AMBITION OF RENEWABLE ENERGY TARGETS FOR THE EU IN 2030

CONCLUSIONS FROM THE REPORT "BENCHMARKS FOR A MORE AMBITIOUS EU 2030 RENEWABLES TARGET" COMMISSIONED BY EREF

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AIM OF THE REPORT: INFORM DEBATE ABOUT EUROPEAN RES TARGETS FOR 2030

Two main points of criticism have been raised regarding the proposed EU 2030 energy efficiency and renewable energy target (30% EE / 27% RES):

1. Targets are considered too low to achieve EU long-term targets, i.e. cutting GHG emissions by 80-95% below 1990 levels by 2050. EP rapporteurs propose higher targets (governance: 40%EE / 45 %RES; RED: 35% RES)

2. Governance of EU-level RES target: EU-level target achievement depends on Member State actions. National targets would make the EU target more reliable.

Pledge approach requires benchmarks to assess whether contributions are adequate.

AIM OF THE REPORT: INFORM DEBATE ABOUT EUROPEAN RES-TARGETS FOR 2030

Approach

1. Show the **effect of higher levels of energy efficiency** on the effort to meet the EU renewables target
2. **Compare the effort of reaching an EU 2030 RES target of 27%- 45%** to the effort of the past decade (net RES increase 2020-2030 compared to 2010-2020)
3. Derive **national benchmarks** for 2030-target sharing, based on 2020 logic and alternative approach

Source: Green-X based on PRIMES scenarios (EC Impact Assessment)

Not included:

- gross RES increase (incl. repowering)
- Cost of RES deployment (much lower than in the past)

HIGHER ENERGY EFFICIENCY FACILITATES MORE AMBITIOUS RENEWABLES TARGETS

Energy efficiency has a direct impact on the RES deployment levels required to achieve the RES targets:

- Aggregated RES deployment needs for all RES targets would be reduced by nearly 15% if the EU energy efficiency target is raised from 30% to 40%.
- A 40% energy efficiency target combined with a 27% RES target in 2030 would not require any net increase in renewables.
- To incentivize a net increase in RES deployment, the 2030 RES target would need to be increased above 27%.

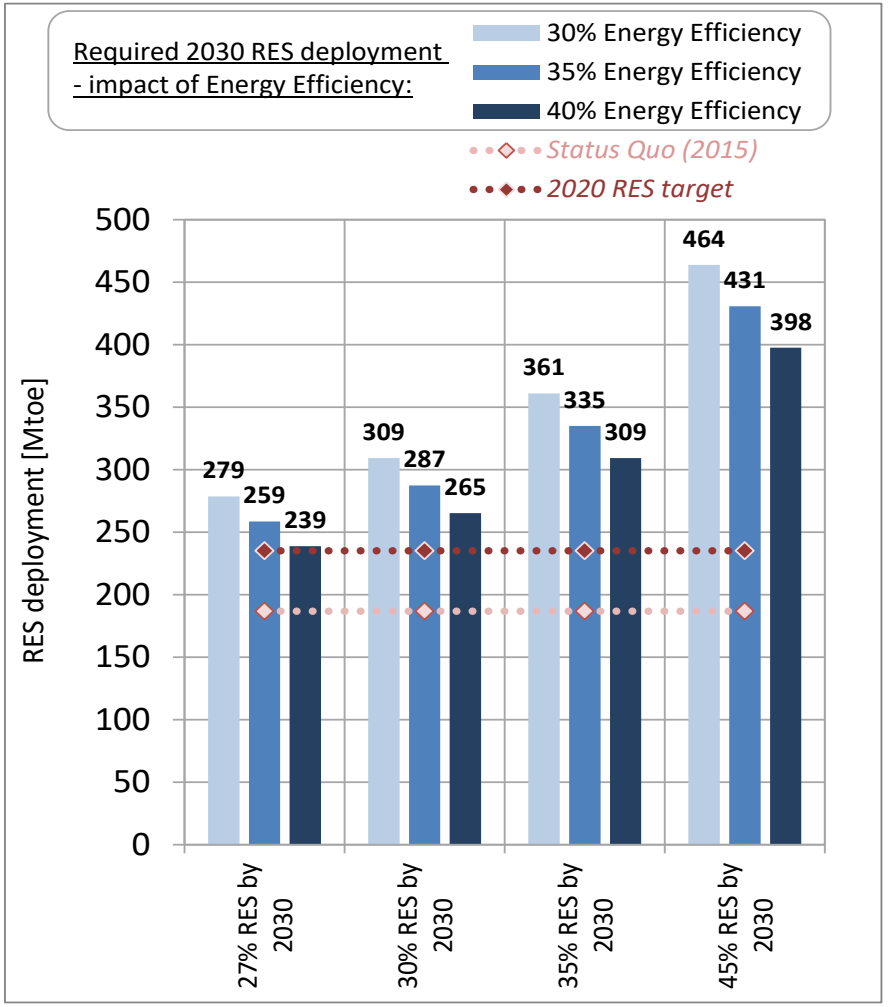


Diagram: Required 2030 RES deployment levels per RES target for different levels of energy efficiency ambition

HIGHER ENERGY EFFICIENCY FACILITATES MORE AMBITIOUS RENEWABLES TARGETS

Required net-increase in RES deployment in 2020-2030 compared to 2010-2020:

- Currently proposed 2030-targets of 30% for EE and 27% for RES could drastically slow down current levels of renewables expansion in the EU-28.
- To maintain current levels of RES growth, the 2030 RES-target must be at least 30%.
- In the case of a 30% RES target, net increase in RES deployment in the EU-28 would be reduced from 75 to 30 Mtoe (nearly 60%) if EE target is raised from 30% to 40%.

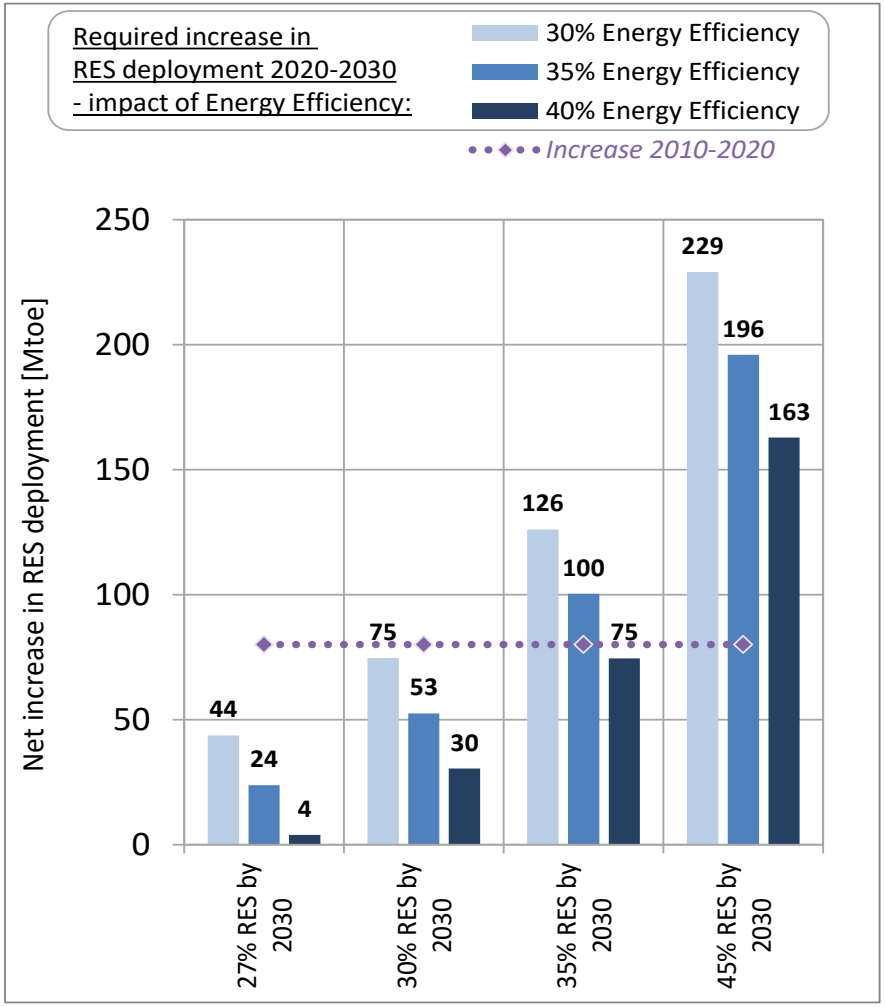
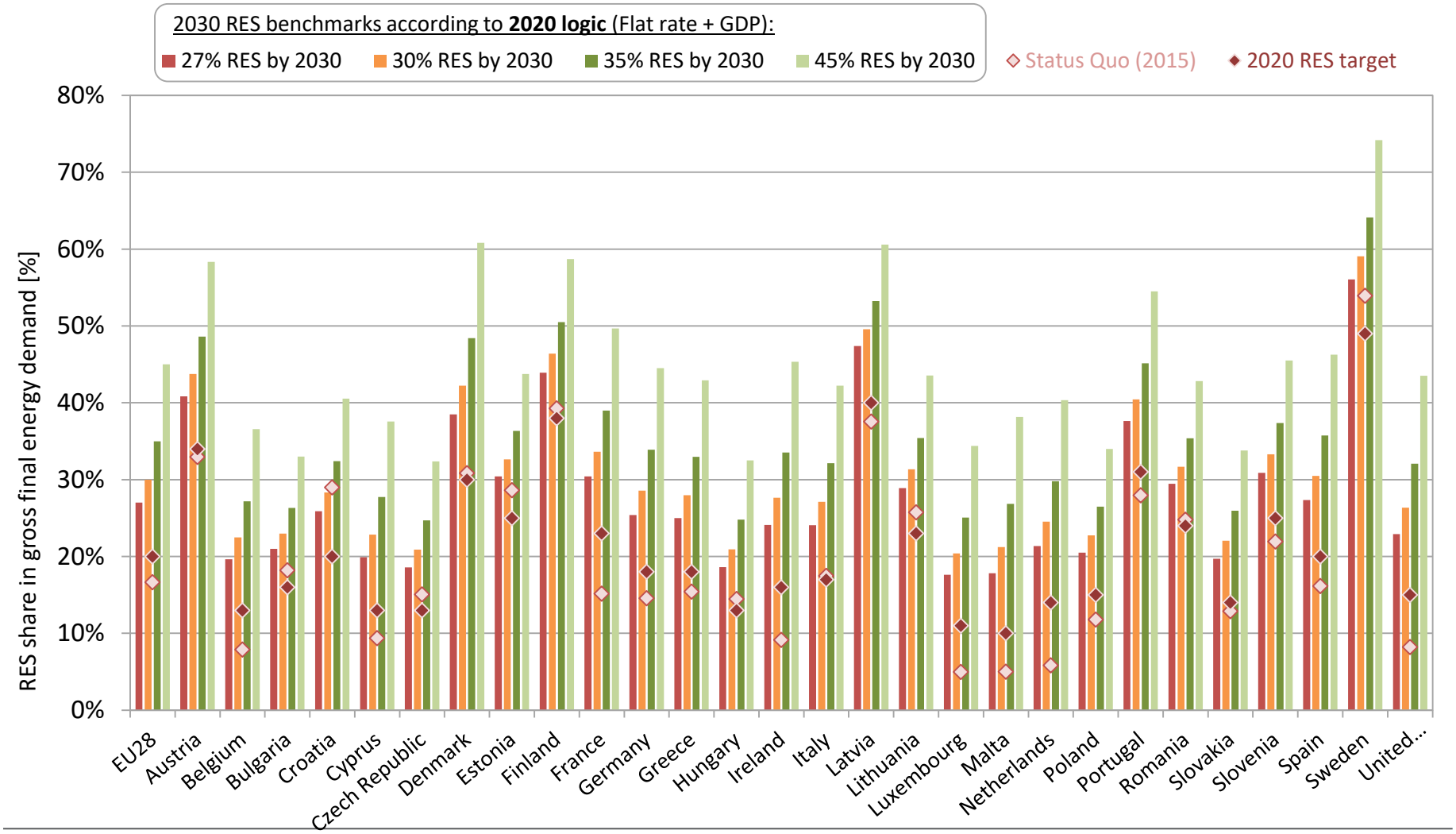


Diagram: Required net additional RES deployment from 2020 to 2030 per RES target for different levels of energy efficiency ambition

DEFINING RENEWABLES BENCHMARKS FOR EFFORT SHARING AMONG MEMBER STATES



KEY FINDINGS

1. **Higher energy efficiency facilitates more ambitious renewables targets:** An increase in the EU EE target from 30% to 40% would reduce the aggregated net RES deployment needed to achieve any RES target by nearly 15%.

2. The currently proposed 2030 target of **27%** for renewables **could drastically slow down** current levels of **renewables expansion** in the EU-28.

3. Even a RES target of **30% would result in a lower overall net deployment increase** of renewables in 2020-2030 **compared to 2010-2020**, both under a 40% and a 30% energy efficiency scenario.

4. Assuming a 40% EE target, a RES target of at least **35%** would need to be set **to maintain current net deployment increase** of RES in the EU-28.

5. A **45%** RES target **would imply a very strong increase** in net renewables deployment **compared to 2010-2020.**

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BACK-UP SLIDES

METHODOLOGY AND DATA BASIS

Starting point for our calculations of national targets:

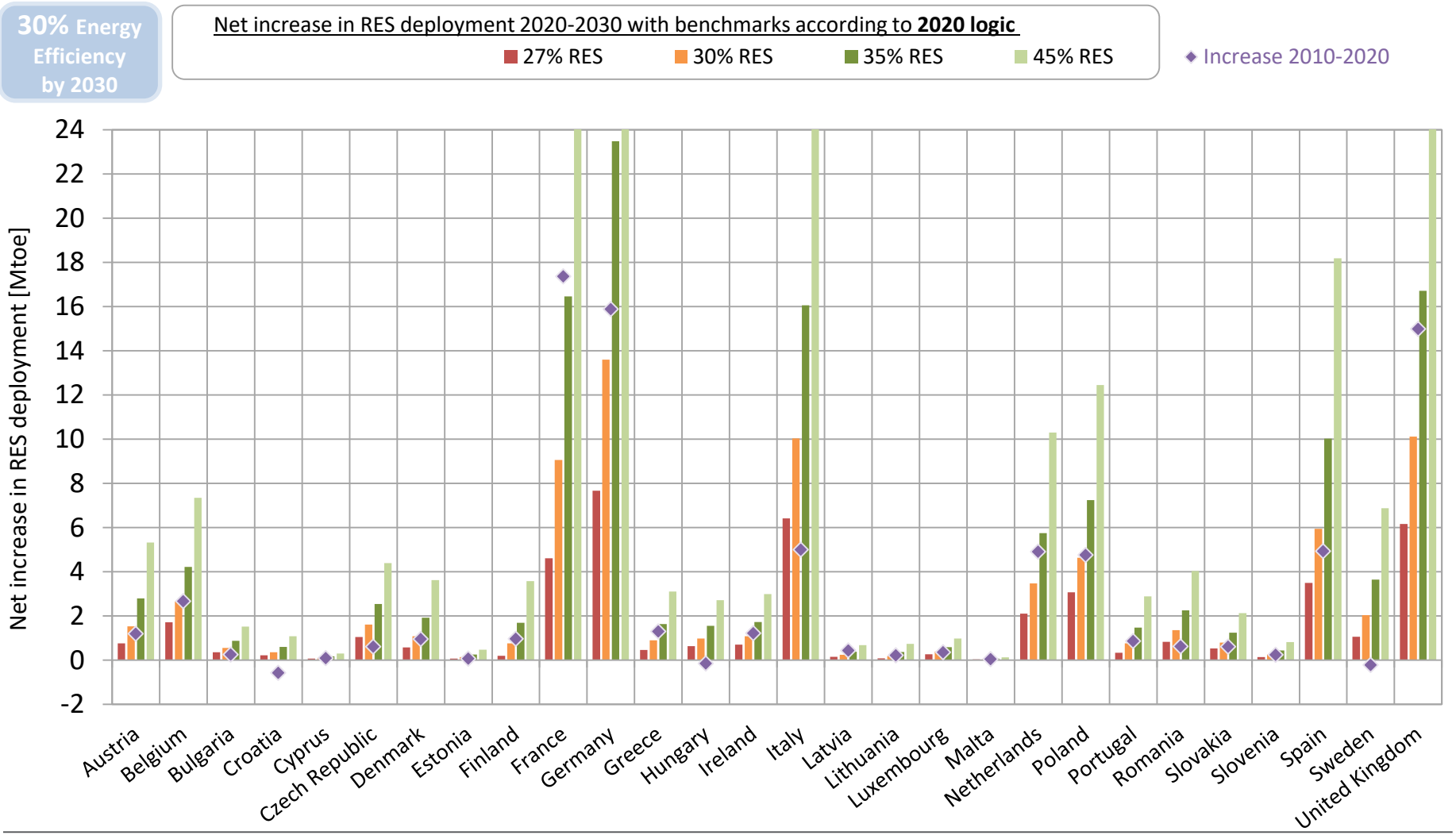
- Method used for the allocation of the 2020 RES targets (“2020-logic”)
- Assumption that national 2020 RES targets are met in time by Member States

Ensuring consistency with existing EU works:

- Key data source was recent PRIMES modelling done on behalf of the EC (Impact Assessment of the RED II)
- Scenarios used:
  - PRIMES reference scenario to calculate MS-specific 2030 RES targets (in %)
  - „PRIMES euco30“ (builds on targeted use of energy efficiency (30%)): to translate RES shares (%) into absolute values
  - For more ambitious energy efficiency targets, a relative increase of energy efficiency across all MS was assumed

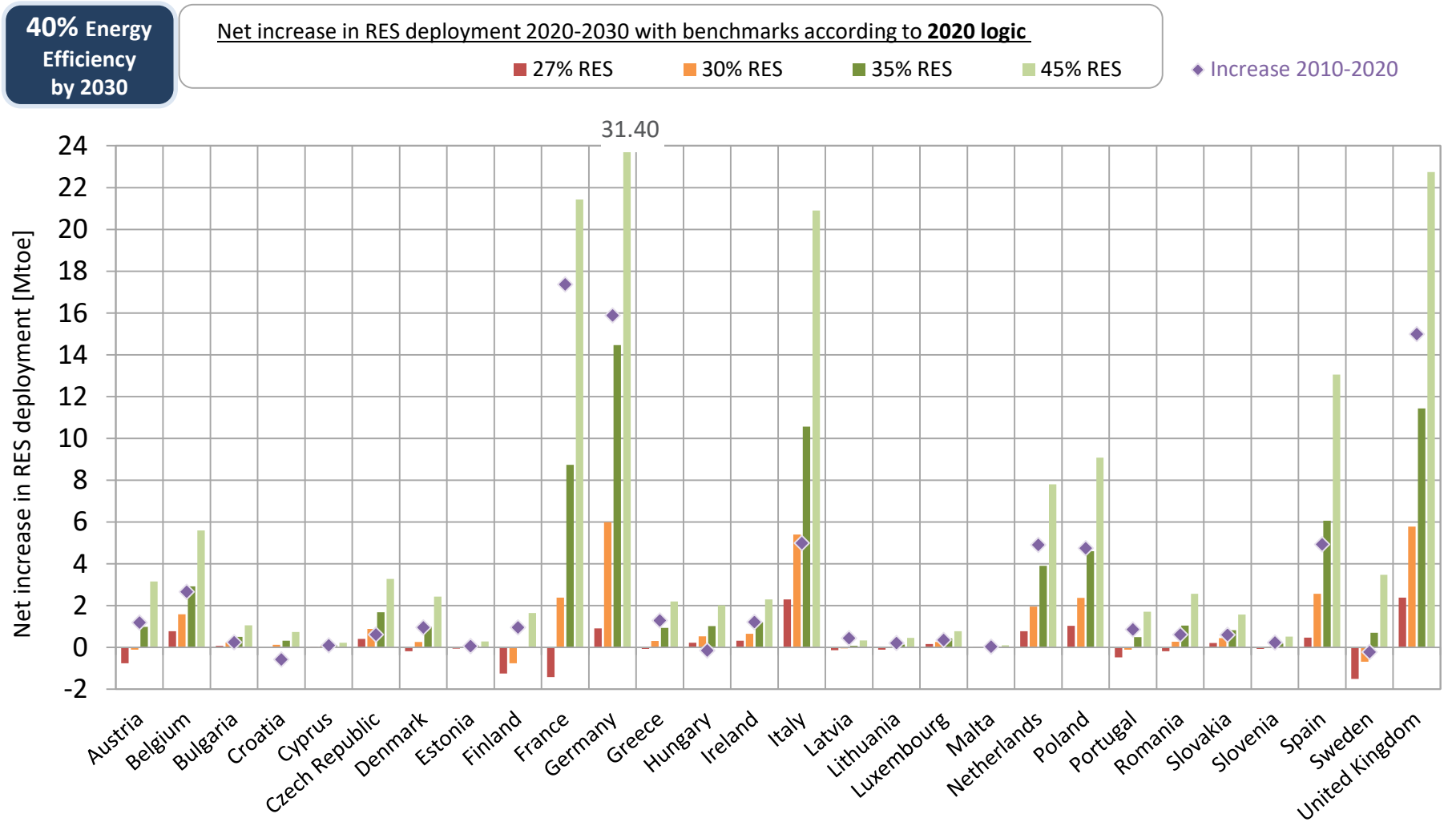
DEFINING RENEWABLES BENCHMARKS FOR EFFORT SHARING AMONG MEMBER STATES

30% Energy Efficiency by 2030



DEFINING RENEWABLES BENCHMARKS FOR EFFORT SHARING AMONG MEMBER STATES

40% Energy Efficiency by 2030



COMPARISON OF TARGET SHARING METHODOLOGIES

So far, no formula for the calculation of RES benchmarks has been provided.

Article 5 of the Draft Governance Regulation mentions several criteria for MS pledges:

- equitable distribution of deployment across the European Union;
- economic potential;
- geographical and natural constraints, including those of non-interconnected areas and regions; and
- the level of power interconnection between Member States.

RED II Impact Assessment: benchmarking approach alternative to the „2020-logic“ (flat+GDP): land area per capita, implicitly reflecting RES potential

COMPARISON OF TARGET SHARING METHODOLOGIES