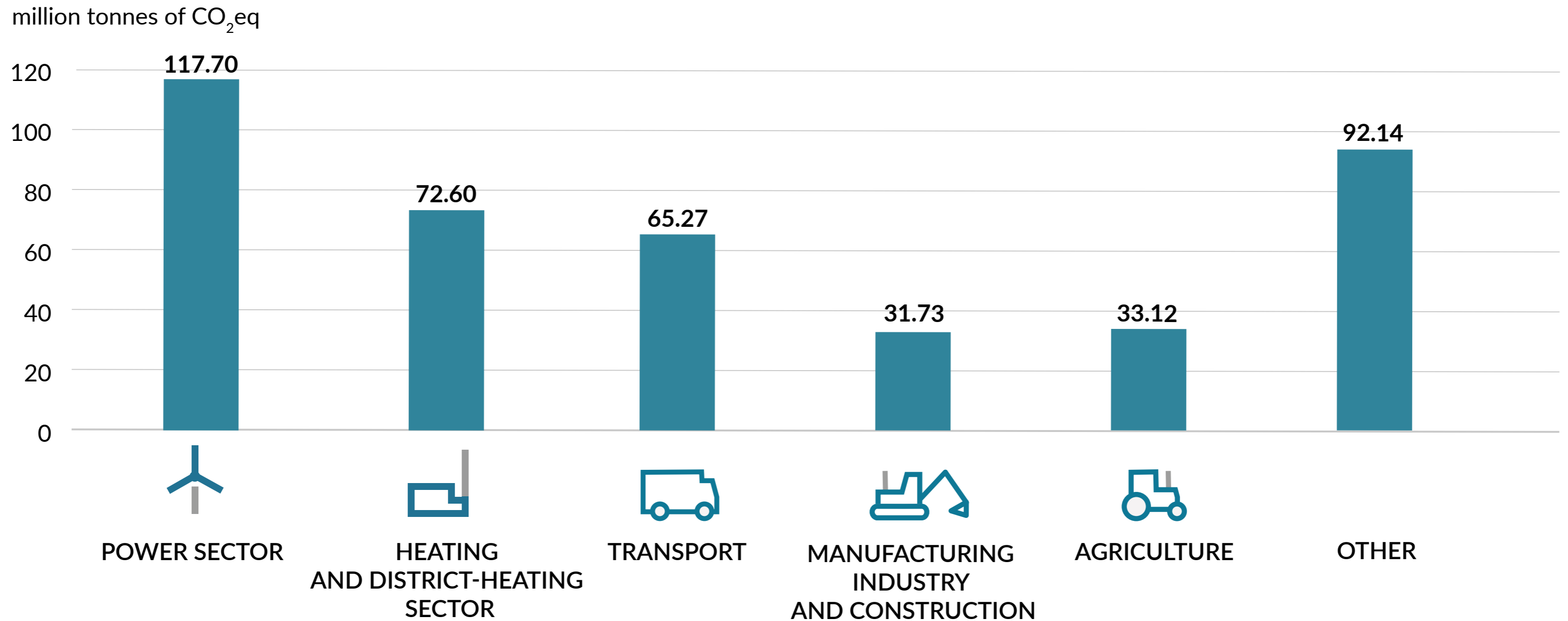
ANNUAL TOTAL GHG EMISSIONS IN THE EU-27



GHG emissions per capita [t]	
Poland	10.87
Germany	10.34
Spain	7.12
Italy	7.08
France	6.64
EU average	8.42

Note: the category 'Others' includes the other EU-27 countries.
Source: based on the data of Eurostat.

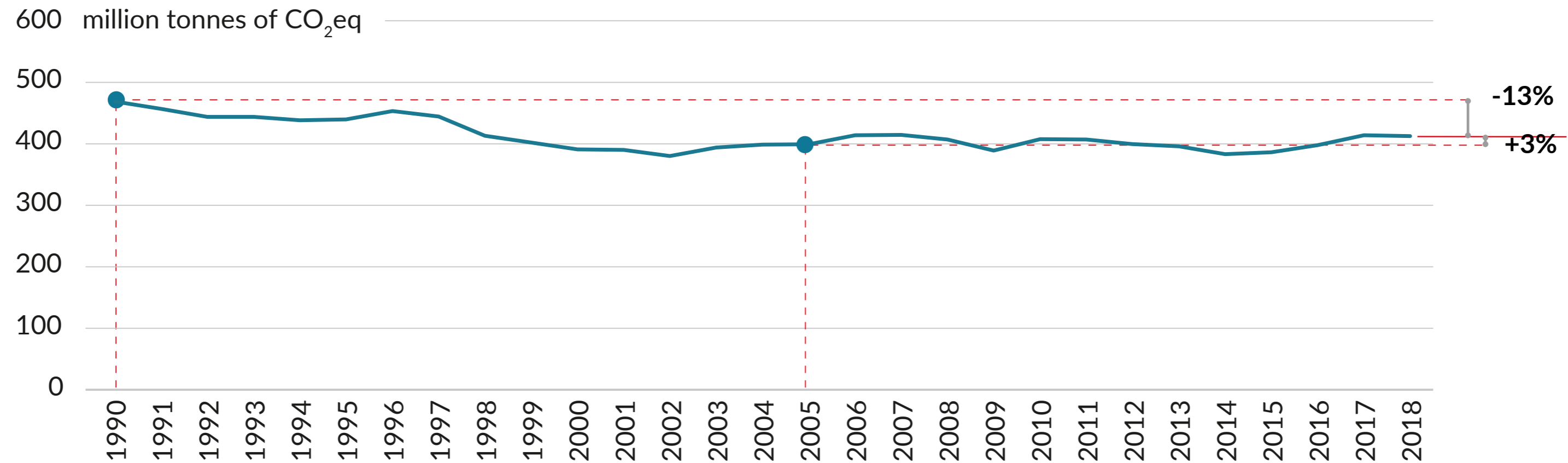
GHG emissions structure in Poland by sectors in 2018



Note: the category 'Other' mainly includes combustion of fuels not included in other sectors.

Source: based on the data of Eurostat, EEA.

Changes in GHG emissions in Poland over the years



FLAGSHIP PROJECTS

Our approach

- We take into account the GHG emission reductions in Poland achieved in the period 1990-2018–13%.
- We define flagship projects in the power sector, transport, heating and industry.
- We calculate the projected decrease in emissions resulting from the implementation of these projects.
- We define the reduction gap to be filled by other projects.

Note: the result is corrected with actual reductions in the ETS sector for which 2019 verified data are already available. In the ETS, emissions decreased by 16.3 million tonnes of CO₂eq compared to 2018.

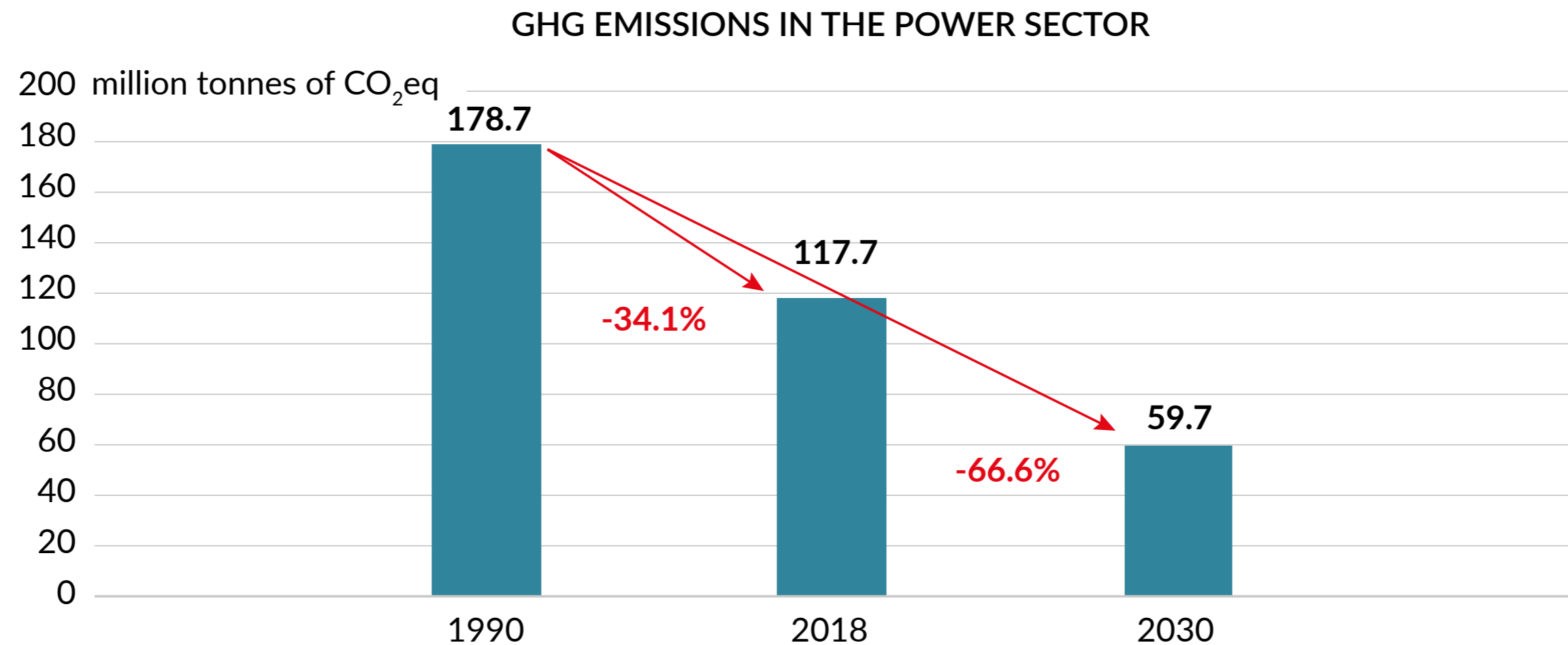
What are flagship projects?

- Concrete actions that not only meet the emission reduction targets, but are necessary from the perspective of:
 - energy security (e.g. falling domestic coal production);
 - the need for investment in energy efficiency and new generation sources;
 - improving air quality.
- Partly the flagship projects have already been declared important and to be implemented by the government.



Flagship project—change of mix in the power sector

- By 2030: replacement of coal, especially lignite by RES and partly natural gas;
- Emissions reduction in this sector—66.6%.





What does it mean?

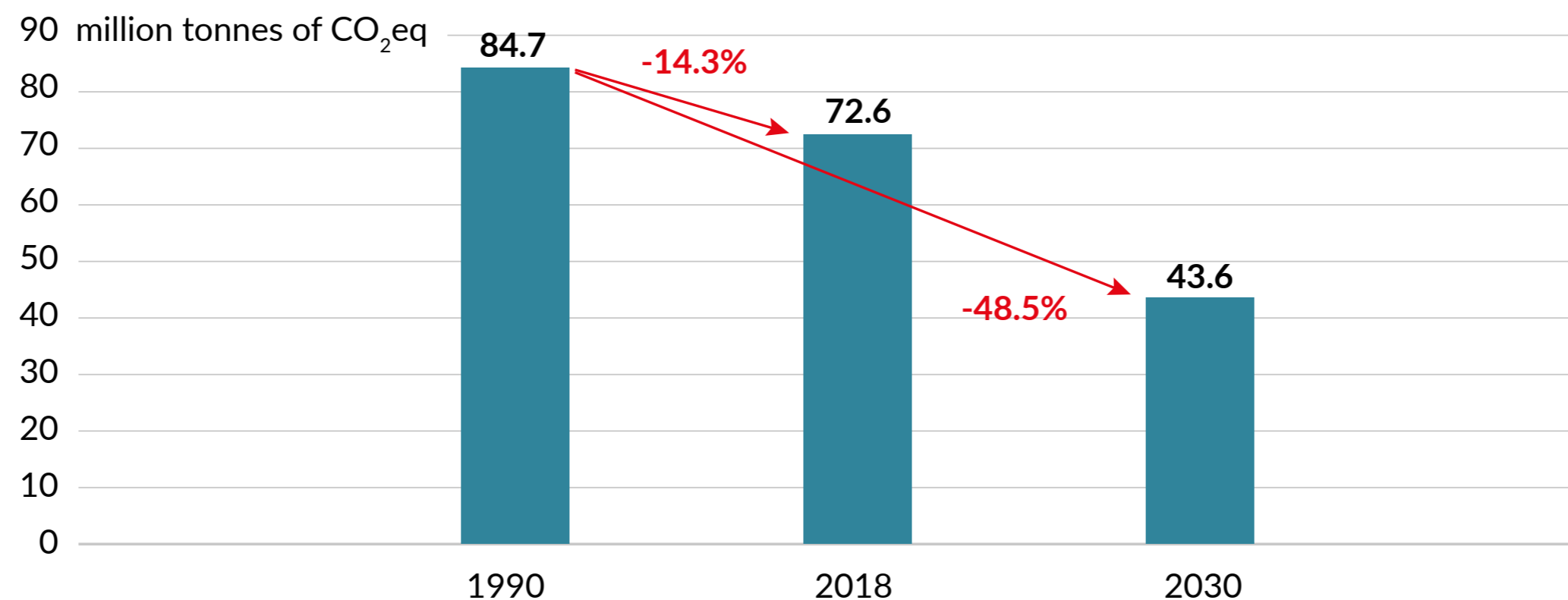
- Nearly complete phase-out of lignite capacities, shutdown of the last units by 2032;
- Significant reduction of hard coal power;
- Filling the coal gap in Poland with renewable sources and partially with gas.



Flagship project—clean heat

- Moving away from coal in households to 2030 and partially in the heating system; improving the energy efficiency of buildings;
- Emissions reduction in the sector—48.5%.

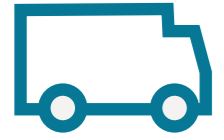
GHG EMISSIONS IN THE HEATING SECTOR





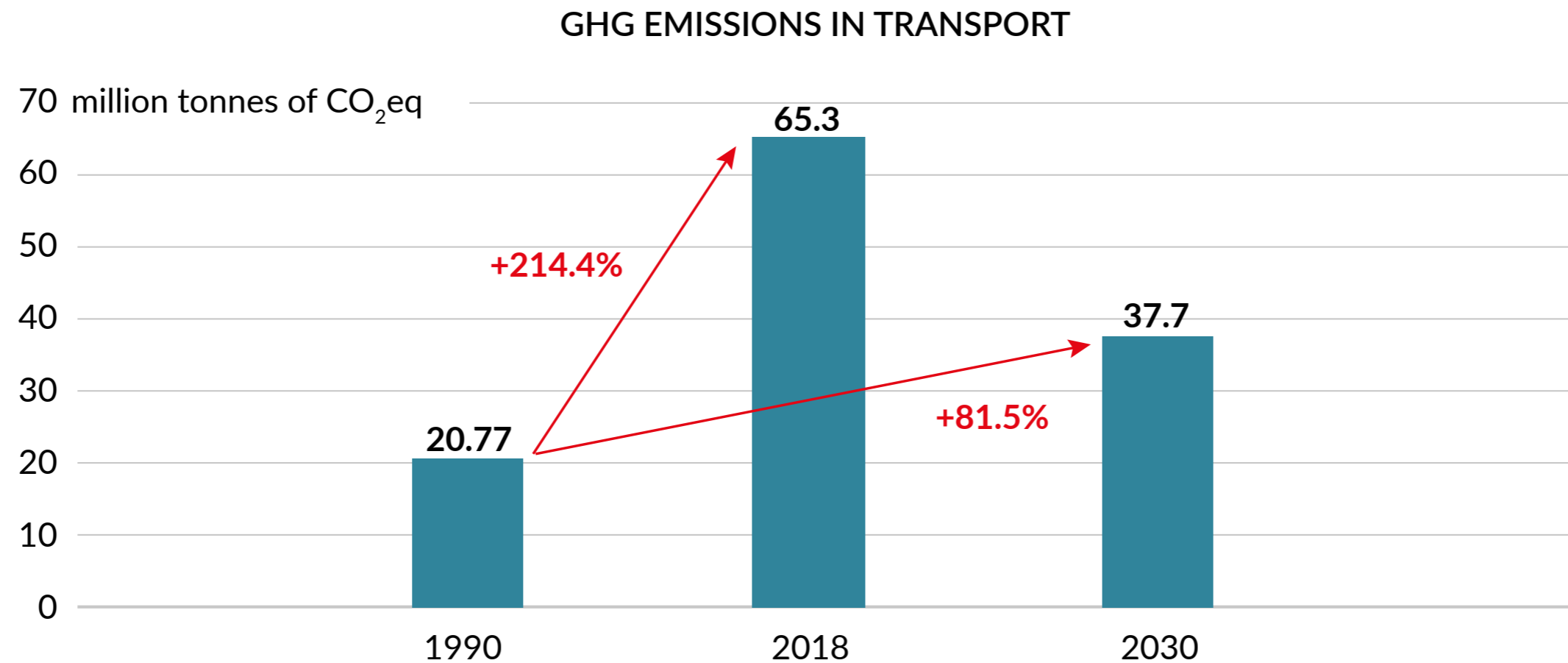
What does it mean?

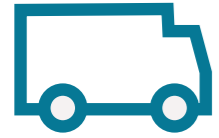
- End of hard coal in households by 2030;
- Limiting the share of coal in system heating; full abandonment of coal by 2035;
- Increase in the share of RES in the entire heat supply area to 39% in 2030;
- 24% reduction in final energy consumption by 2030 compared to 2015 levels.



Flagship project—electrification of transport

- Electrification of transport;
- Slowing and reducing emissions compared to current levels.





What does it mean?

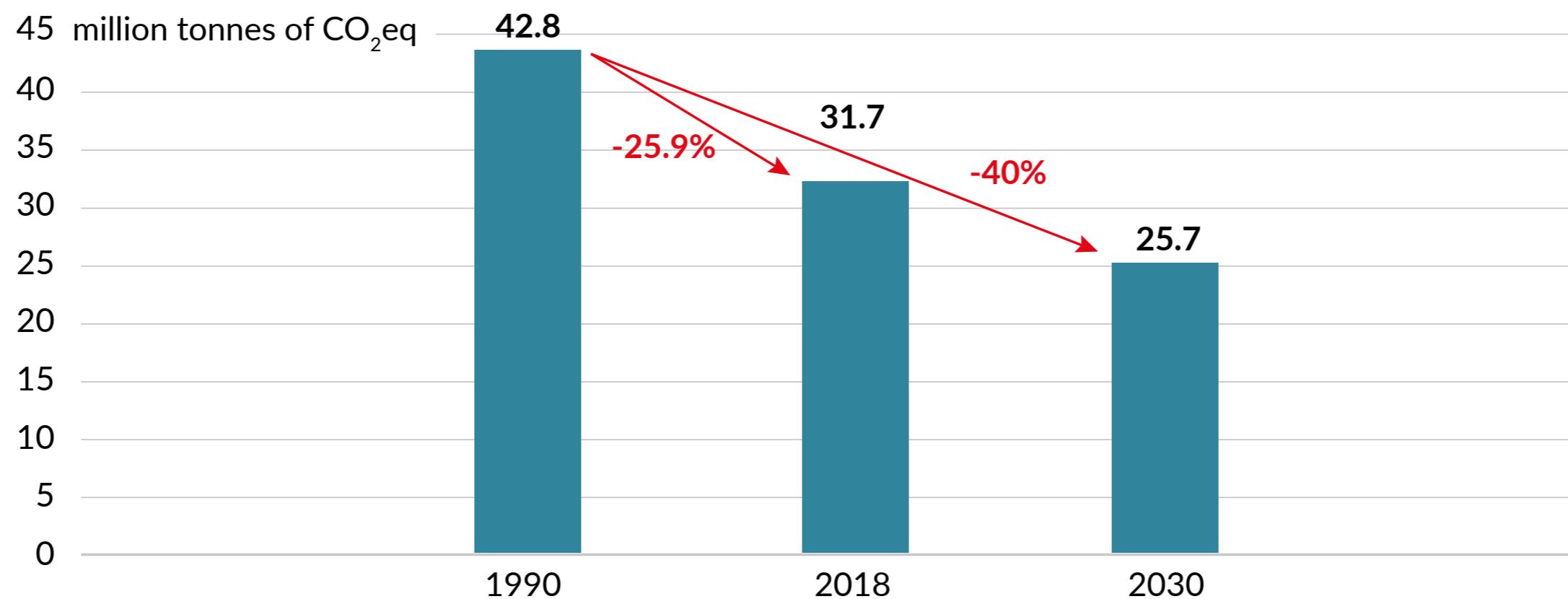
- Electrification of transport, especially in cities;
- Expansion of the charging infrastructure;
- Promotion of rail and public transport; facilities for bicycles and pedestrians;
- Tax policy reform;
- Preparation of a roadmap for the decarbonisation of transport.



Flagship project—innovative industry

- Increasing the energy efficiency of processes, less energy-intensive materials, products that can be recycled;
- Emissions reduction in the sector—40%.

GHG EMISSIONS FROM MANUFACTURING INDUSTRY



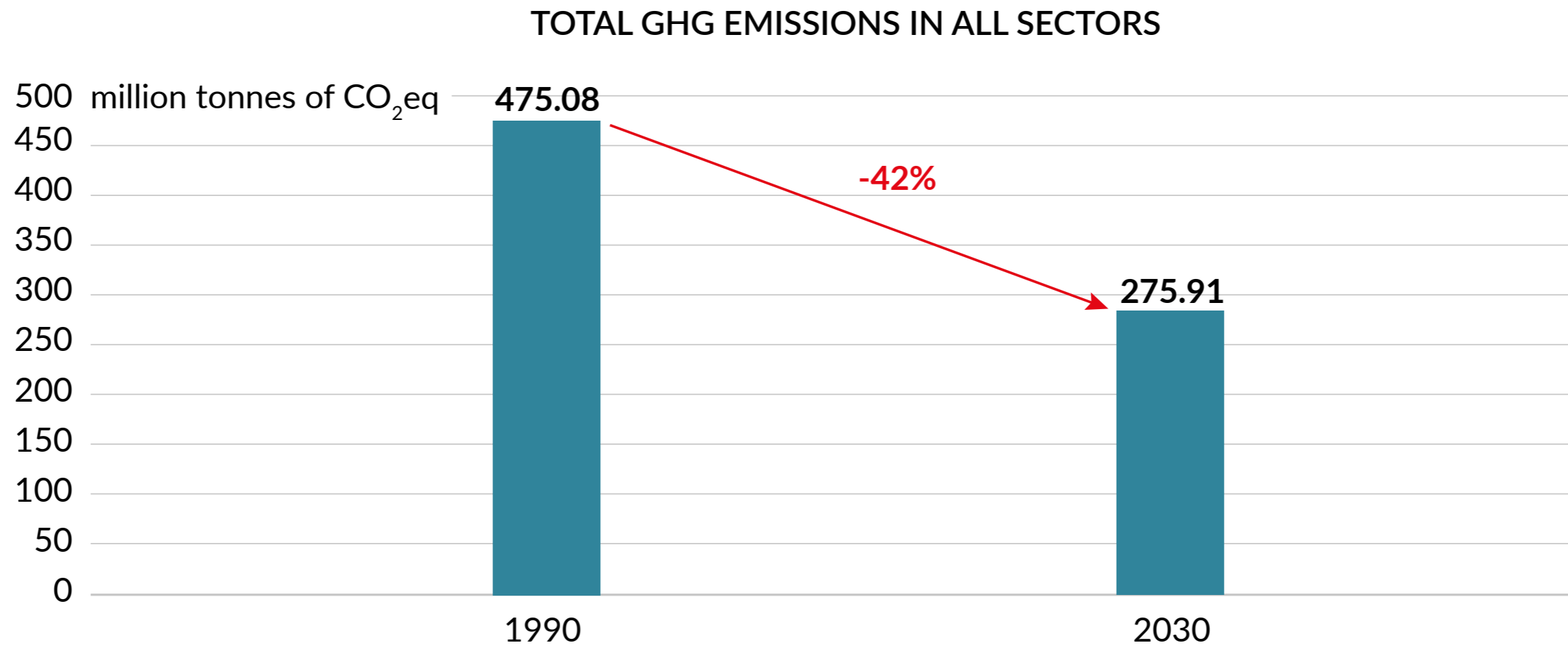


What does it mean?

- Process energy efficiency improvements;
- Less energy-intensive materials;
- Recyclable products;
- Industry decarbonisation strategy, taking into account the specificity of individual branches.

GHG emission reductions through flagship projects

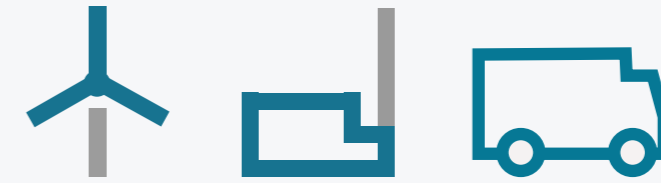
The implementation of the flagship projects will allow to reduce GHG emissions by 42%.



EU target of 55% and Poland's contribution

44-51%

We estimate that Poland should reduce GHG emissions compared to 1990, taking into account the principle of a common goal, but differentiated efforts.



42%

GHG emission reductions resulting from the implementation of flagship projects in the power sector, heating, transport and industry.



2-9%

The emission gap that we must fill with activities in industry, agriculture and forestry.

Conclusions: 55%—only without panic

- The target of reducing greenhouse gas emissions by 55% until 2030 is ambitious but achievable.
- By adopting flagship projects, we can implement strategic goals for Poland and become part of the EU climate policy.
- Actions already taken (and those planned) in the power industry, heating and transport sectors support the policy of the state. These trends need to be reinforced.
- However, there are areas where no emission reduction strategies are in place—these are industry and agriculture. Urgent action is needed here.

ALL SECTORS MUST PLAY A ROLE IN REDUCING EMISSIONS



ADOPTION OF FLAGSHIP PROJECTS



SETTING SECTOR GOALS



REVISION OF THE NATIONAL CLIMATE AND ENERGY PLAN



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