



How to deliver 27% renewables by 2030

or:

Why solar in Germany is better than its reputation!

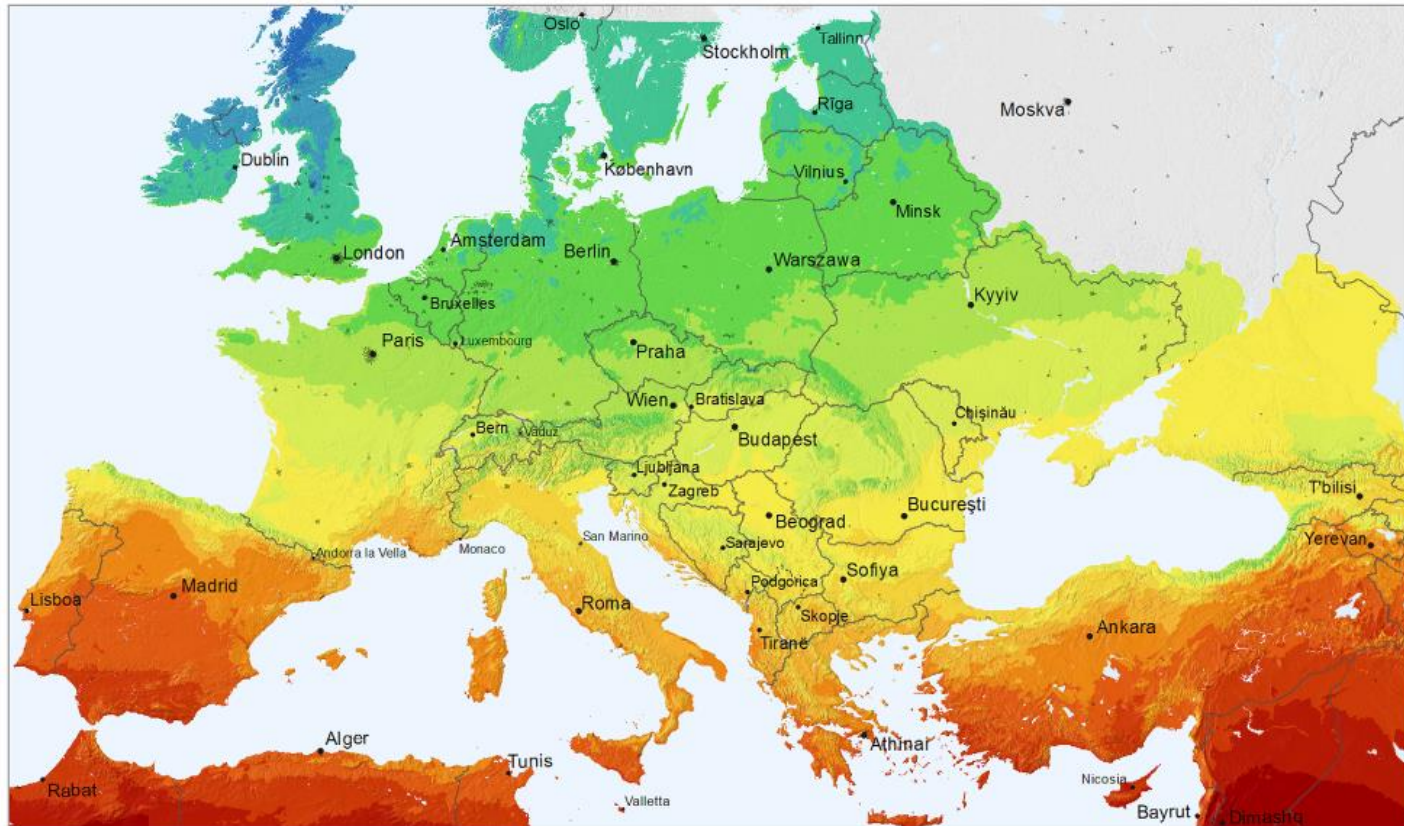
Dr Fabio Genoese

DiaCore Final Conference
Brussels, 30 May 2016

Solar in Germany?

Global Horizontal Irradiation (GHI)

Europe



Average annual sum, period 1994-2010



< 800 1000 1200 1400 1600 1800 2000 > kWh/m²

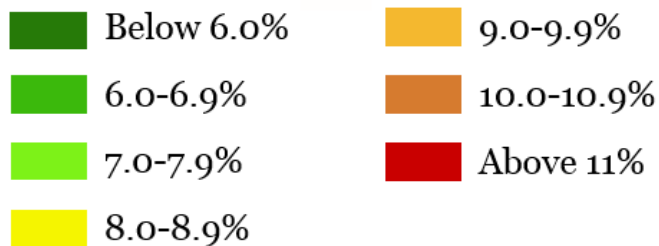
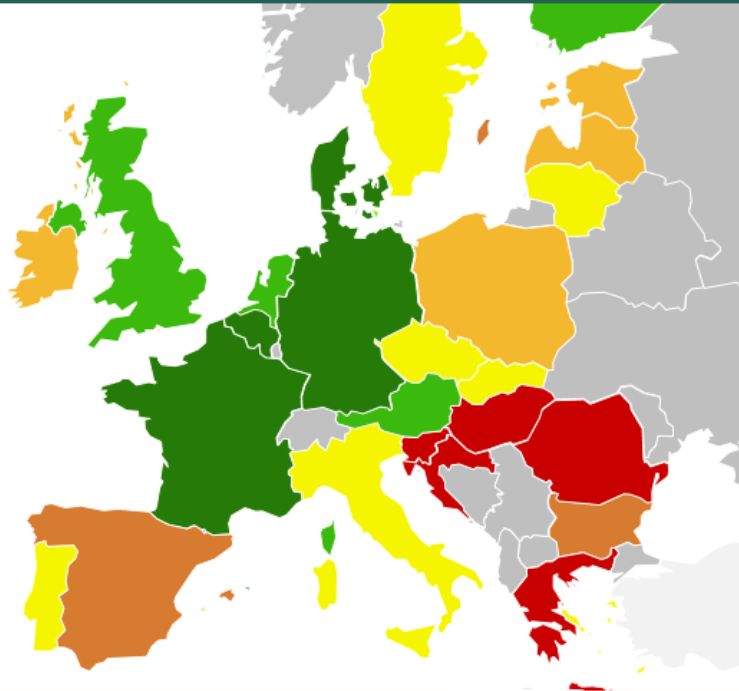
0 400 km

GHI Solar map © 2014 GeoModel Solar

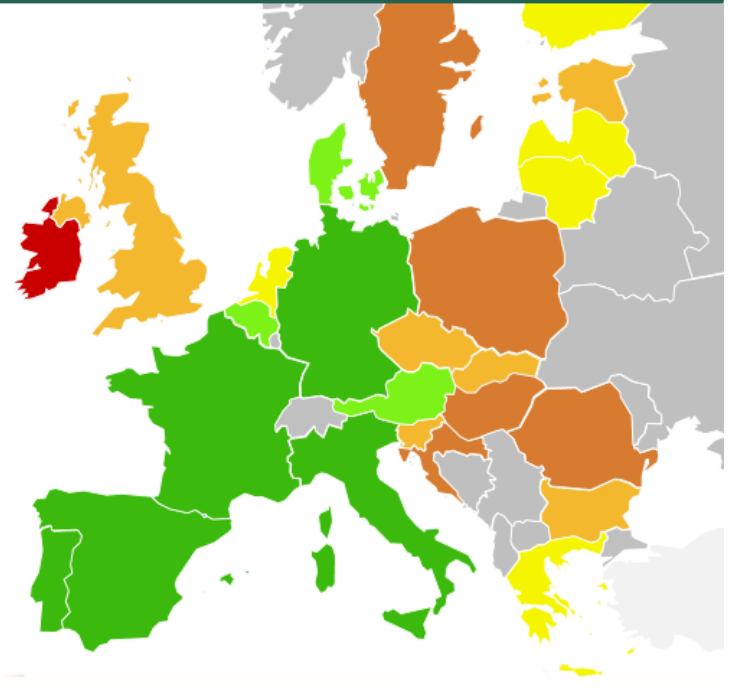


...is better than its reputation!

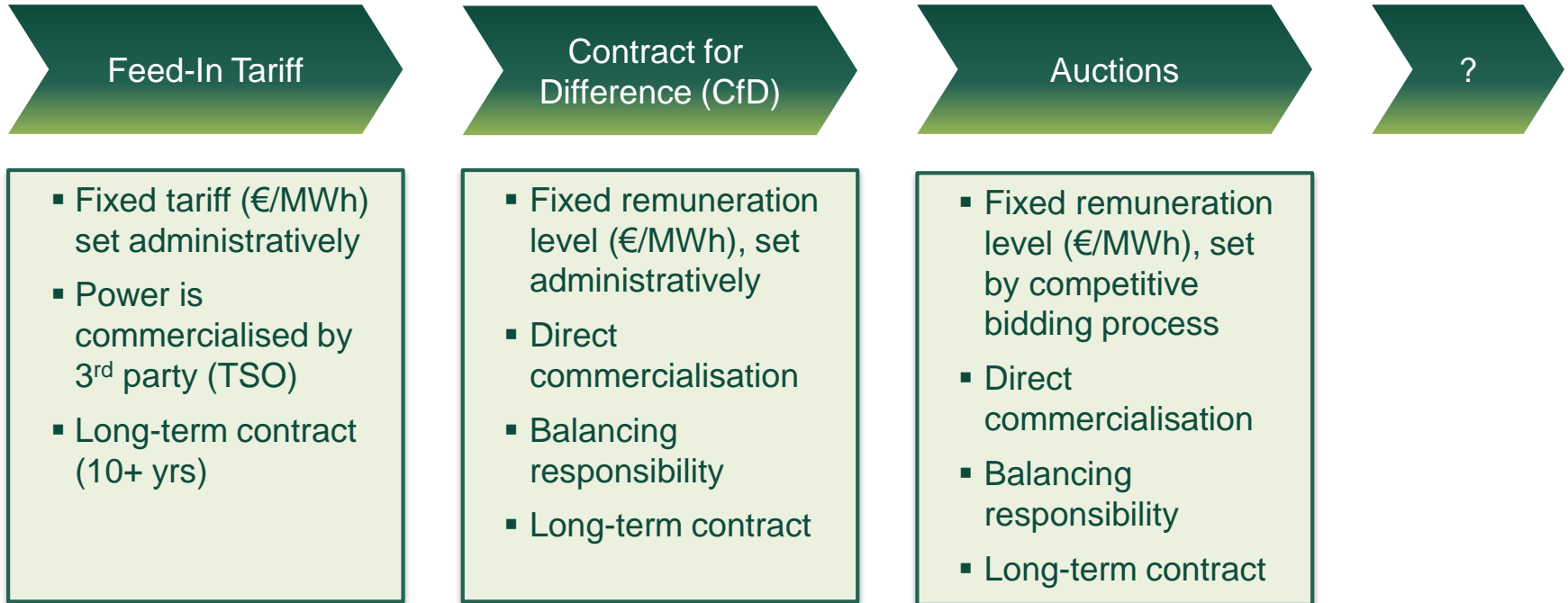
Cost of capital
(DiaCore results for onshore wind)



Total costs, solar
(LCOE)



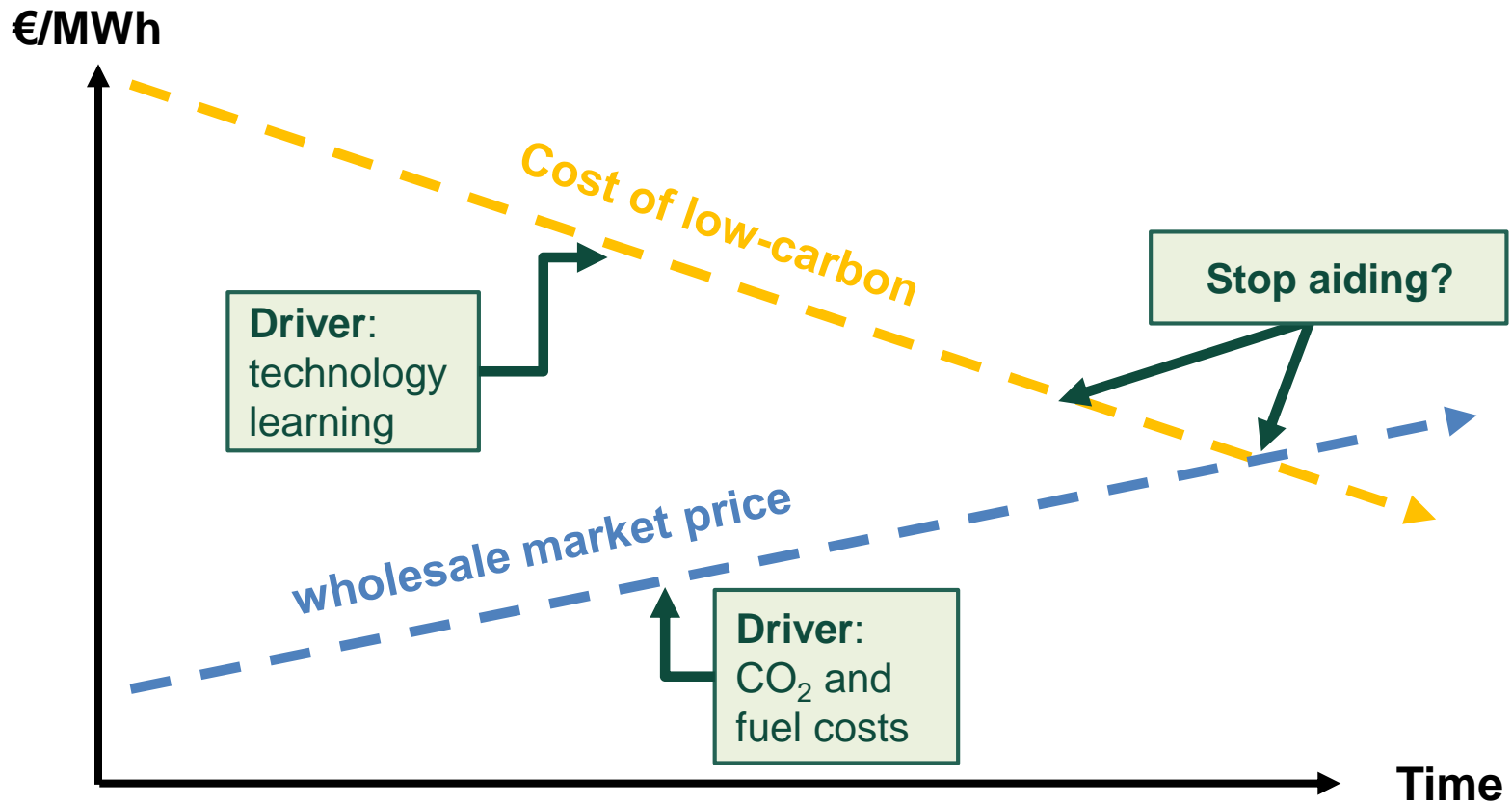
Evolution of renewables framework in DE



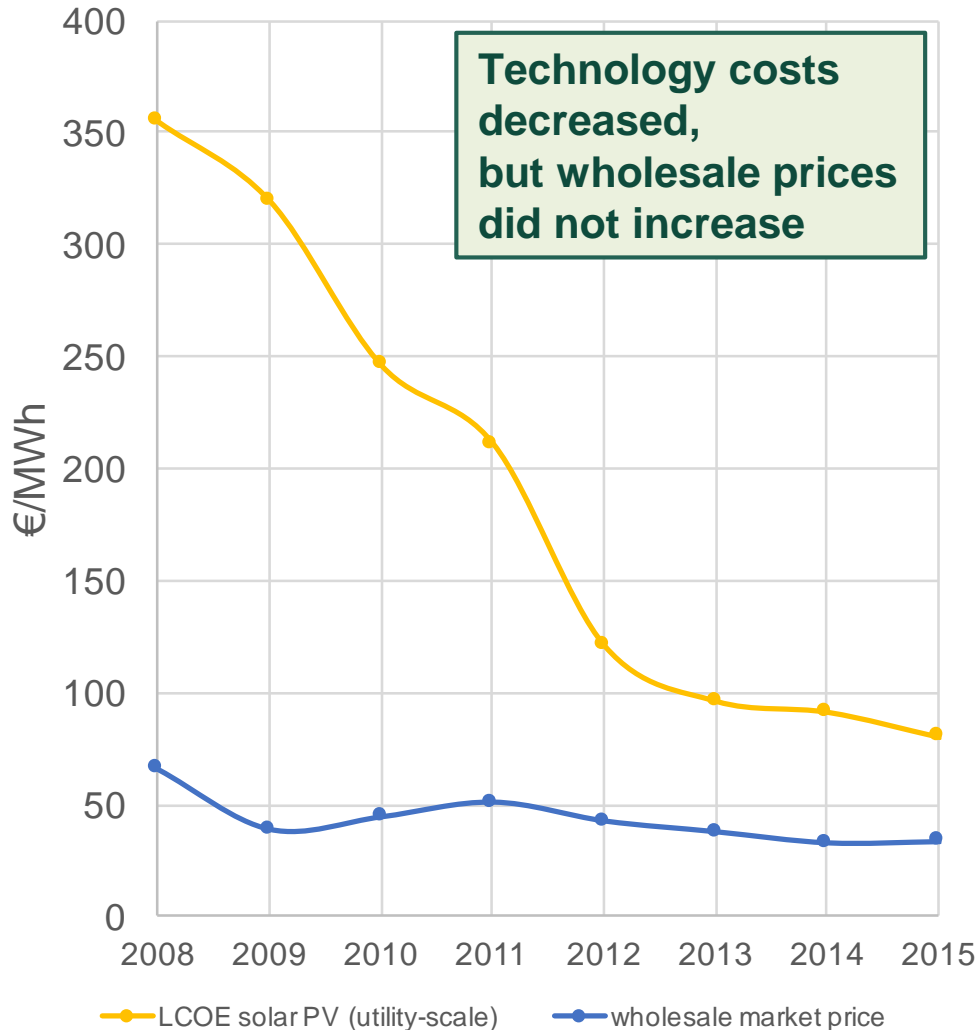
All steps so far: **long-term contracts**

What should come next?

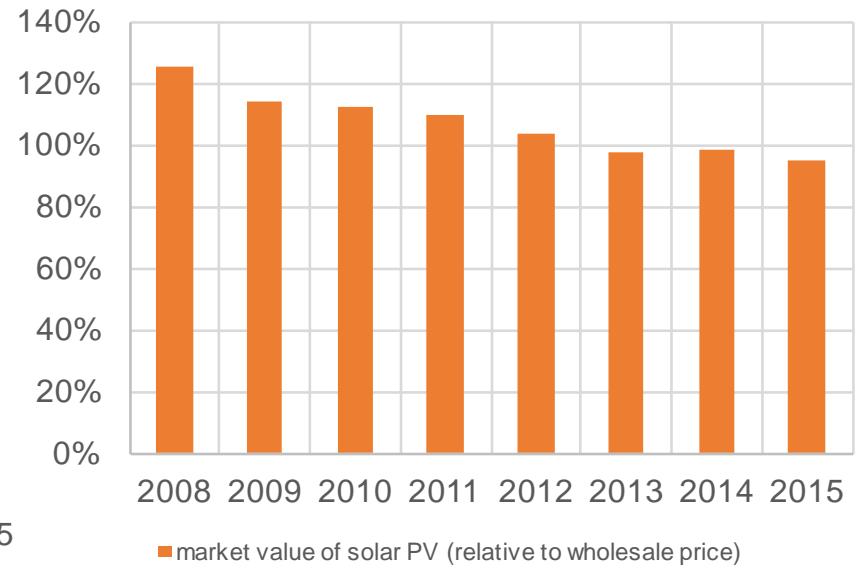
Expectations in 2007/08



Reality (German market)



With increasing market share, renewables tend to earn less than the average market price



Outlook

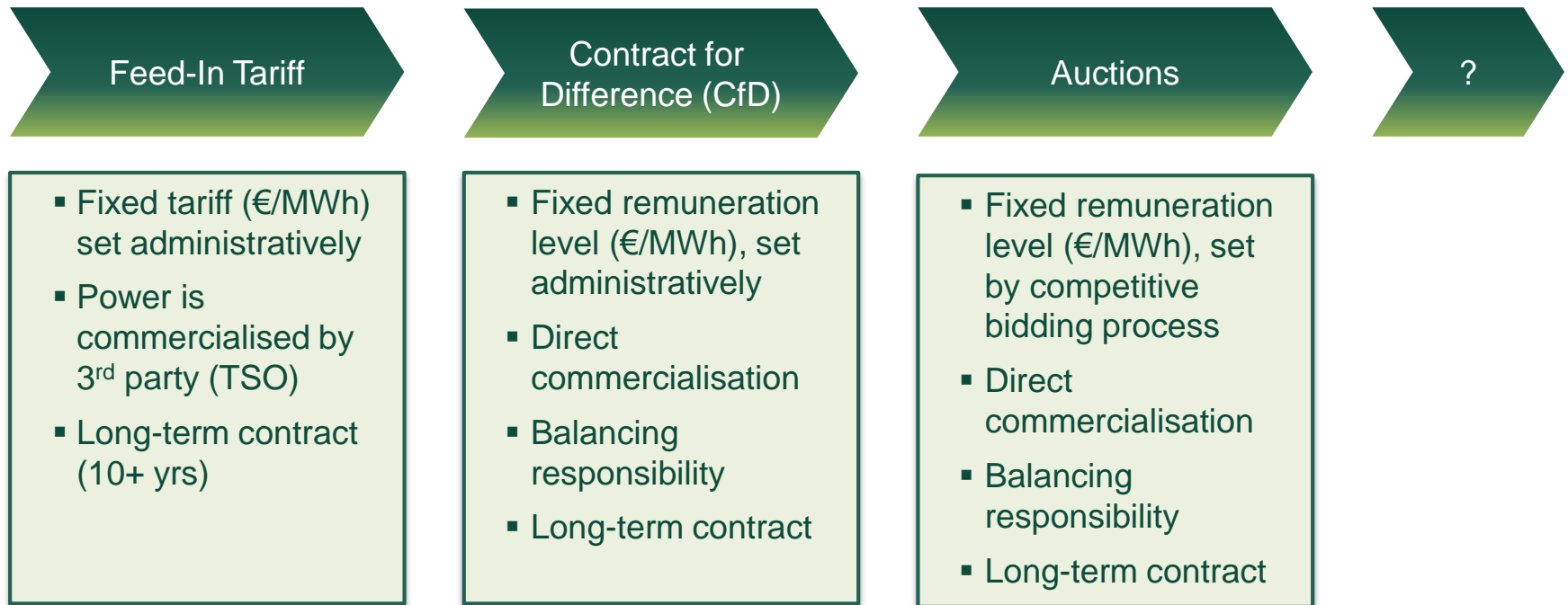
Future development of market prices

- No firm conclusions among stakeholders
- But: high uncertainty whether renewables can recoup investment in the future purely from volatile spot market prices

Consequence

- Uncertainty will be reflected in the cost of capital
 - Lower “no-regret” potential of renewables
 - Challenge for cost-effectiveness

Further evolution of renewables framework



(1) CfD is also a risk-hedging instrument – for both sides!

(2) Long-term contract is fundamental to keep cost of capital under control.
Thus: **LT contract = essential policy element to deliver 27% renewables**

CEPS Special Report: goo.gl/2gdtlq

Thank you for your attention

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