

Structural Energy and Emissions Indicators for the EU-27

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EU Target Sharing 2020

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■ The ambitious EU Targets for 2020

- Minus 20 percent GHG emissions over 1990 - unilateral
- Minus 30 percent GHG emissions over 1990 – multilateral
- 20 percent increase of energy productivity – over BaU
- 20 percent share of renewables

■ How to allocate these community targets to the Member States

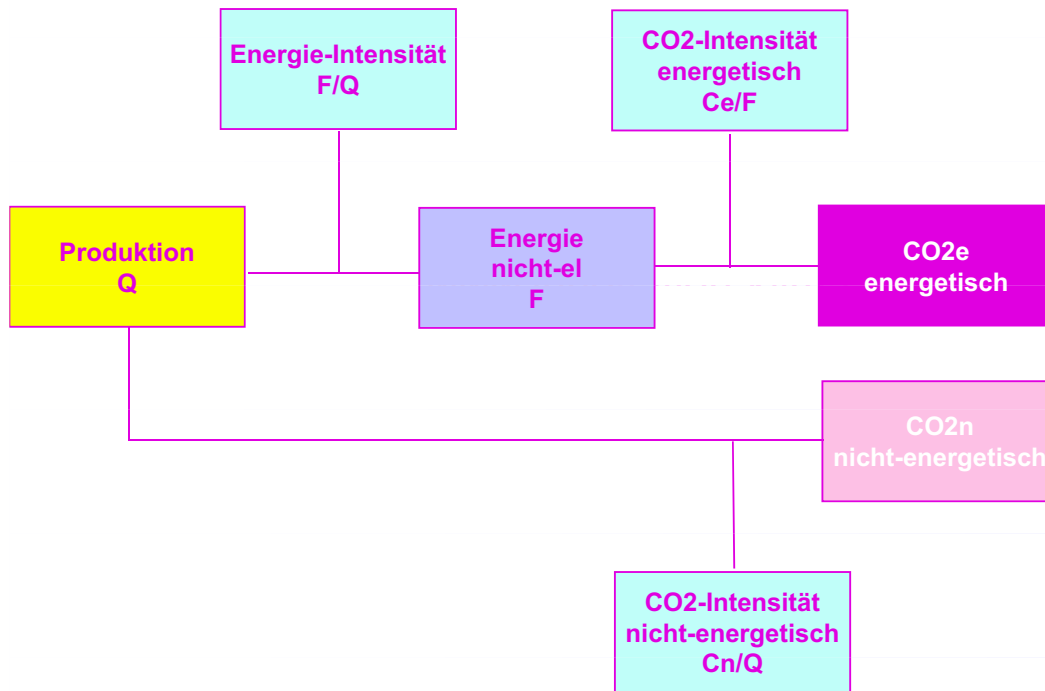
- Target or effort sharing

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A structural model of the energy sector



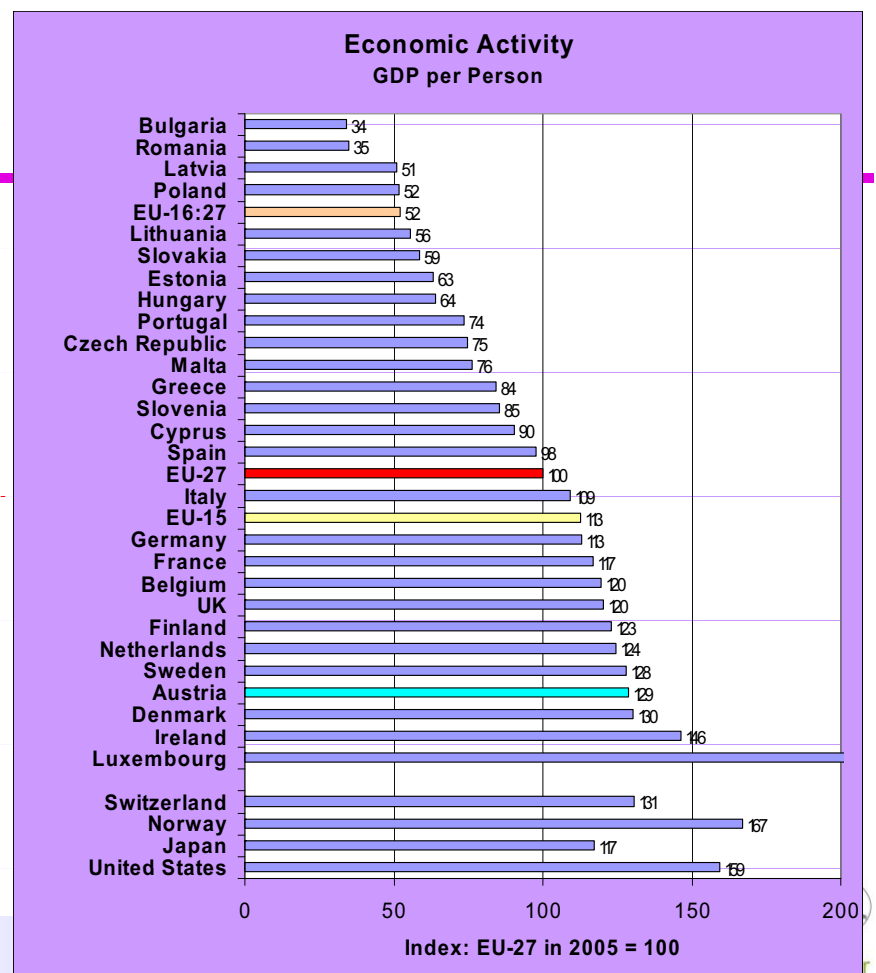
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Economic activity

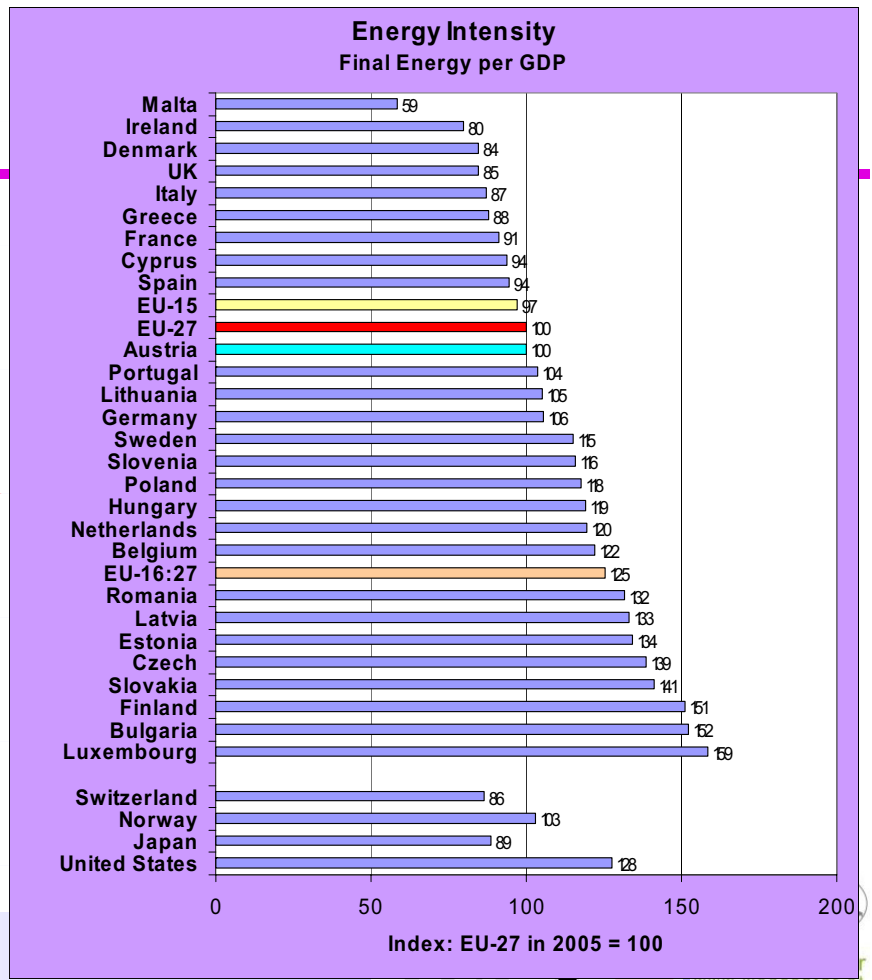
GDP per Person



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Energy intensity

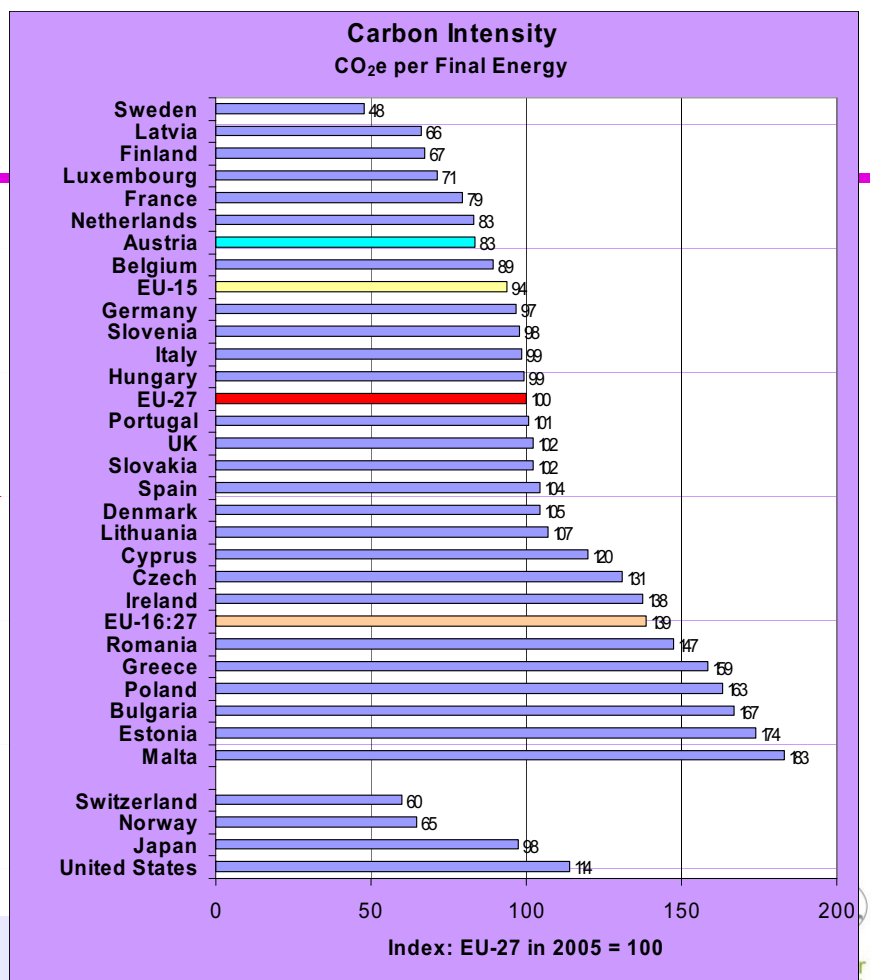
Final Energy per GDP



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Carbon intensity

CO2e per Final Energy

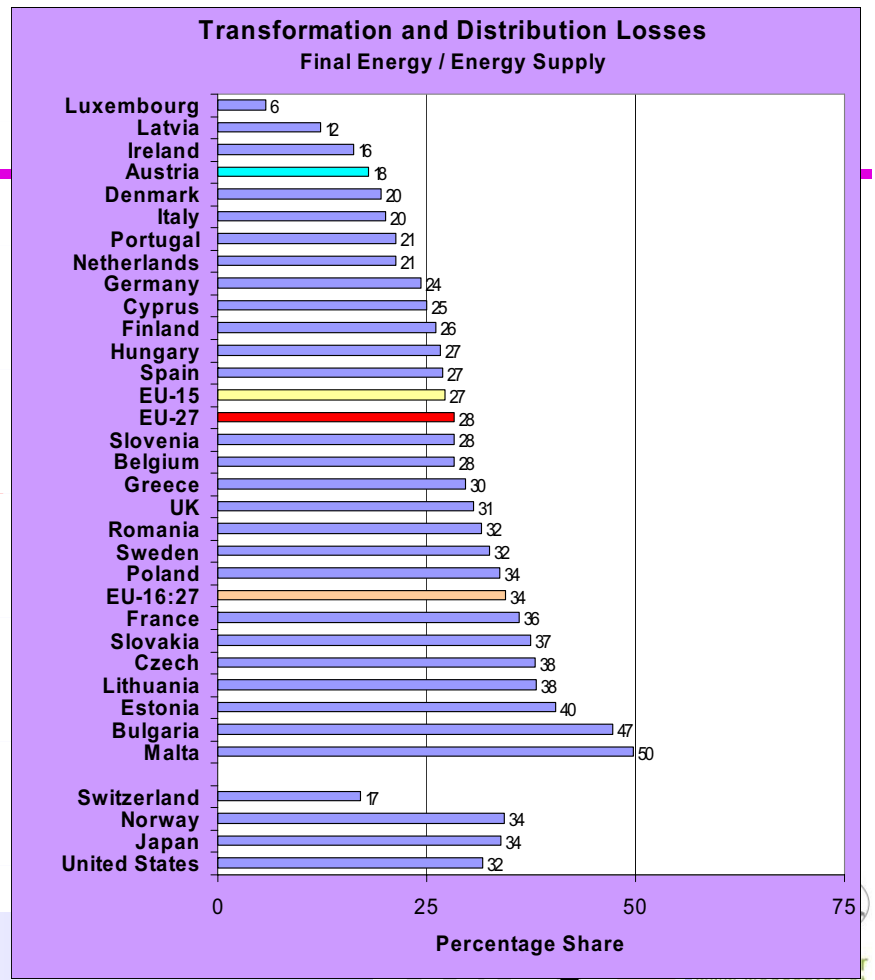


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Share of Losses

$$100 - \frac{(\text{Final Energy})}{(\text{Energy Supply})} \times 100$$

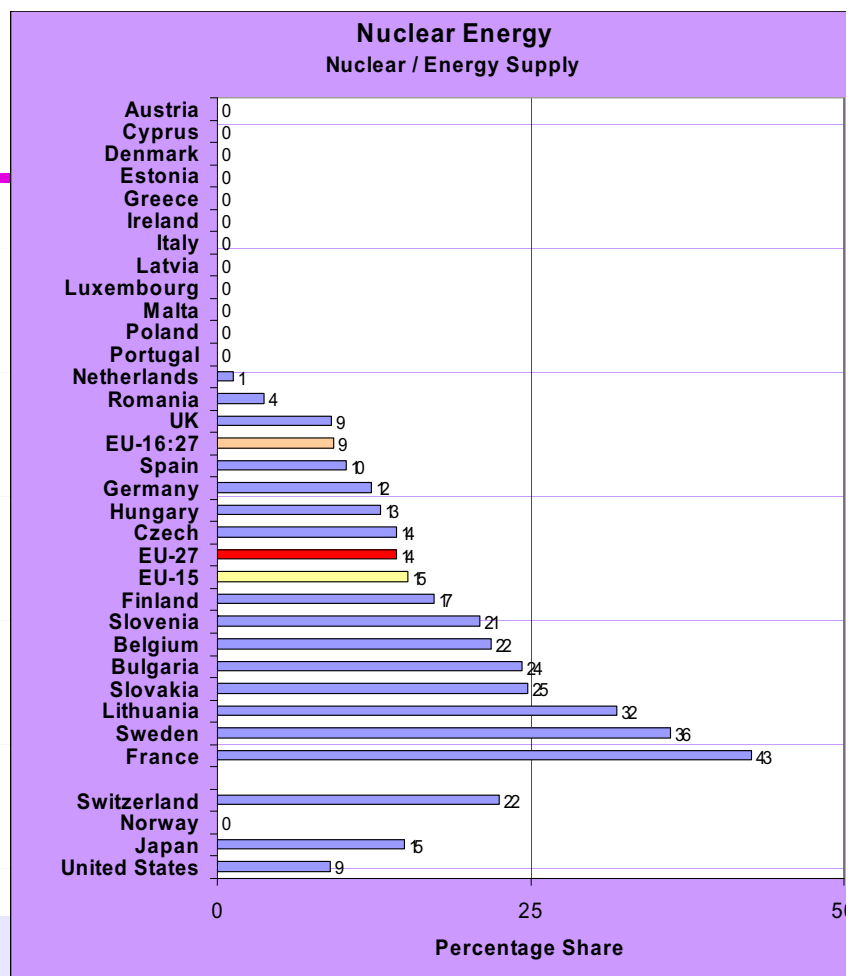
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Share of Nuclear

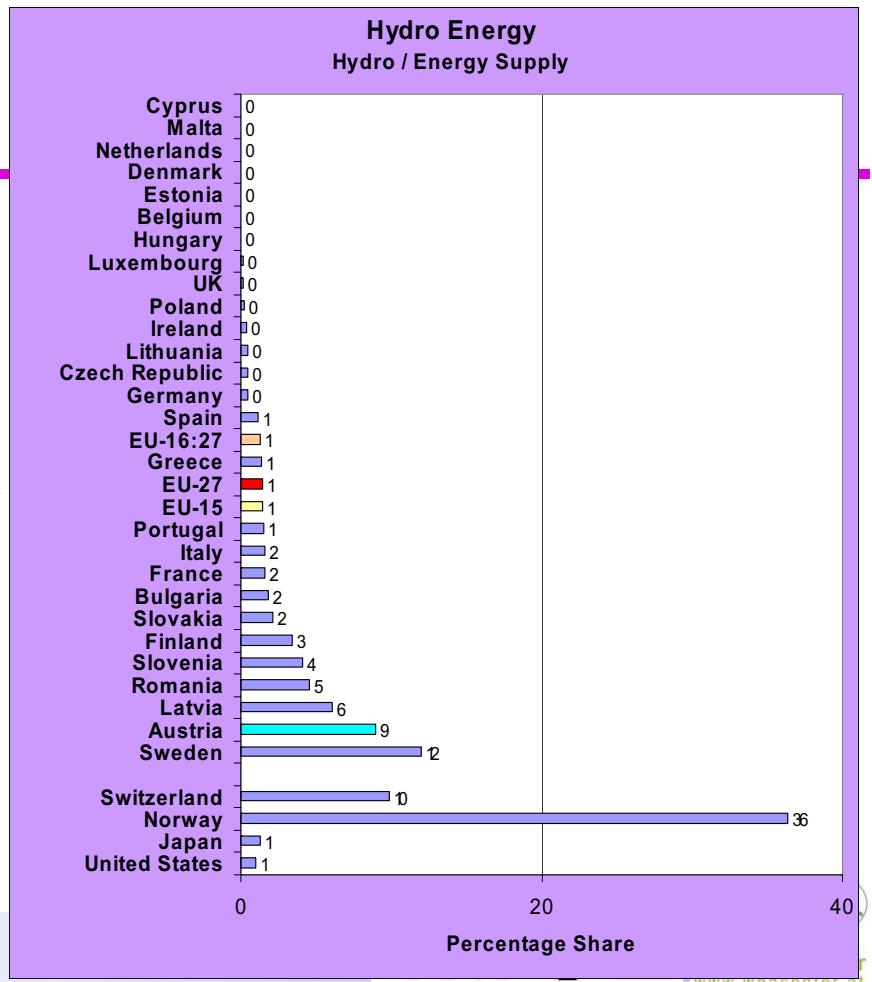
$$\frac{(\text{Nuclear})}{(\text{Energy Supply})} \times 100$$

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Share of Hydro

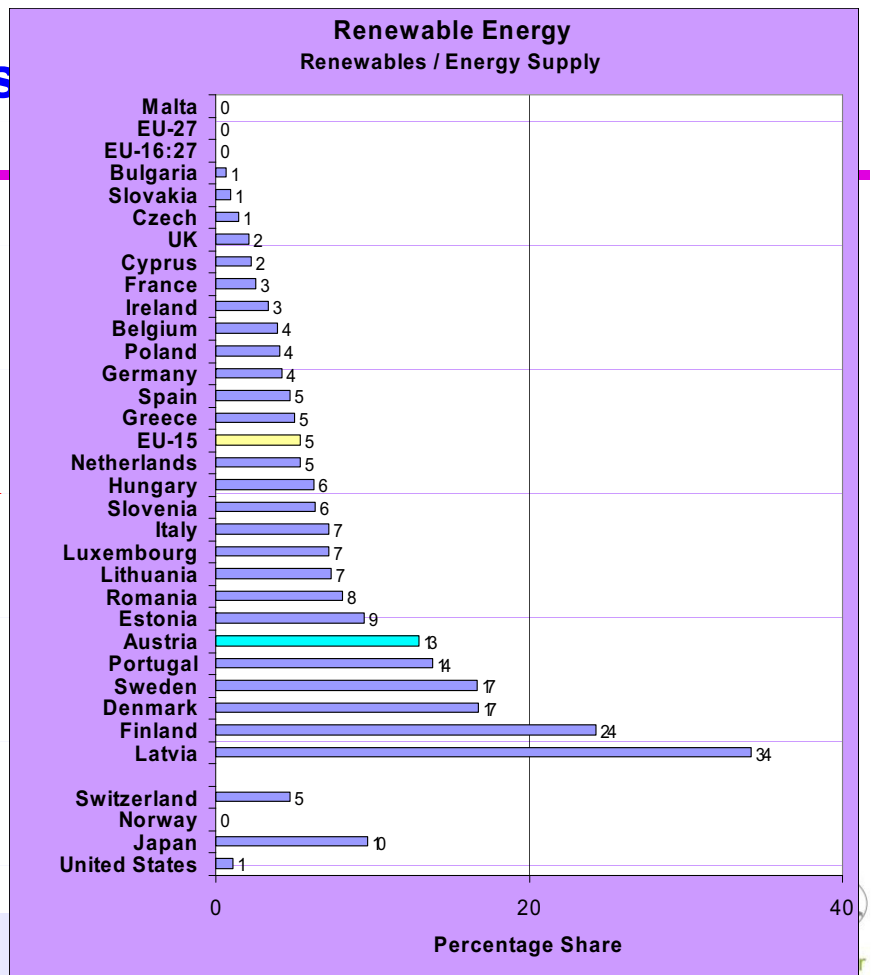
$\frac{(\text{Hydro})}{(\text{Energy Supply})} \times 100$



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Share of Renewables

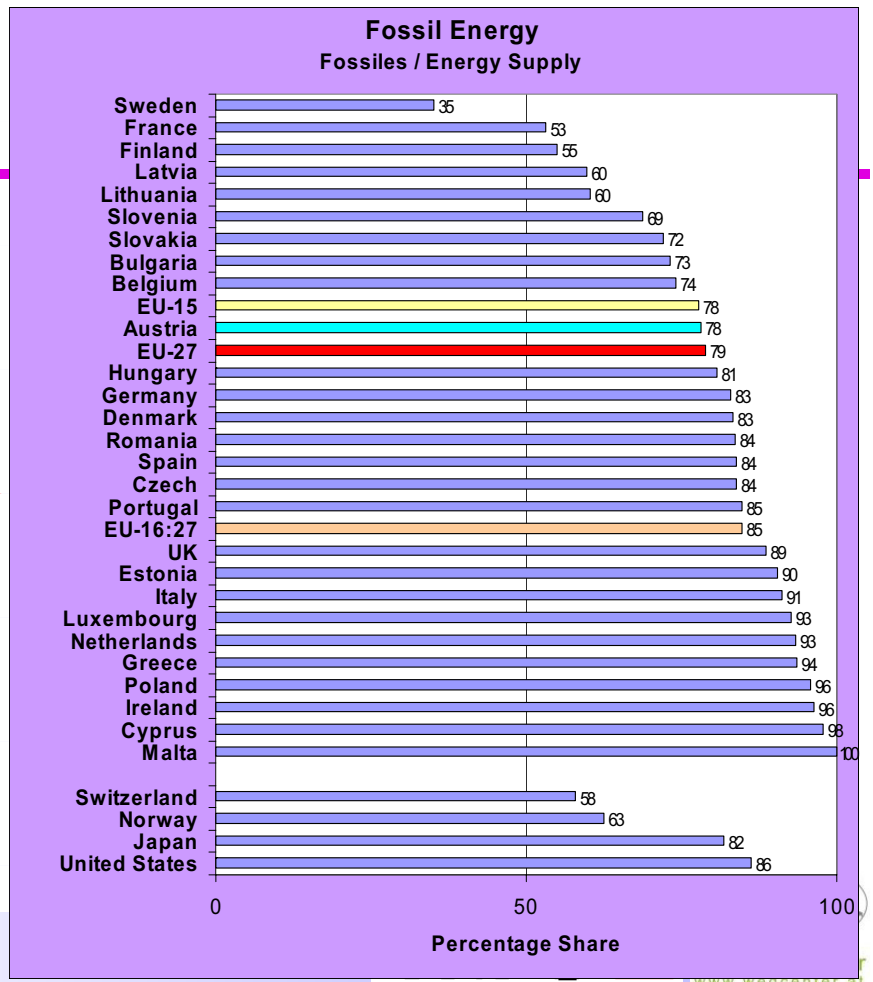
$\frac{(\text{Renewables})}{(\text{Energy Supply})} \times 100$



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Share of Fossils

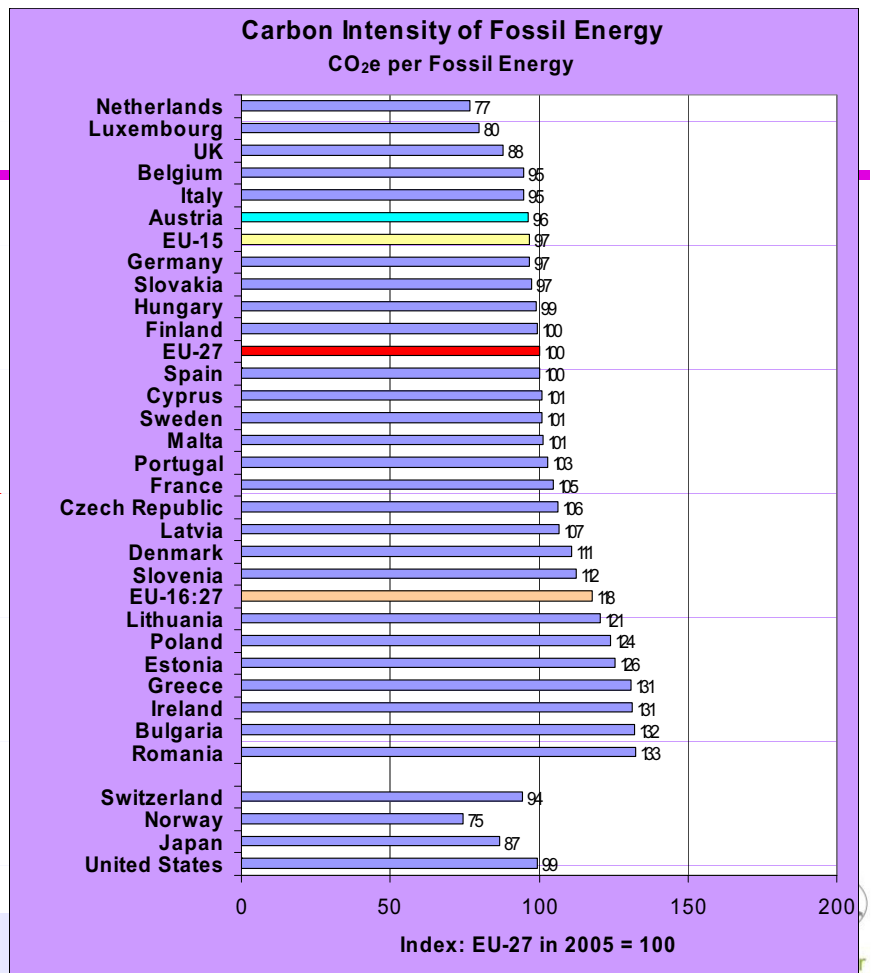
$\frac{\text{(Fossils)}}{\text{(Energy Supply)}} \times 100$



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Carbon intensity of Fossils

$\frac{\text{(CO2)}}{\text{(Fossils)}}$



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The policy decisions

- To what extent to we want

contraction – to common targets (e.g. for renewables)

convergence – to such a target

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