

Solar Photovoltaics

A future outlook

Alan South - Solarcentury



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Agenda

Near term: UK feed-in tariff

PV price falls

Mid term: Code for Sustainable Homes



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How does a feed-in tariff work?

- the right to feed solar electricity into the public grid
- receive a premium tariff per generated kWh
- receive the premium tariff over a fixed period of time

example: France €0.60/kWh (cf.€0.12/kWh), 20 years

21 European countries: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Hungary, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxemburg, Netherlands, Portugal, Slovakia, Slovenia, Spain, Switzerland



Proposed UK feed-in tariff

- Technologies included: PV, micro-wind, micro-hydro, biomass, CHP
- Heat technologies excluded e.g. ASHPs. Large scale keeps ROCs.
- Tariffs pay for generation (generation tariff) and export (export tariff)
- Savings on electricity that doesn't have to be bought
- Solar (generation) tariffs for 2010:
 - 36.5p retrofit <4kWp
 - 31p new build <4kWp
 - 31p 4-10 kWp
 - 28p 10-100 kWp
 - 26p 100kWp-5MWp



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- Fixed for 25 years at starting rate
- 7% regression means tariff you receive reduces every year you wait
- Flexibility as to who owns the system
- Installations from today will be covered by the FiT
- Timeline: consultation to January, in place from April 2010



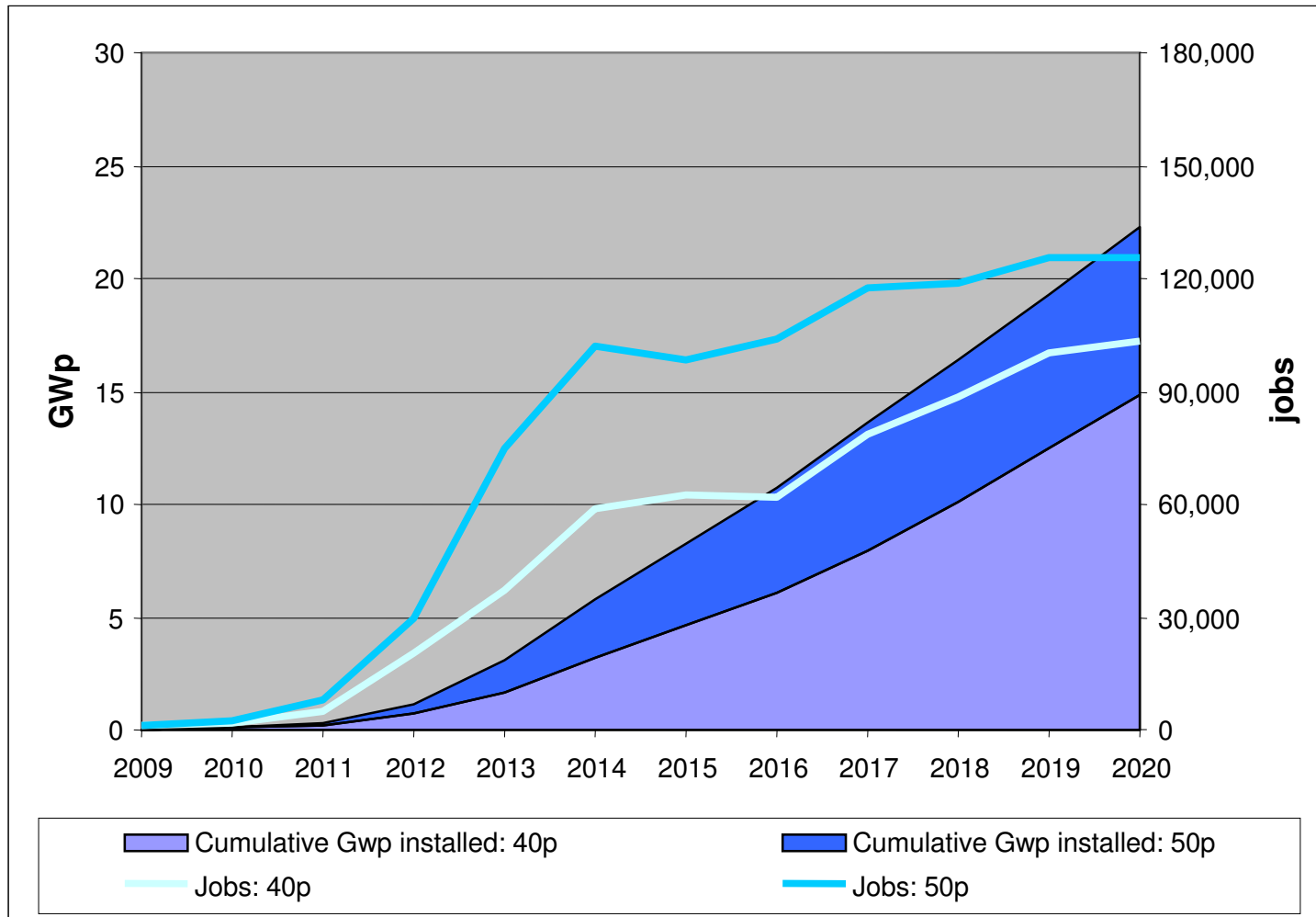
Effect – Europe

Annual installed capacities (MWp) in selected European countries
(*source IEA and EPIA*)

	2006	2007	2008	2009
Belgium	2	18	48	100
Czech Republic	0	3	51	80
France	10.6	31.3	46	250
Germany	830	1,135	1,500	2,000
Italy	12.5	70.2	258	400
UK	3.2	4	6	6?



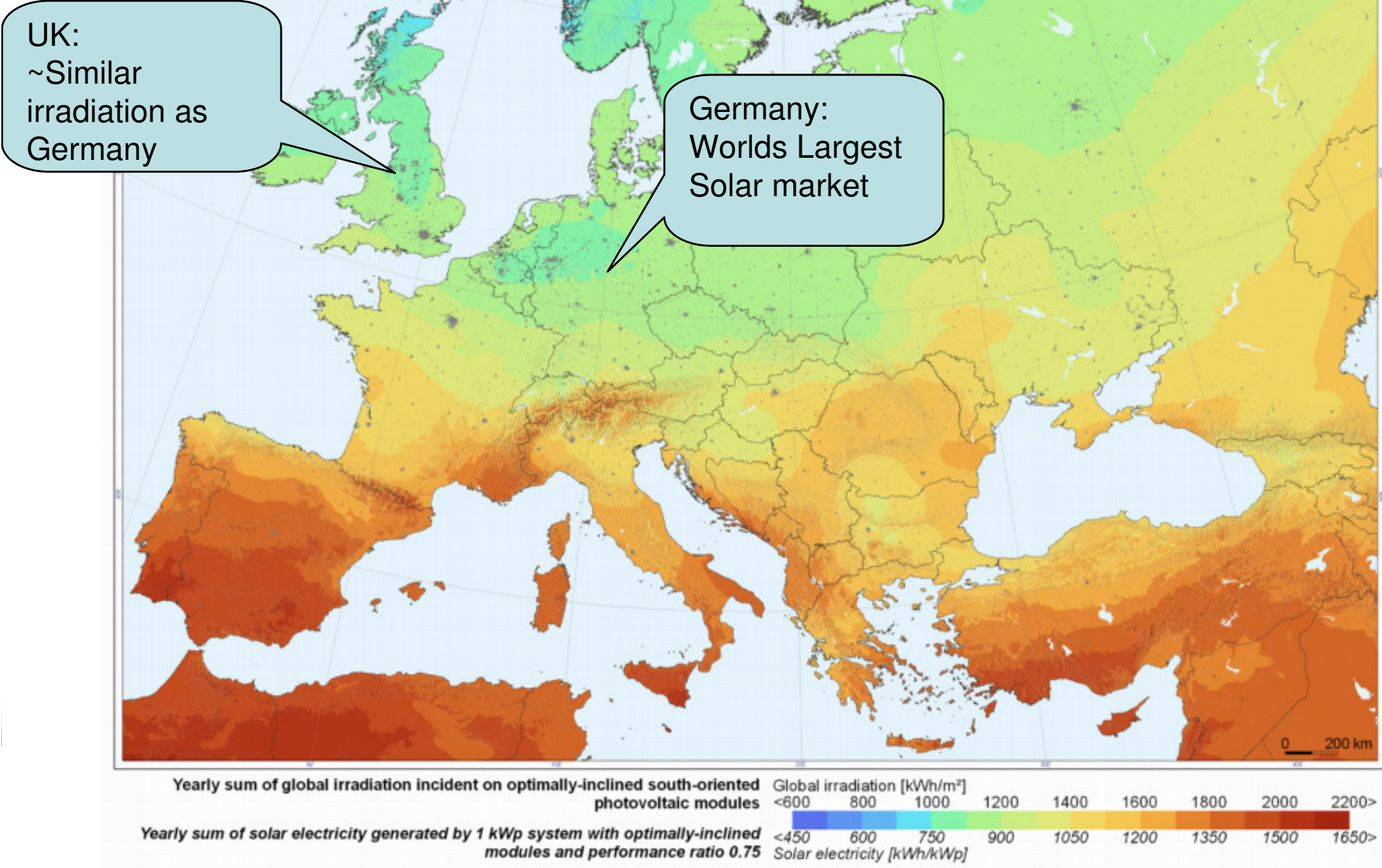
Effect – UK volume and jobs potential (SC model)



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Solar Irradiation in Europe



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One year PV price reduction

HEAT 08: €2.70/W

HEAT 09: €1.25/W

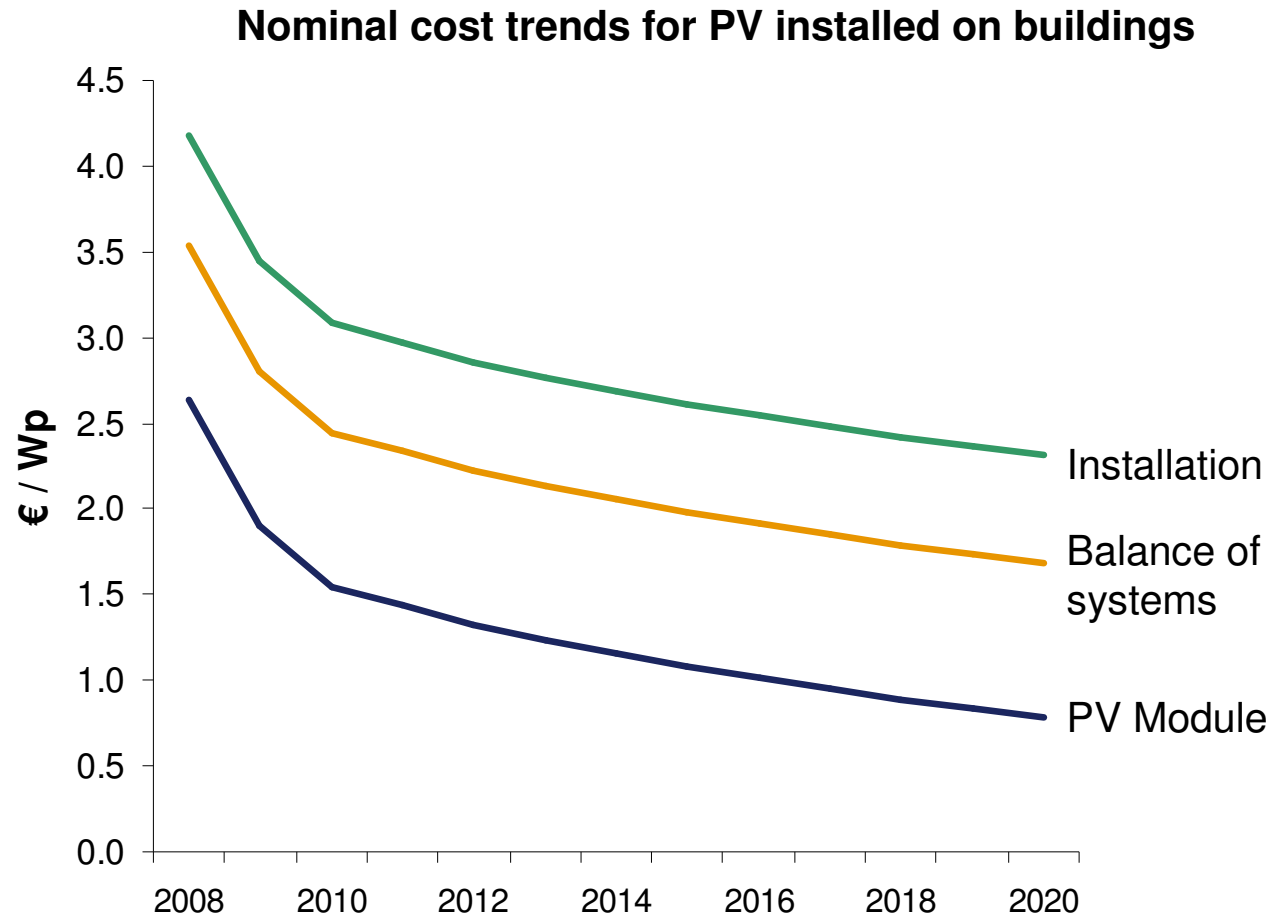
(Prices for crystalline silicon modules)



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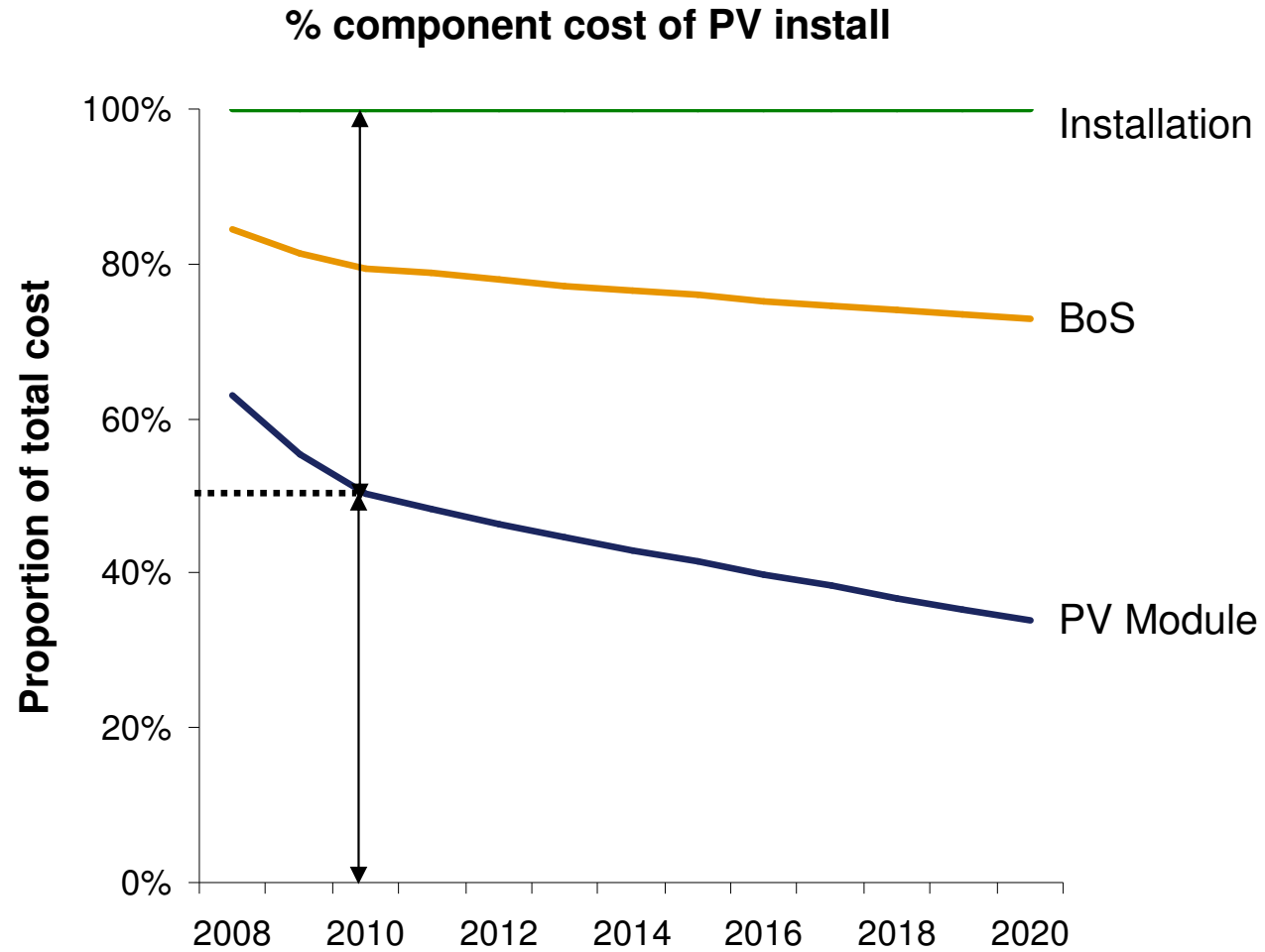
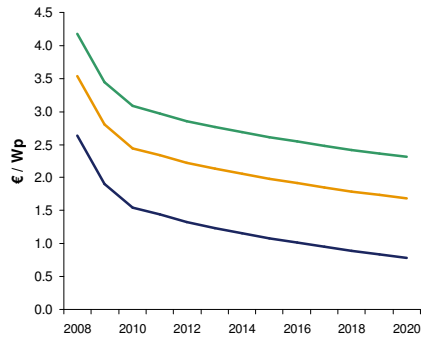
PV prices – shift in relative costs



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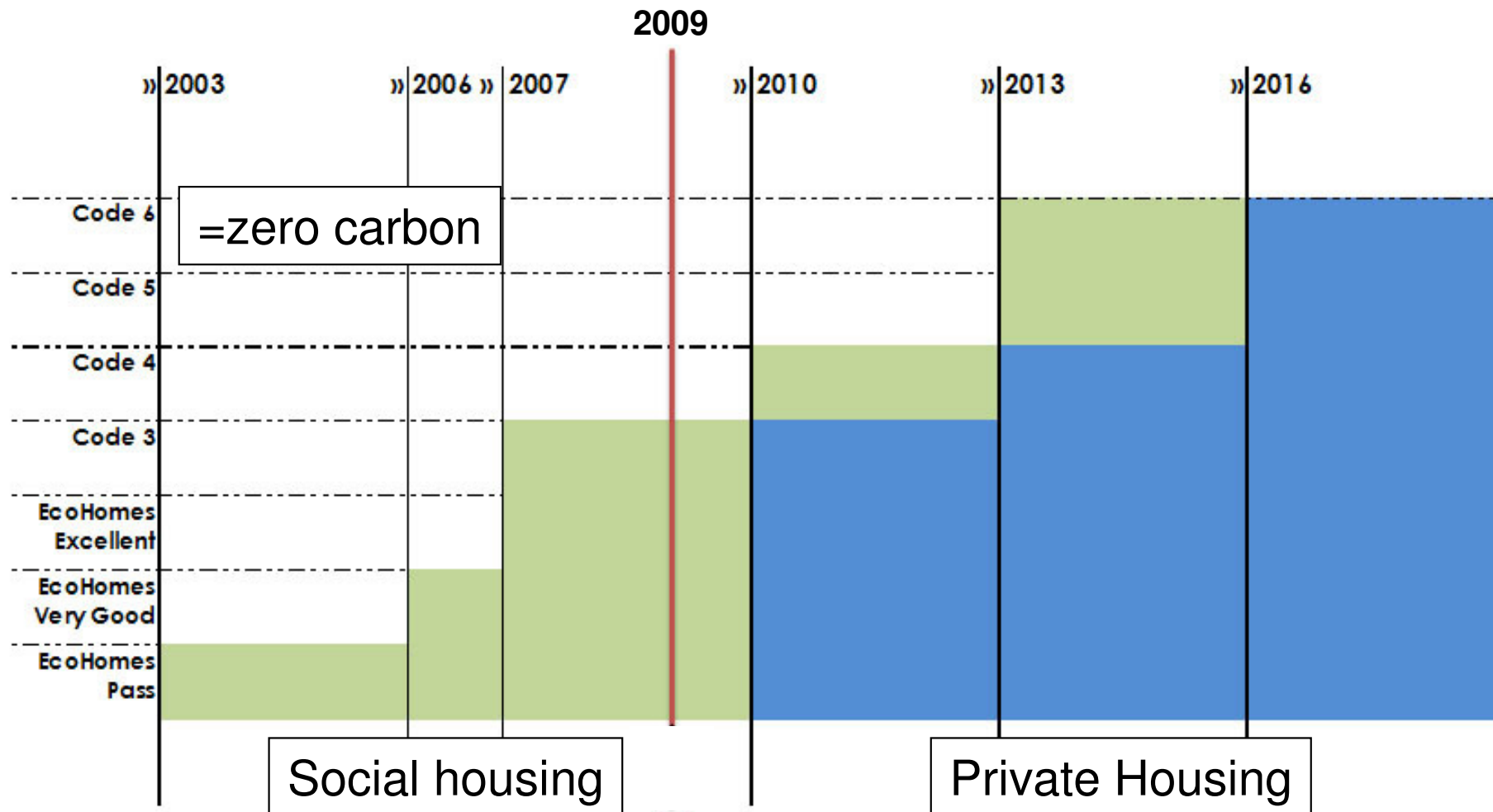
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Code for sustainable homes



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Conclusion



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