



Making a Low Carbon Economy Happen

**BIEE Sustainable Energy Seminar
Ben Irons, McKinsey & Company**

21 September, 2009

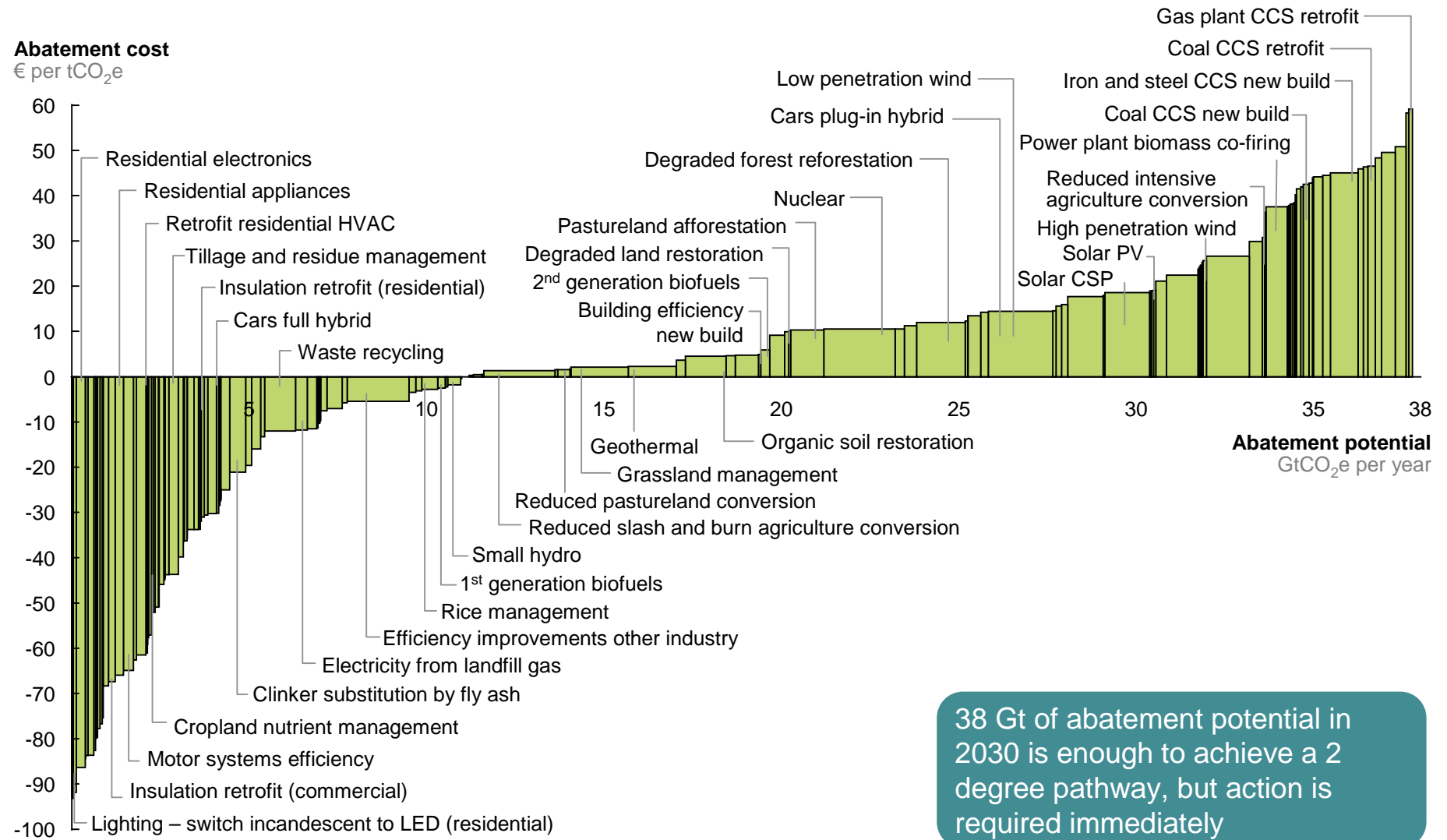
Contents

**What will it take to become
a low carbon economy?**

What investment is required?

We know what is required to become a low carbon economy

Global abatement cost curve 2030

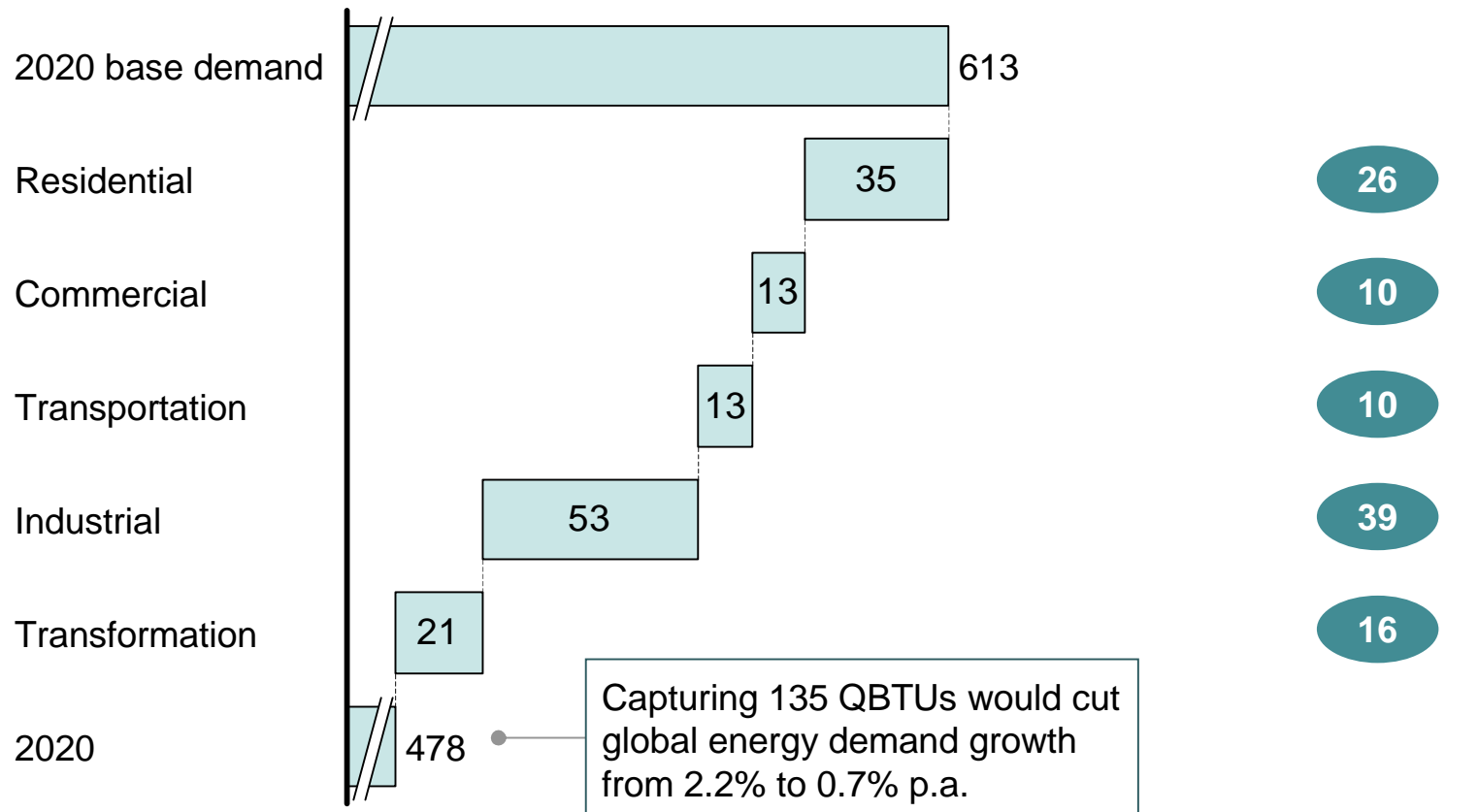


38 Gt of abatement potential in 2030 is enough to achieve a 2 degree pathway, but action is required immediately

Energy efficiency offers significant opportunities across all sectors

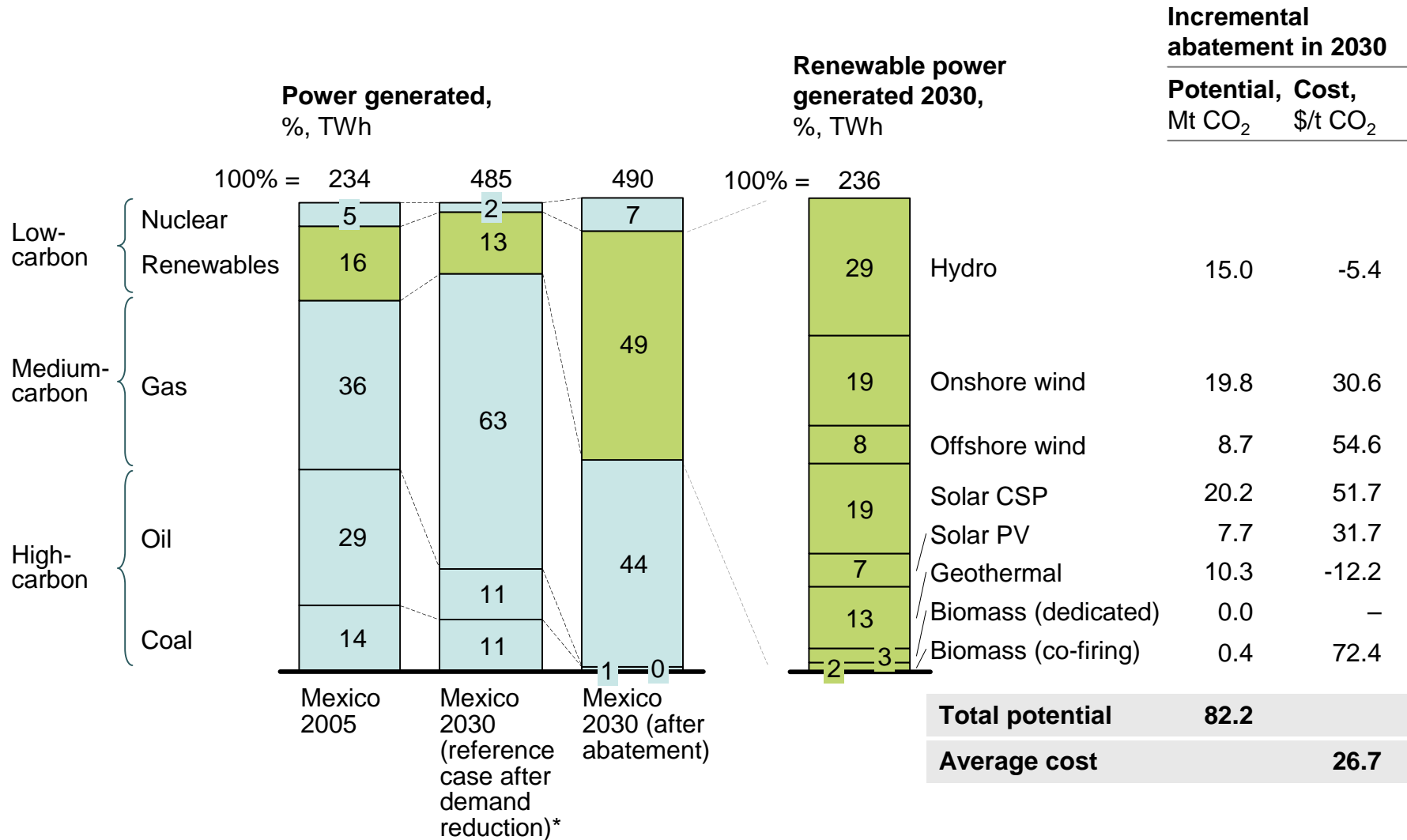
Potential demand reduction in 2020 through enhanced energy productivity, (QBTUs)

% of total opportunity



A low carbon economy needs a low carbon power sector

Mexico example of low carbon power mix



* Includes demand reduction coming from energy efficiency in consuming sectors

Source: IEA WEO 2007 (unpublished Annex); McKinsey GHG abatement cost curve v2.0; McKinsey analysis

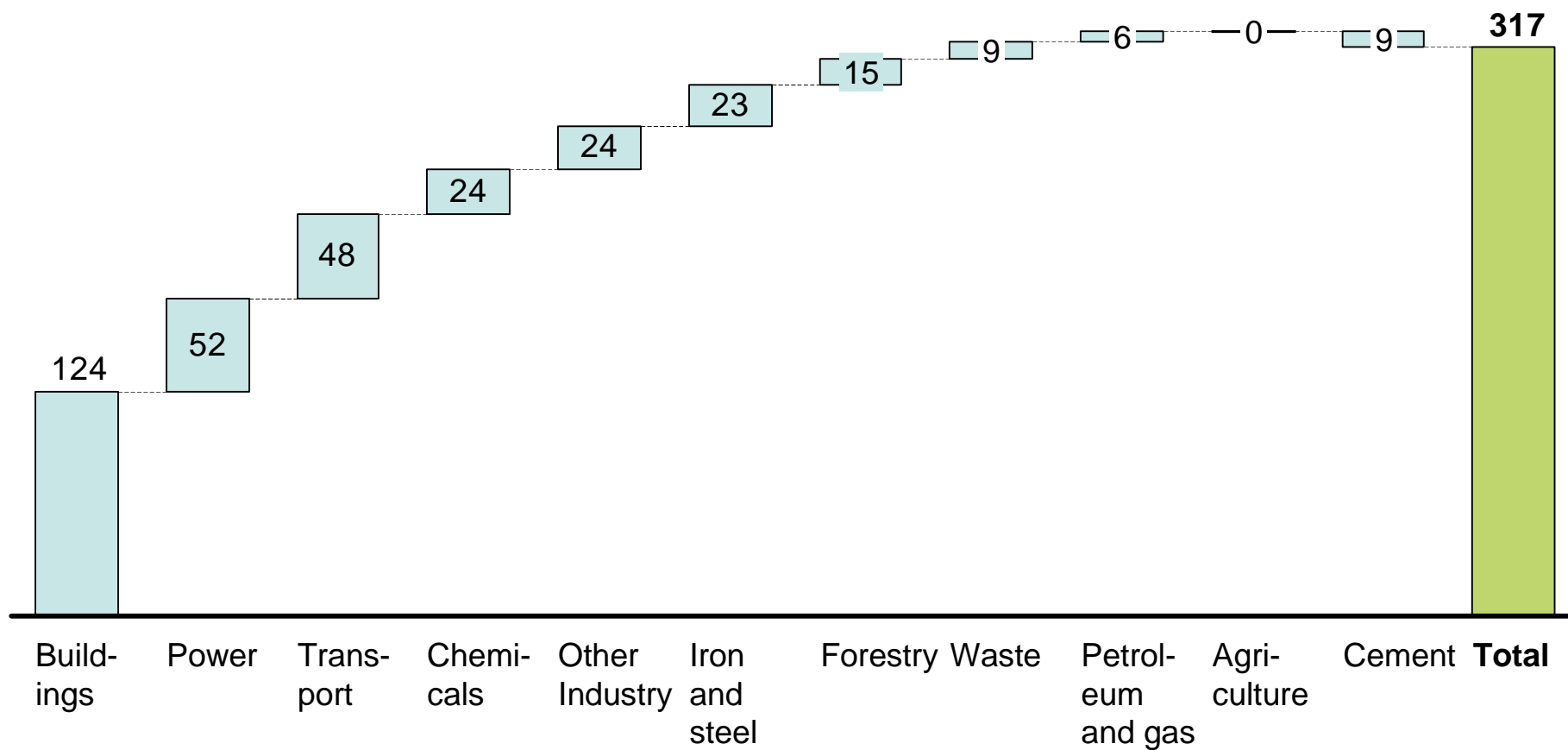
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a low carbon economy?

What investment is required?

A low carbon economy will require incremental investment of over €300b per year through 2015

Global incremental investment requirements for low carbon economy 2010–15, € bn per year

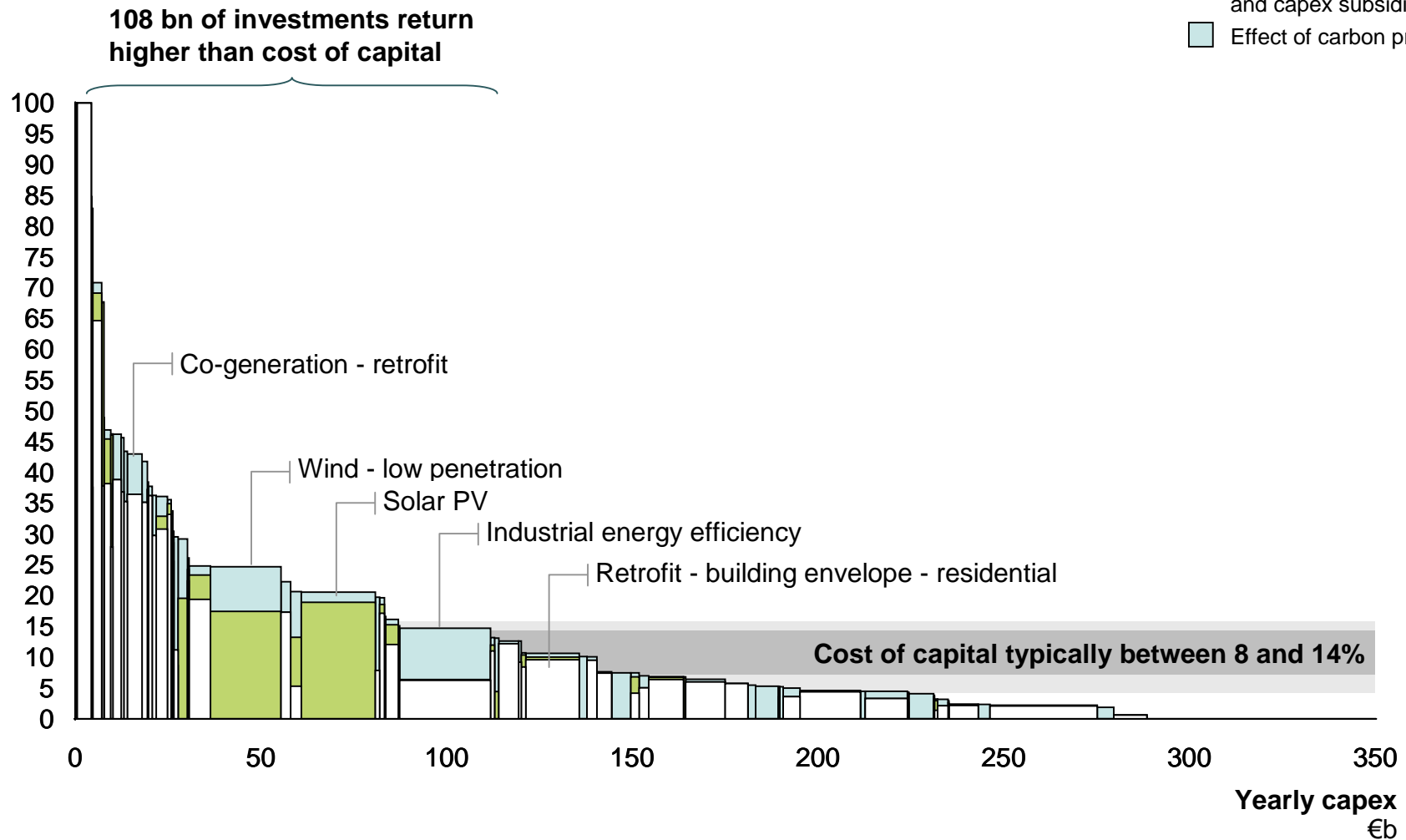


But only a third of that investment requirement is currently attractive to investors

IRR on incremental investment*, 2015, %

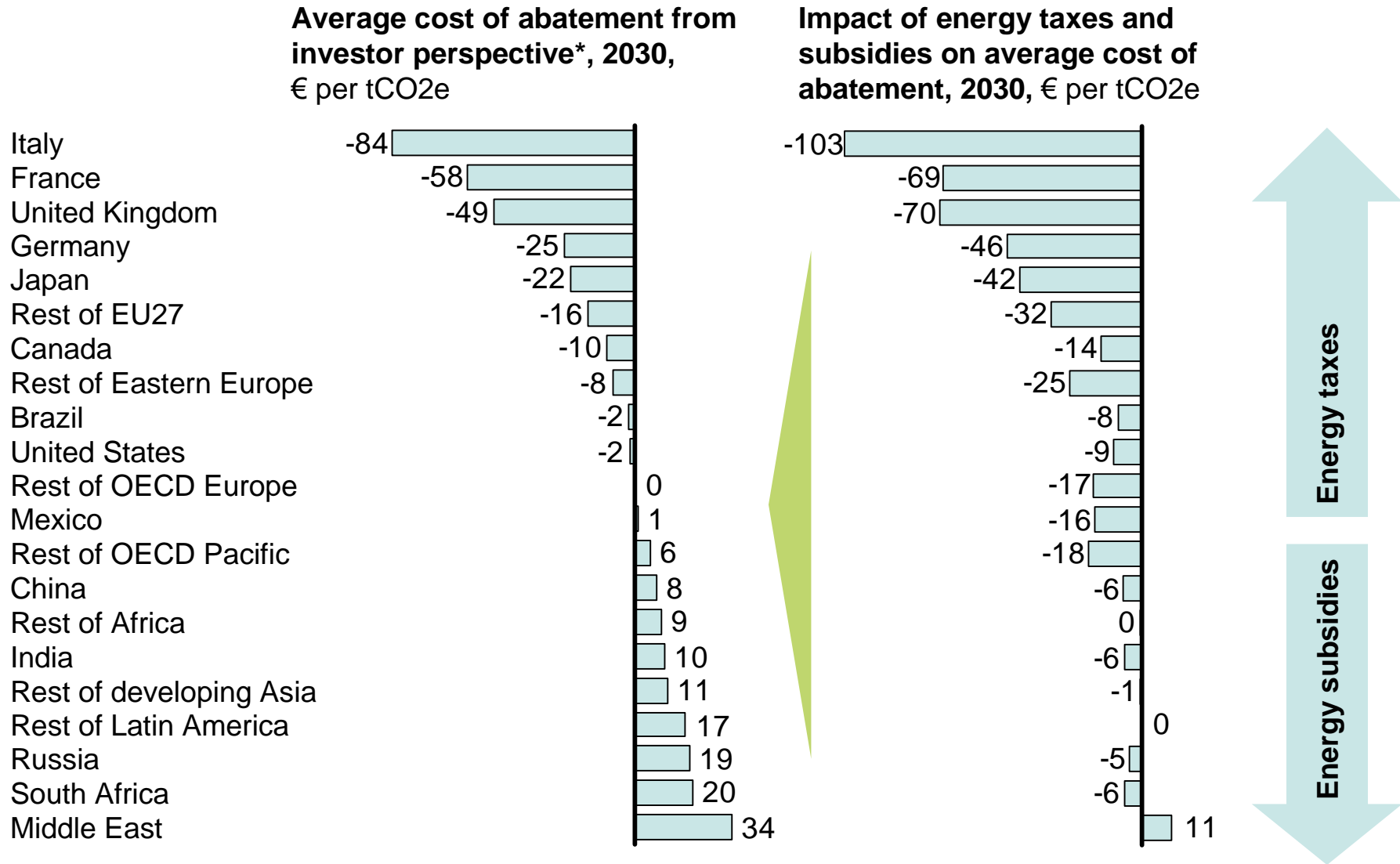
PRELIMINARY

- IRR with no policy effects
- Effect of feed-in tariffs and capex subsidies
- Effect of carbon price



* Includes fuel taxes and subsidies, feed-in tariffs, capex subsidies and carbon prices (differentiated by region and sector)
IRR is calculated on the incremental cash flows compared to business as usual for each lever in each region

Energy policy is key to attracting private investment



* Includes fuel taxes and subsidies, feed-in tariffs, capex subsidies and carbon prices (differentiated by region and sector)