energy technologies institute

www.eti.co.uk

On track or too little too late: how can we accelerate the low carbon transition?

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Strategy Director

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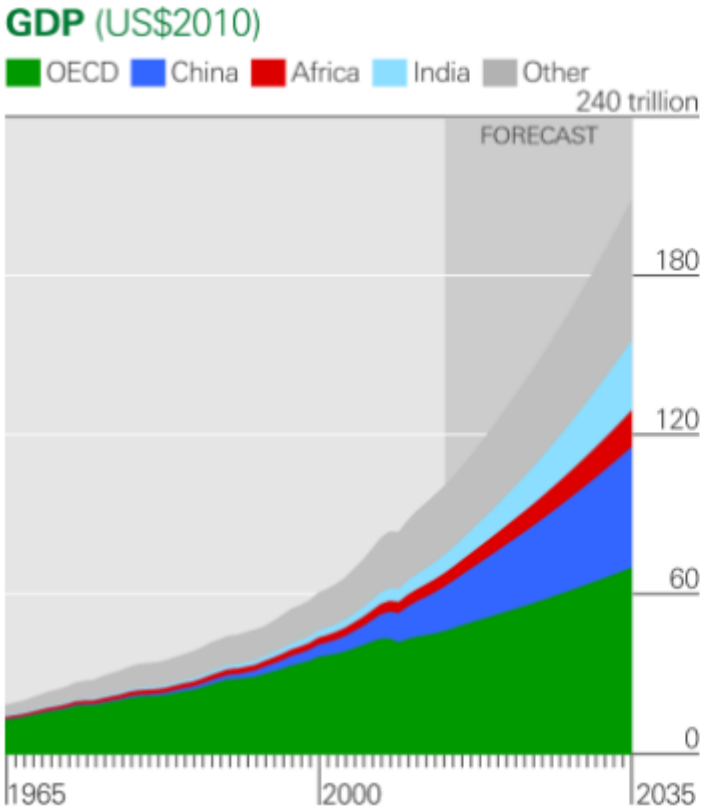
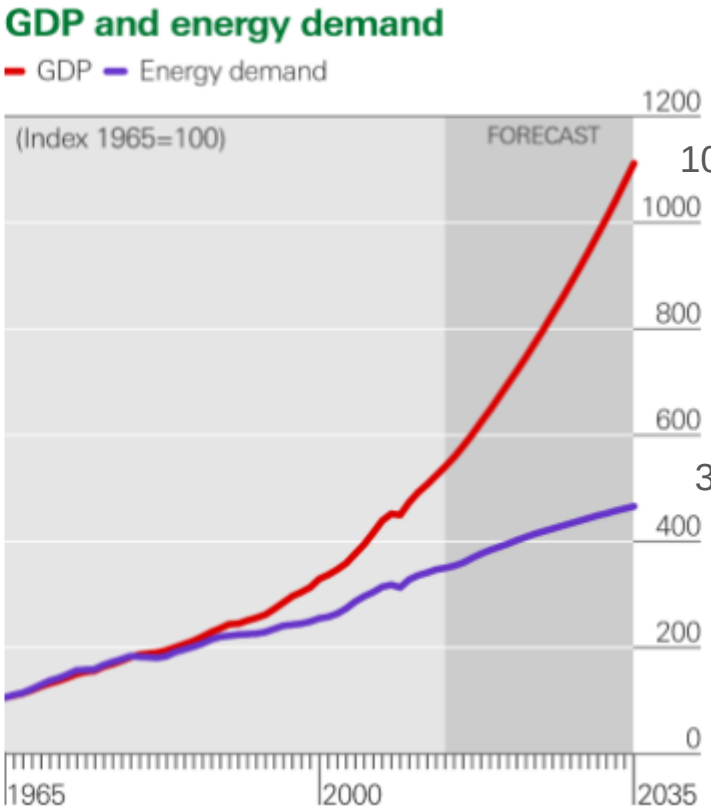
World energy demand is set to grow





107% growth in GDP

34% growth in energy

http://www.bp.com/en/global/corporate/energy-economics/energy-outlook-2035/drivers-of-energy-demand.html

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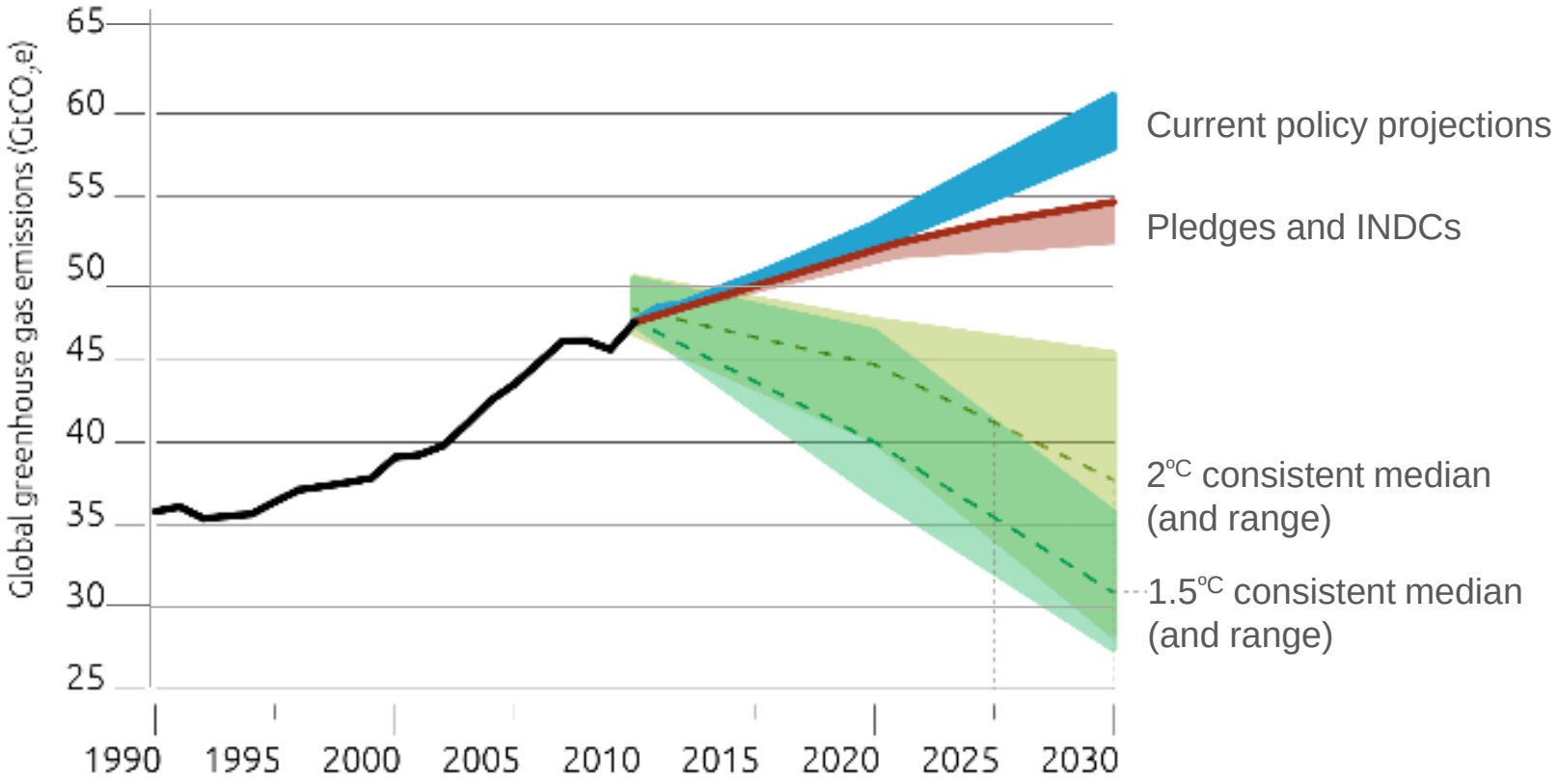
COP21 pledges fall far short of a 2°C pathway



http://climateactiontracker.org/global/emissions-gap.html

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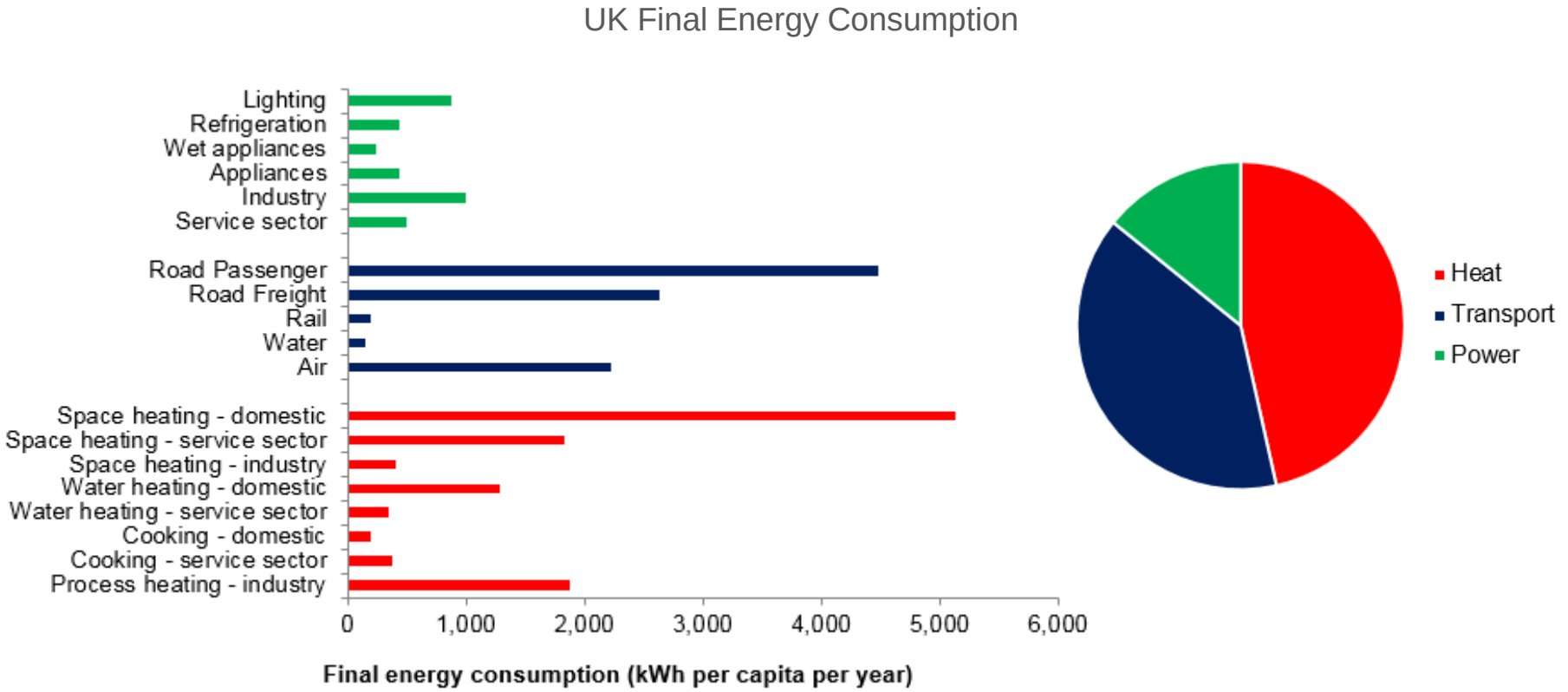
Power is not typically the dominant end-use



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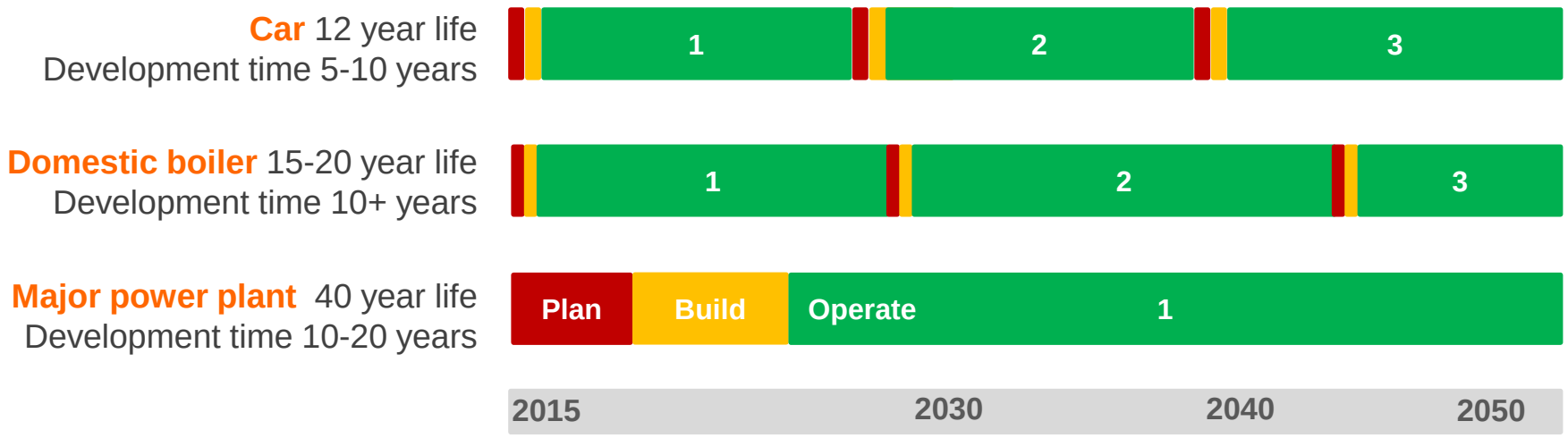
Infrastructure Renewal - slow and steady…

Opportunities to introduce step-changes in technology or strategic direction are few



- Lead-time for step-change in vehicle and boiler performance often driven by introduction of new standards and regulations – may take 10 years
- Other **major infrastructure** similar to power assets, 40-100 year lives, planning phase can be 10-20+ years
- **Behaviour change**? Can be quicker but can take generations

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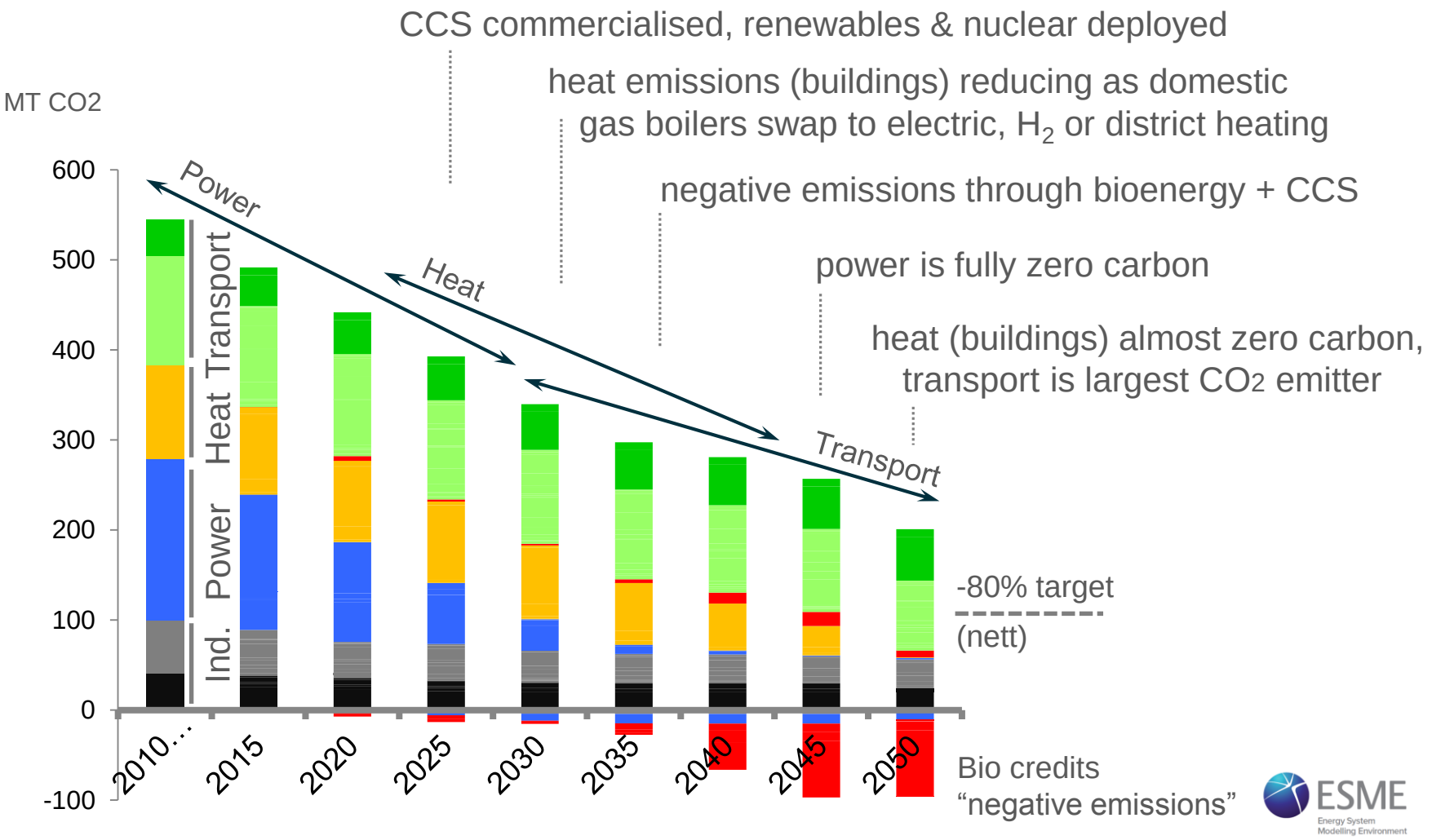
An emissions reduction plan

Power now, heat next, transport gradual – cost optimal



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