



E-mobility adoption pathways in France, Germany and Norway

Comparative analysis of macro-environmental factors for knowledge transfer and best practice identification

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22.06.2018

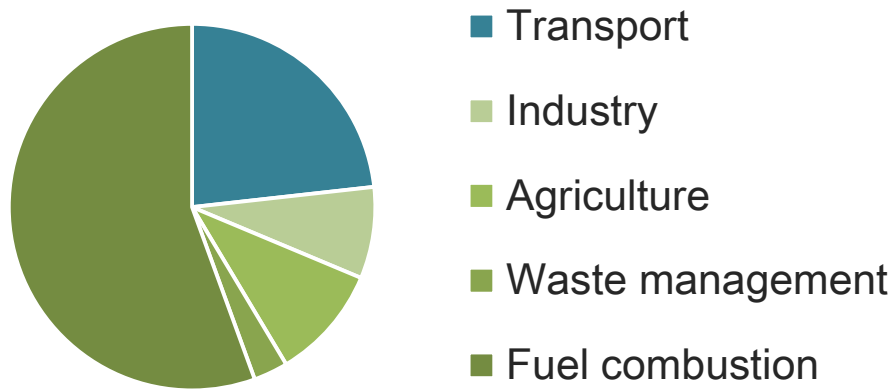


Agenda

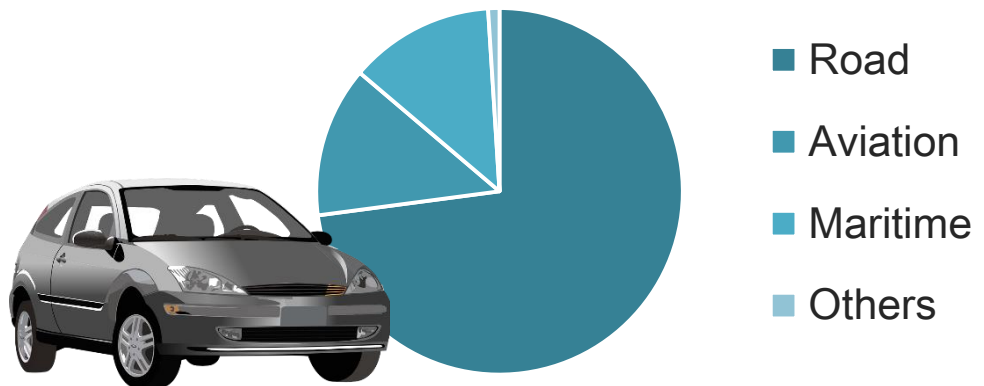
- Sustainable mobility
- Adoption path comparison
- Why these differences?

Sustainable mobility

Share of European GHG

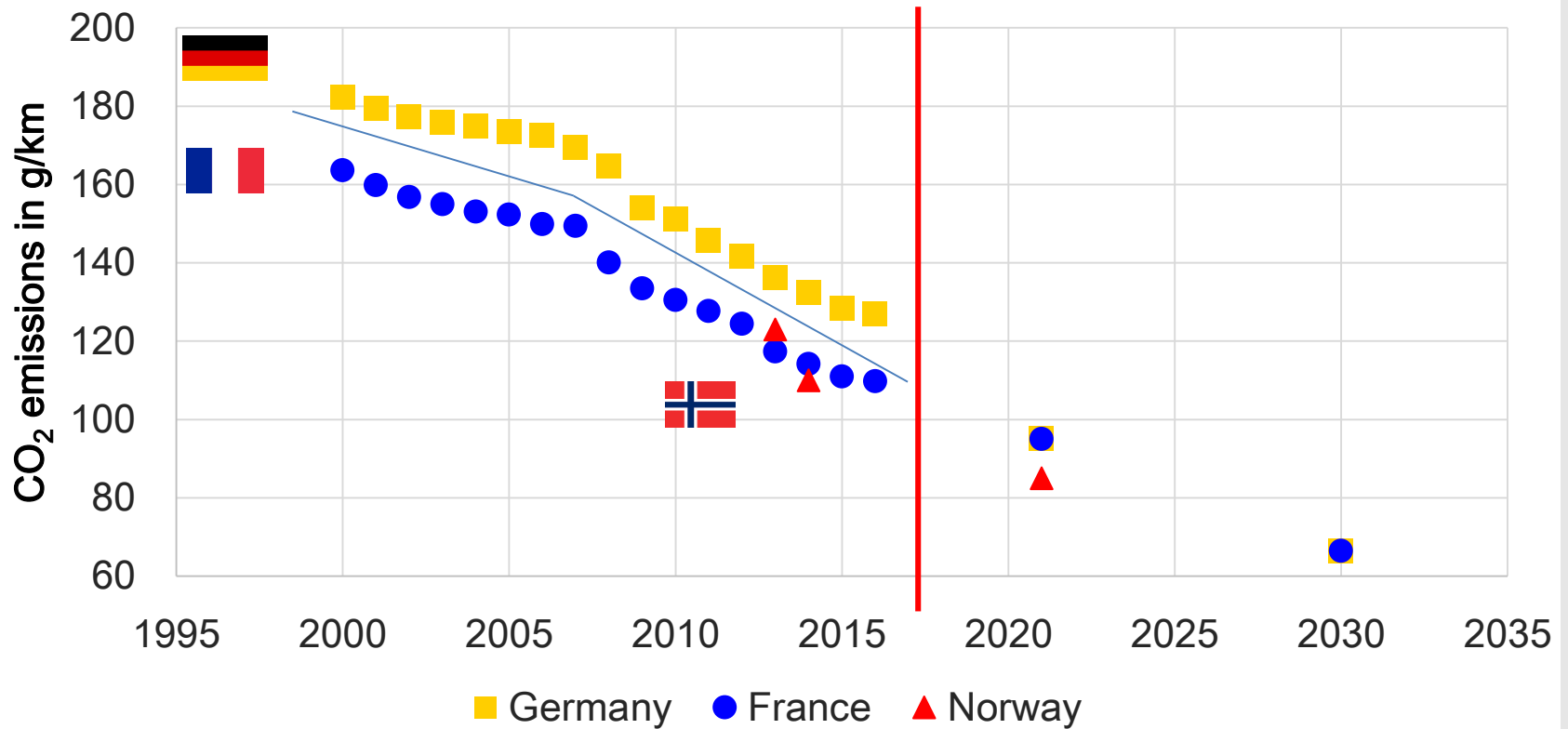


Share of European transport GHG

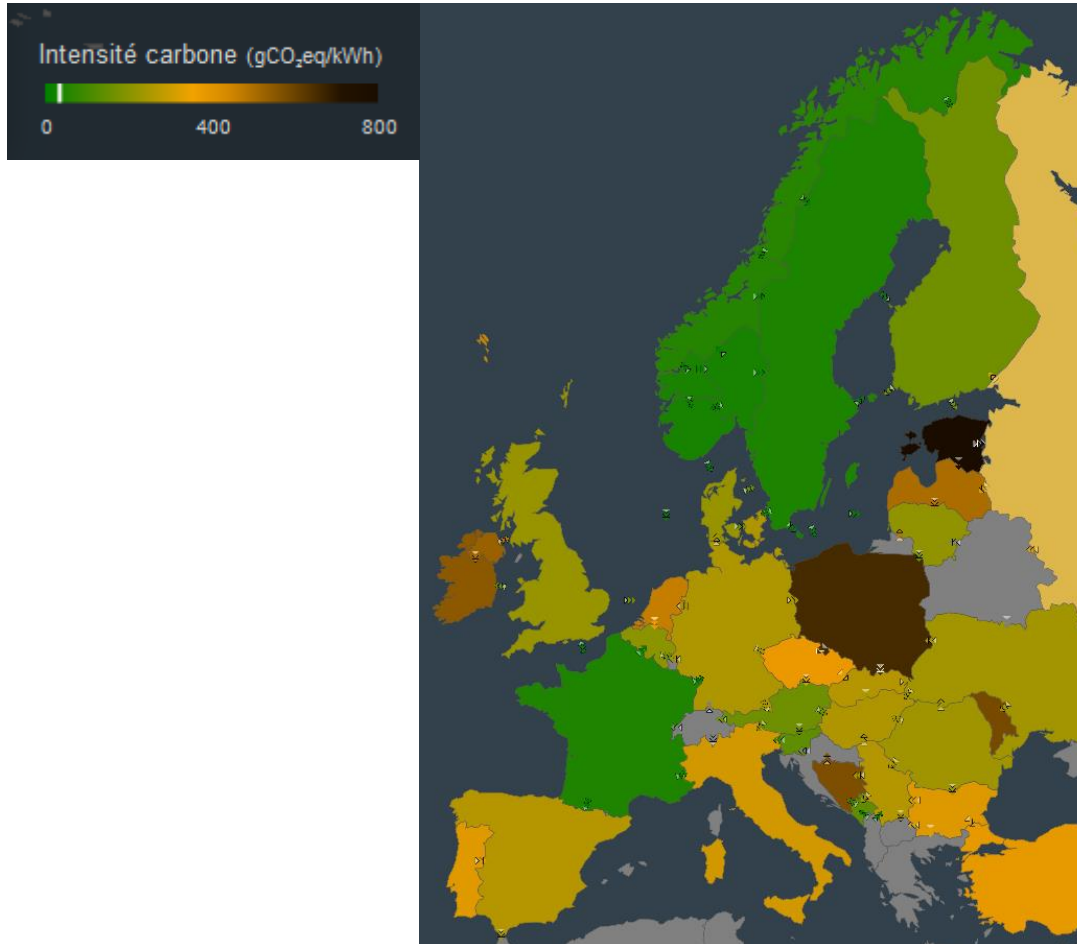


Sustainable mobility

Average CO₂ emissions in g/km from new passenger cars



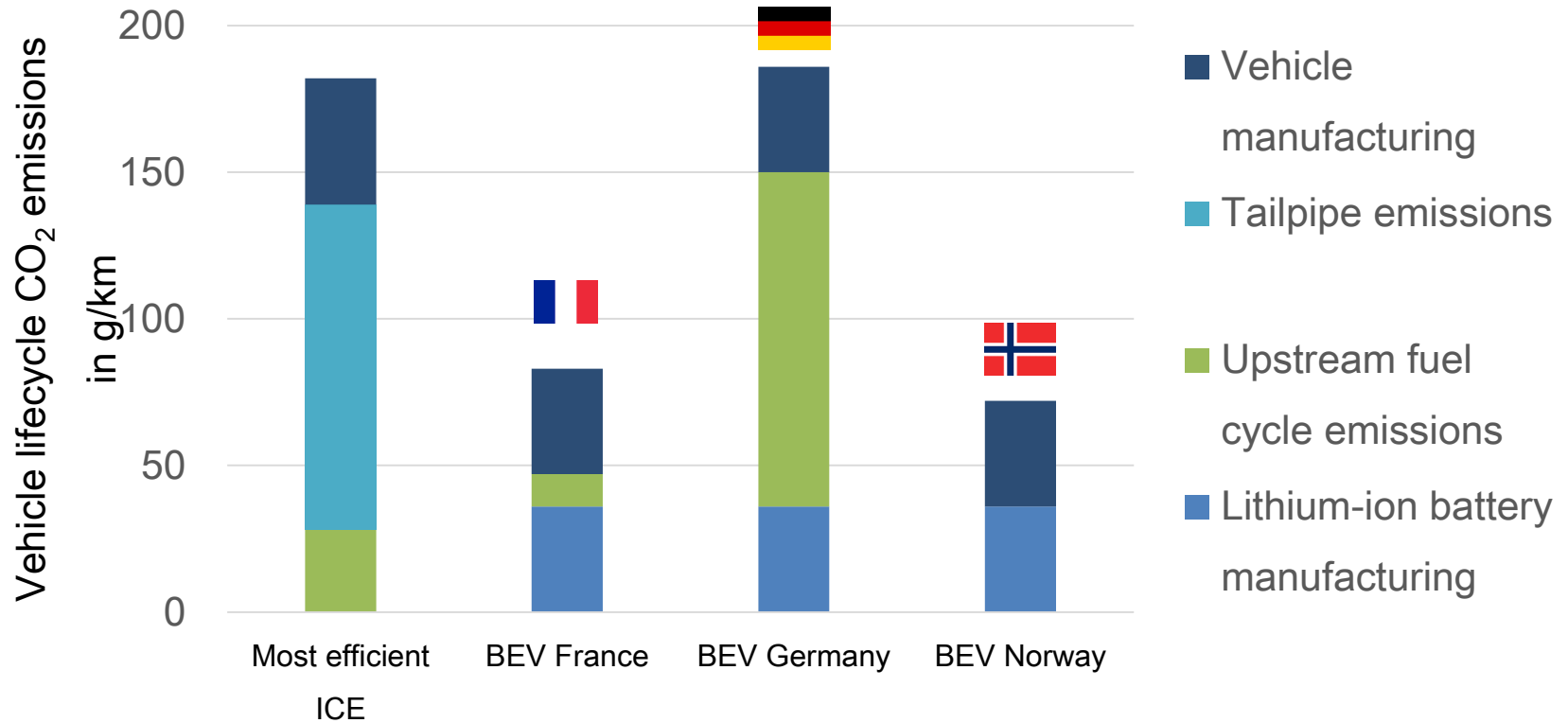
Sustainable mobility



Electricity Map
electricitymap.org

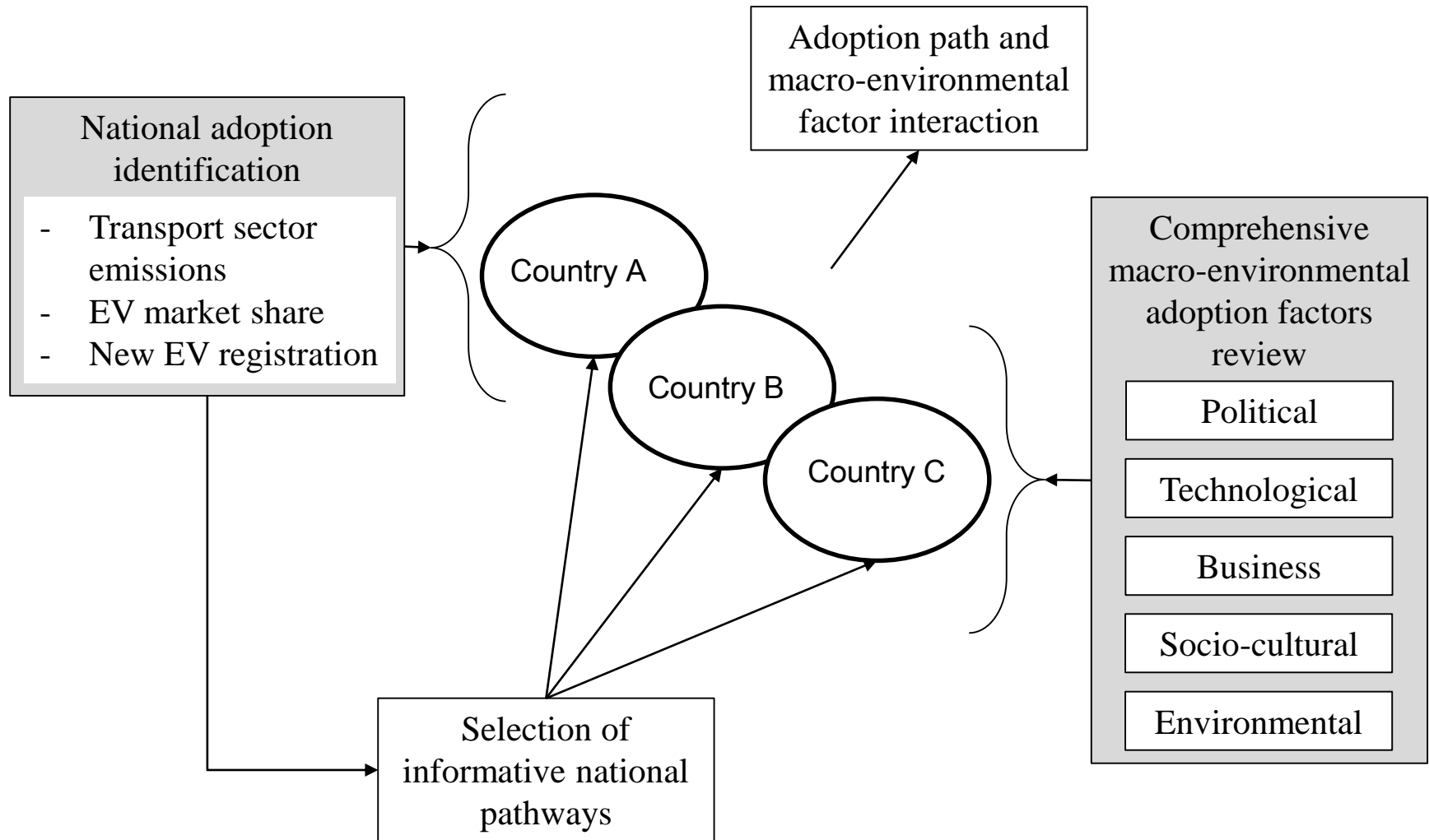
June 2018

Sustainable mobility



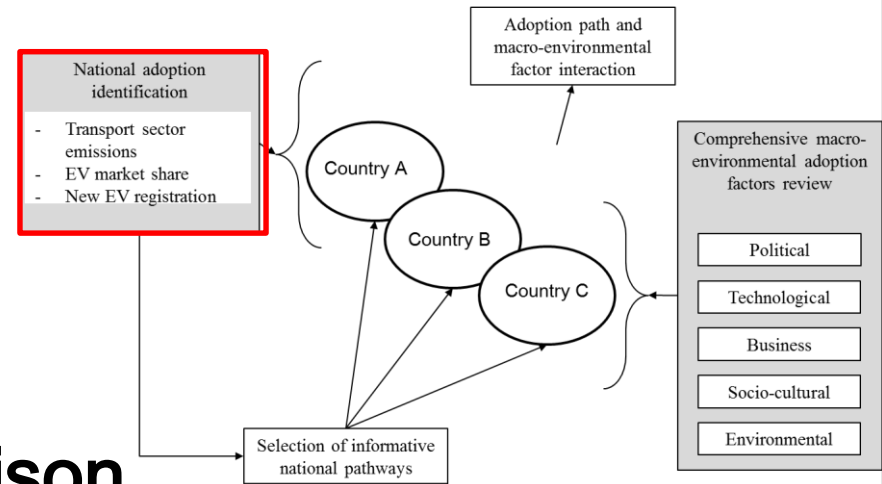
Adapted from Hall, Dale; Lutsey, Nic (2018): Effects of battery manufacturing on electric vehicle life-cycle greenhouse gas emissions. ICCT.

Analysis framework

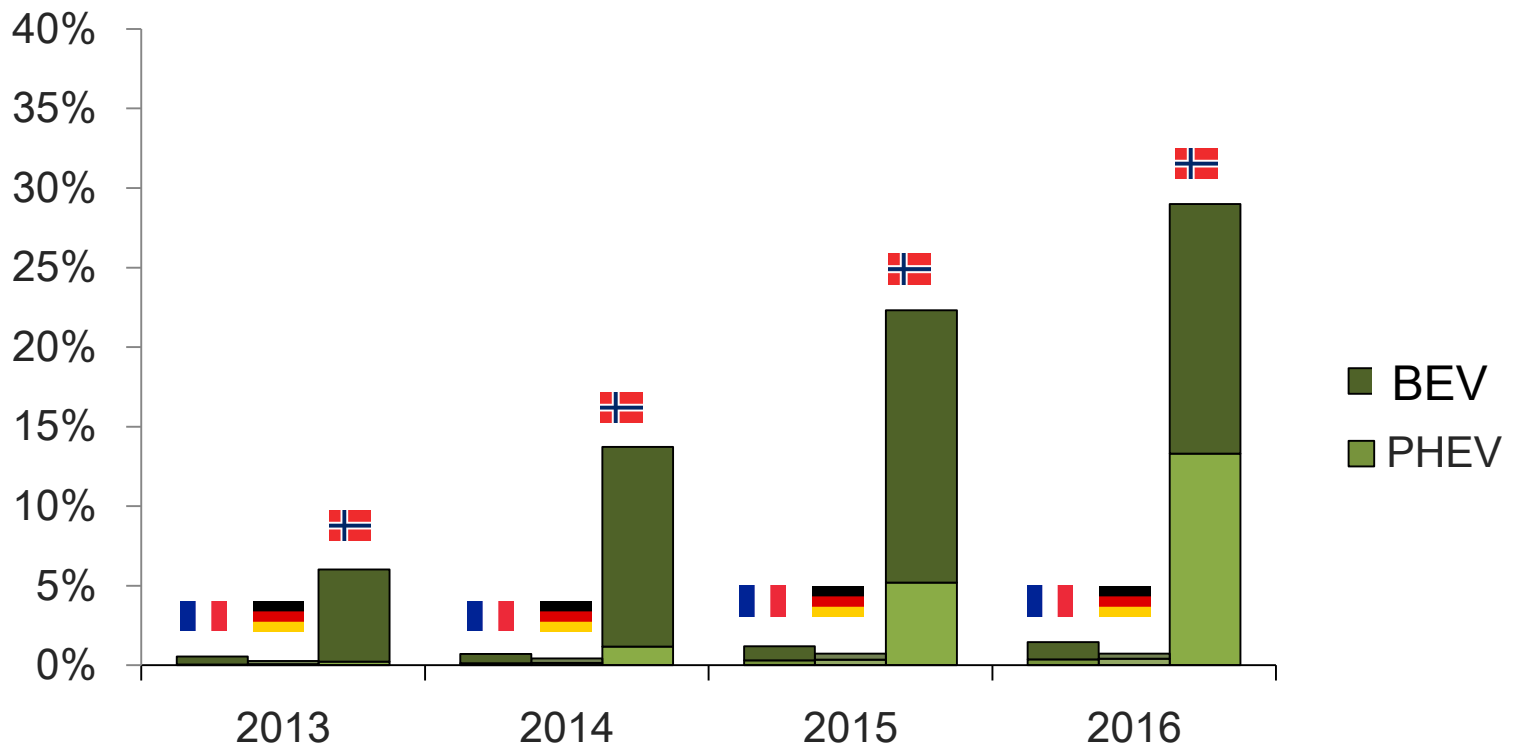


Agenda

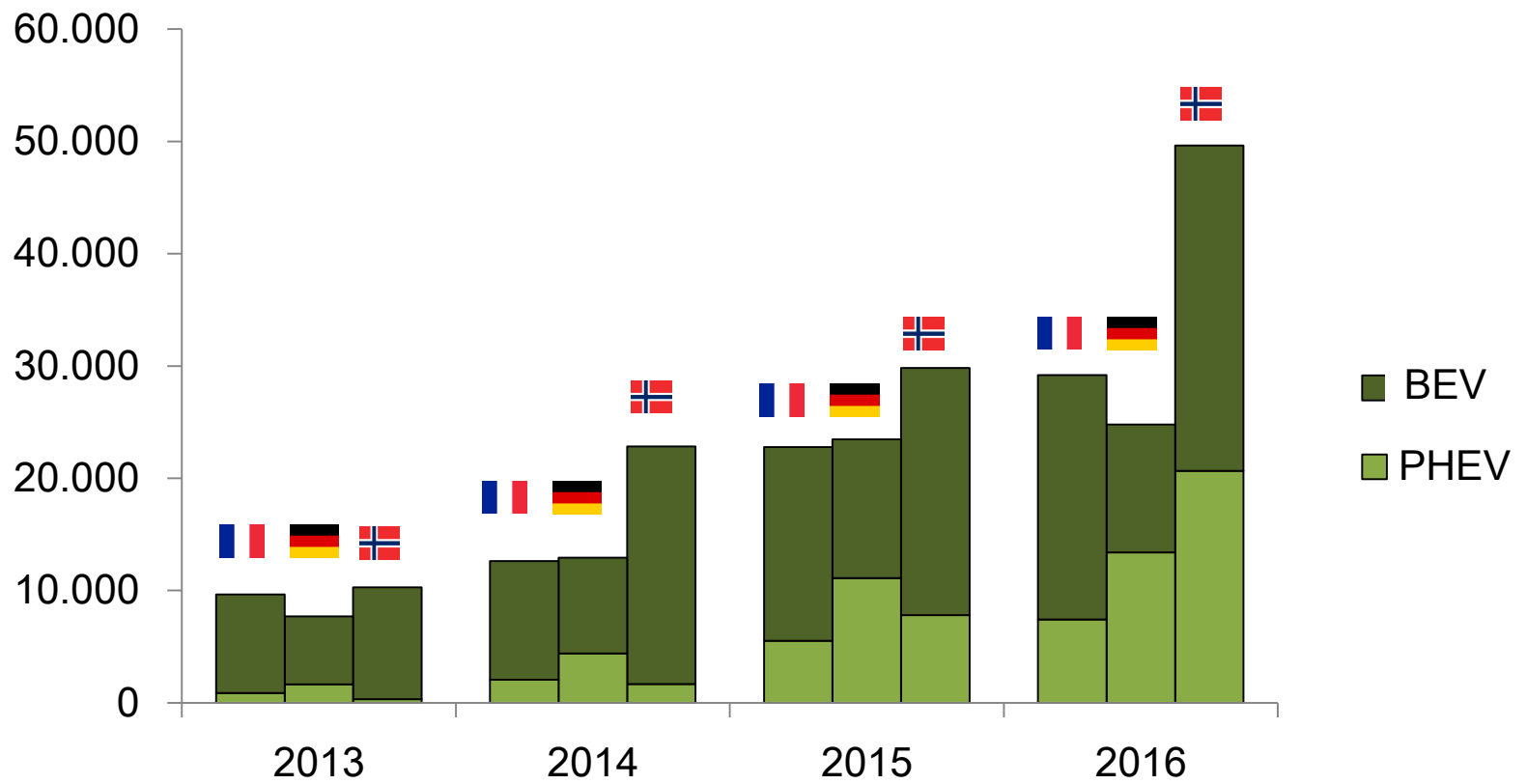
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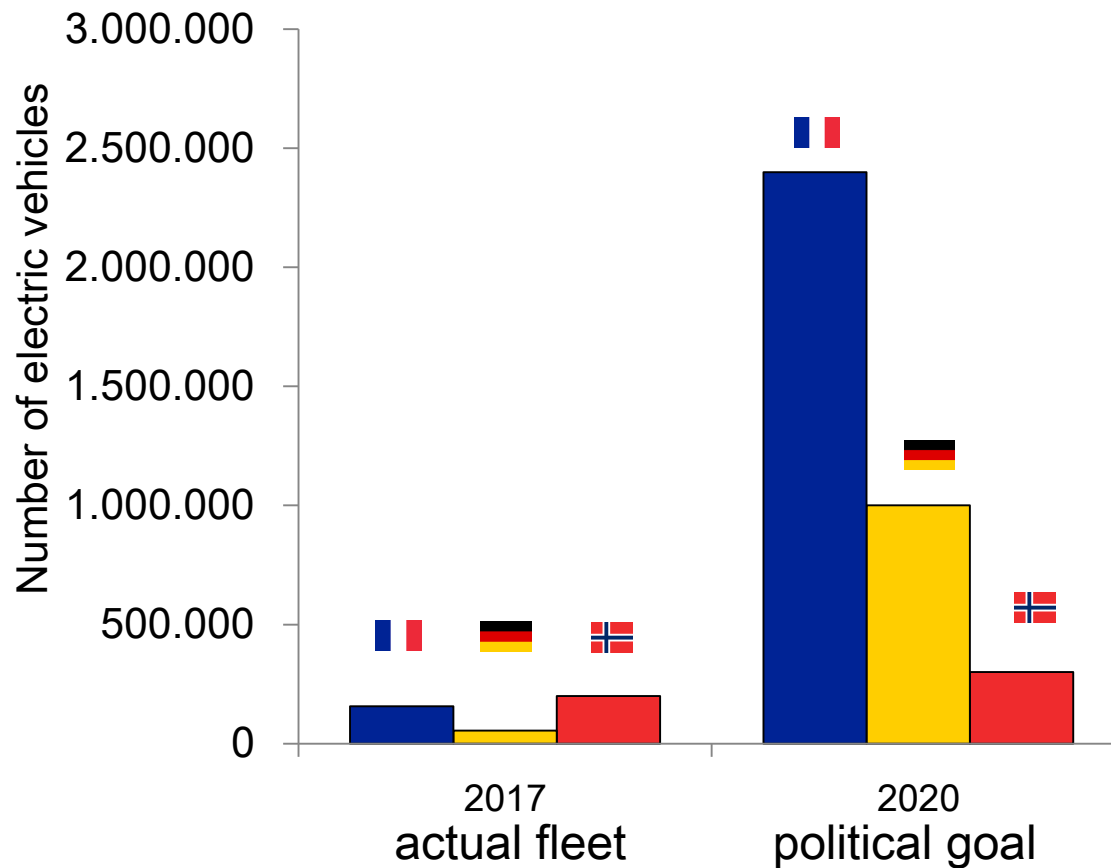
Market share comparison



New registration comparison

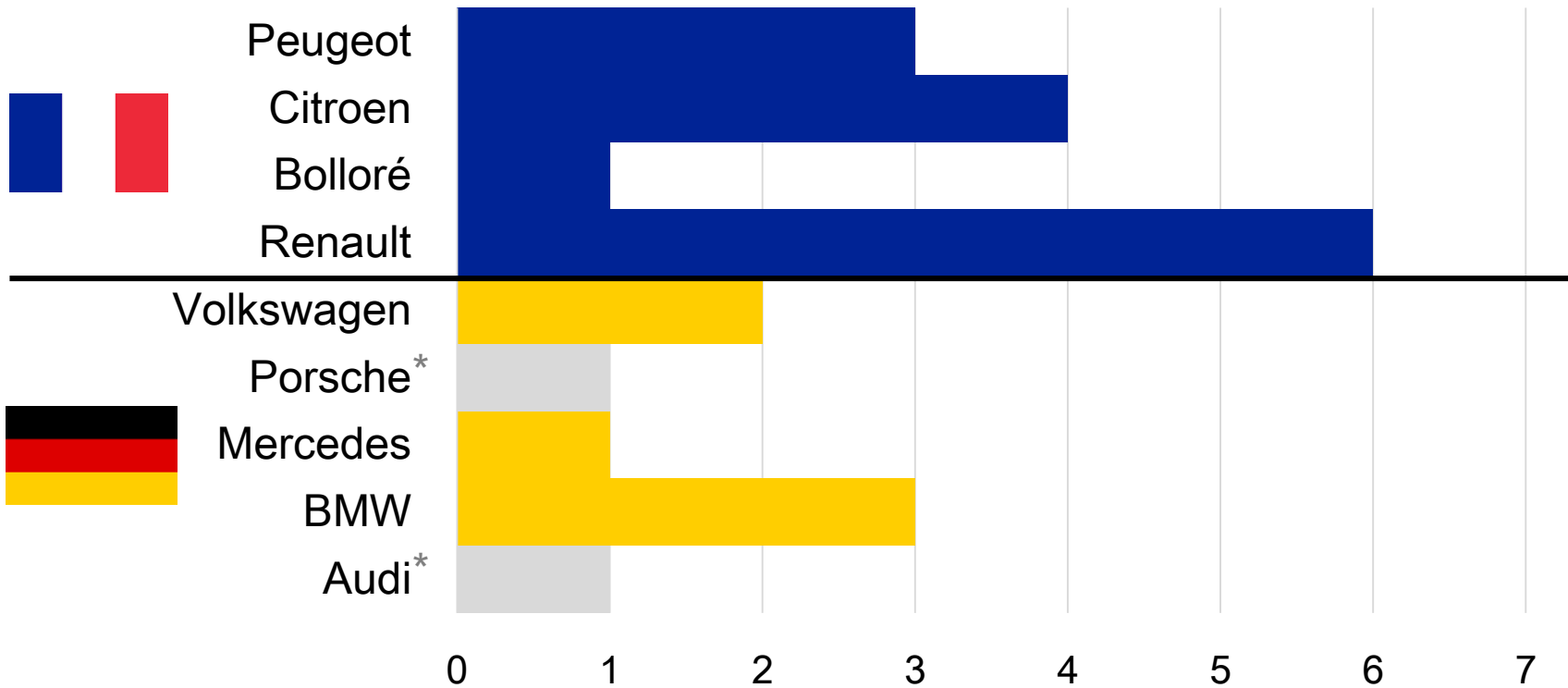


Electric vehicle fleet and political goals



Car industry

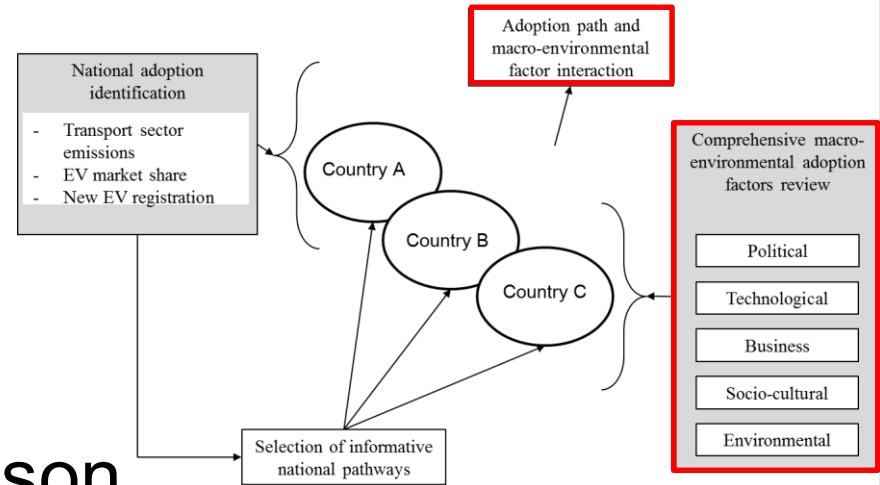
Number of fully electric models by make



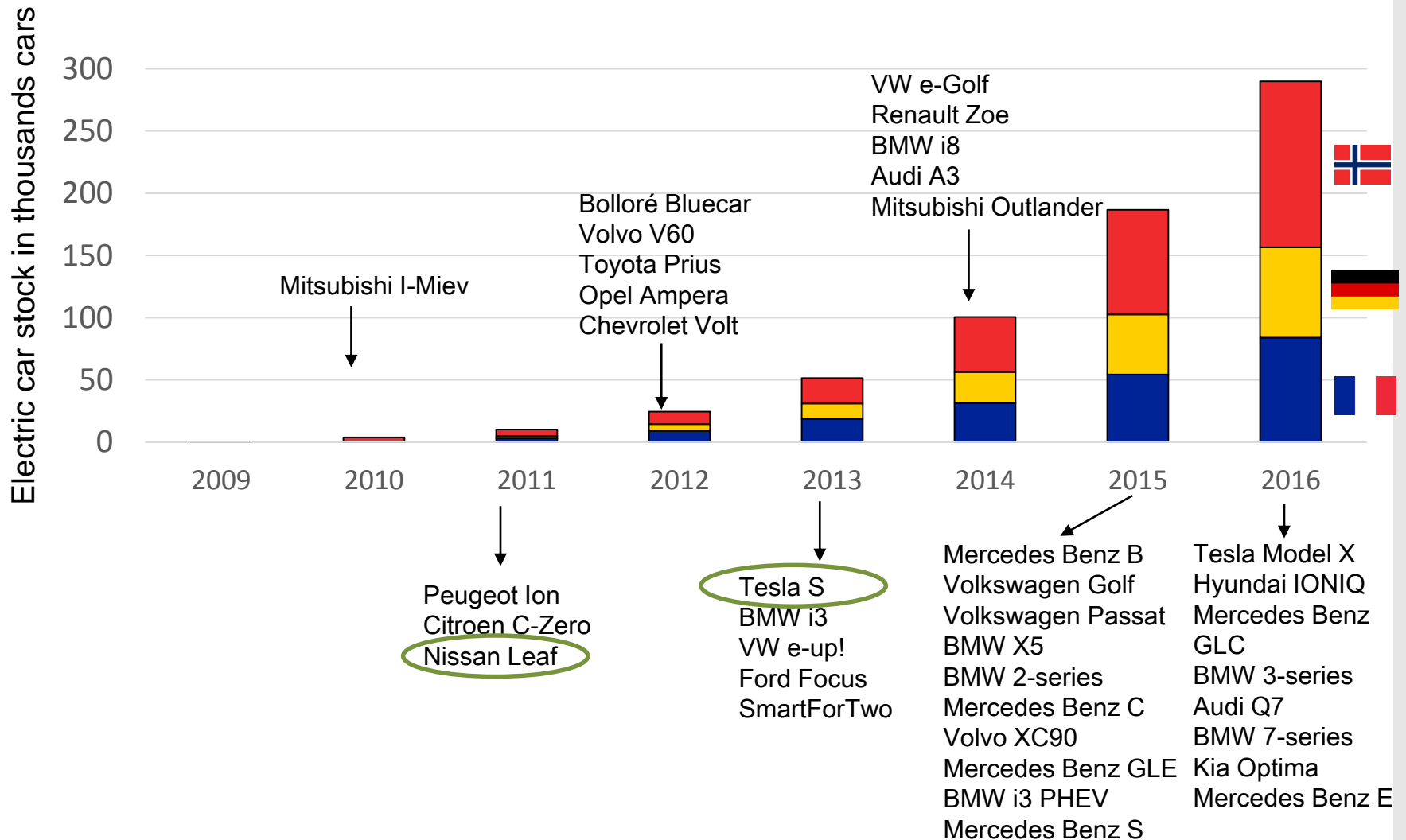
*upcoming

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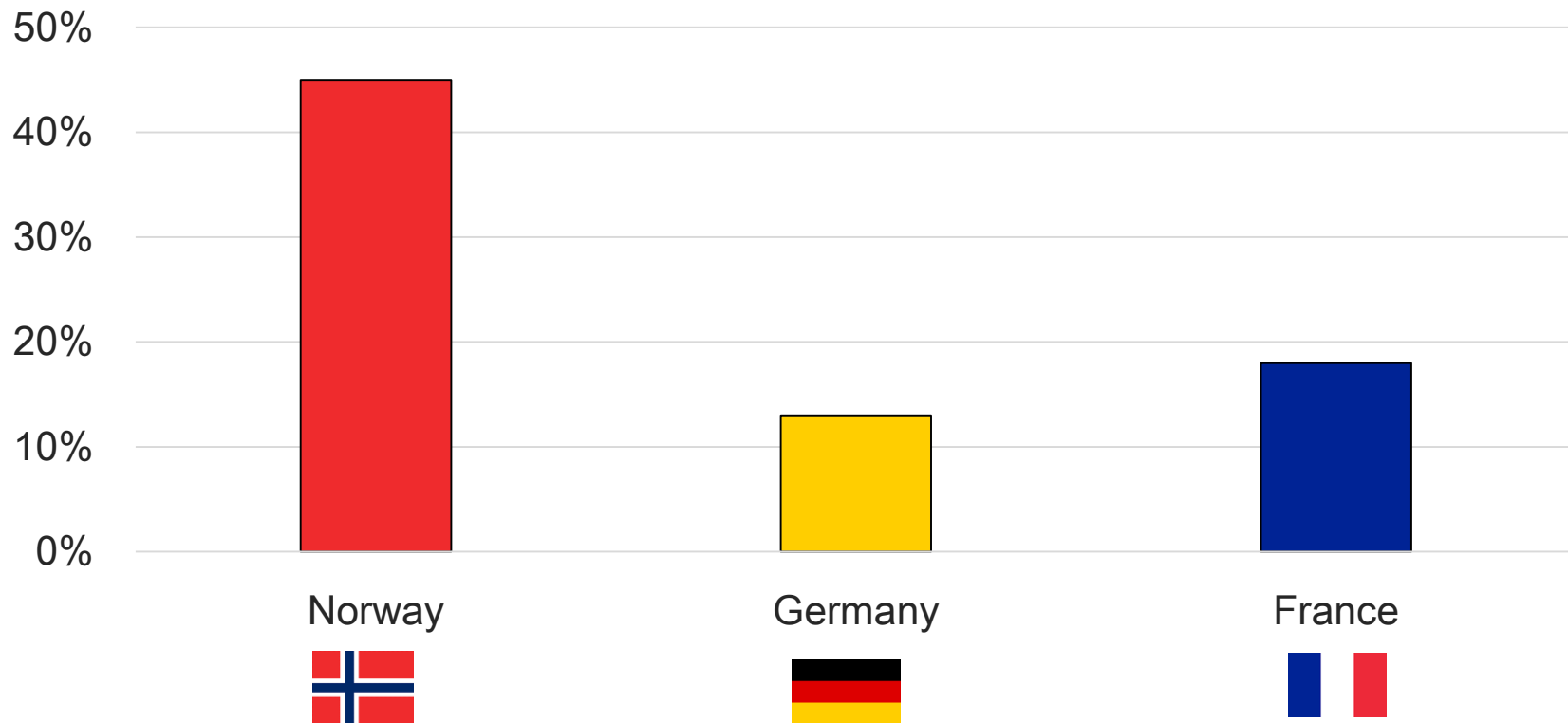


Electric car stock and model availability






Monetary subsidy

Average of financial incentive as % of net EV price

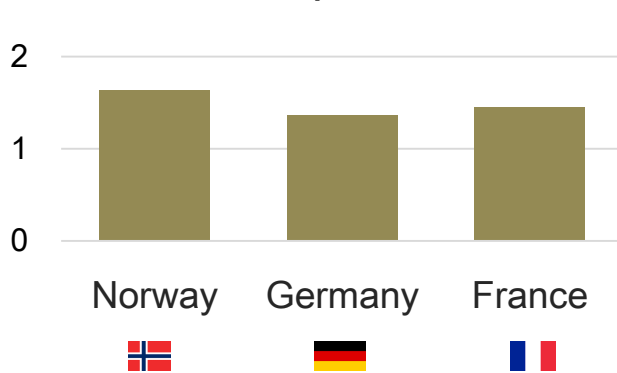


Exemplary calculation: Renault ZOE Life 41kWh

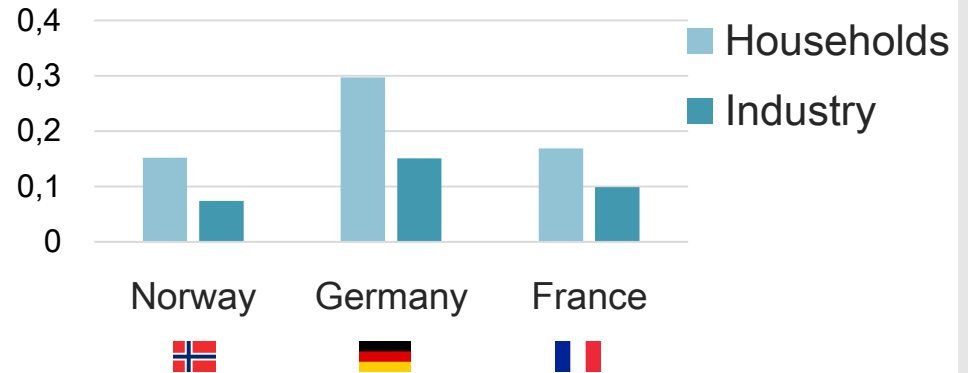
	 France	 Germany	 Norway
List Price	26480 €	26649 €	24852 €
VAT	6620 €	6251 €	Exempted
Bonus	-6000 €	-5000 €	None
Home charging facility	1500 € -30% tax credit	1500 €	Offered
Registration tax	Exempted (~46 €)	~27 €	Exempted
Annual ownership/road tax	Not applicable	Exempted five years	Exempted
End price	28150 €	29426 €	24852 €

Fuel prices

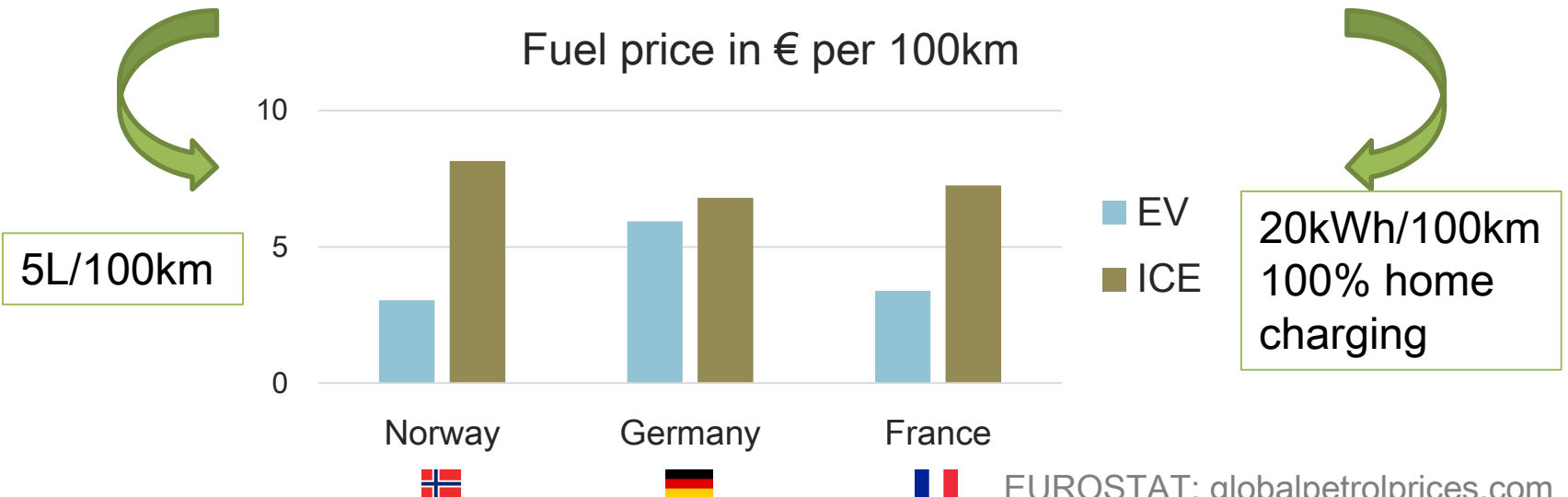
Gasoline price in €/Liter



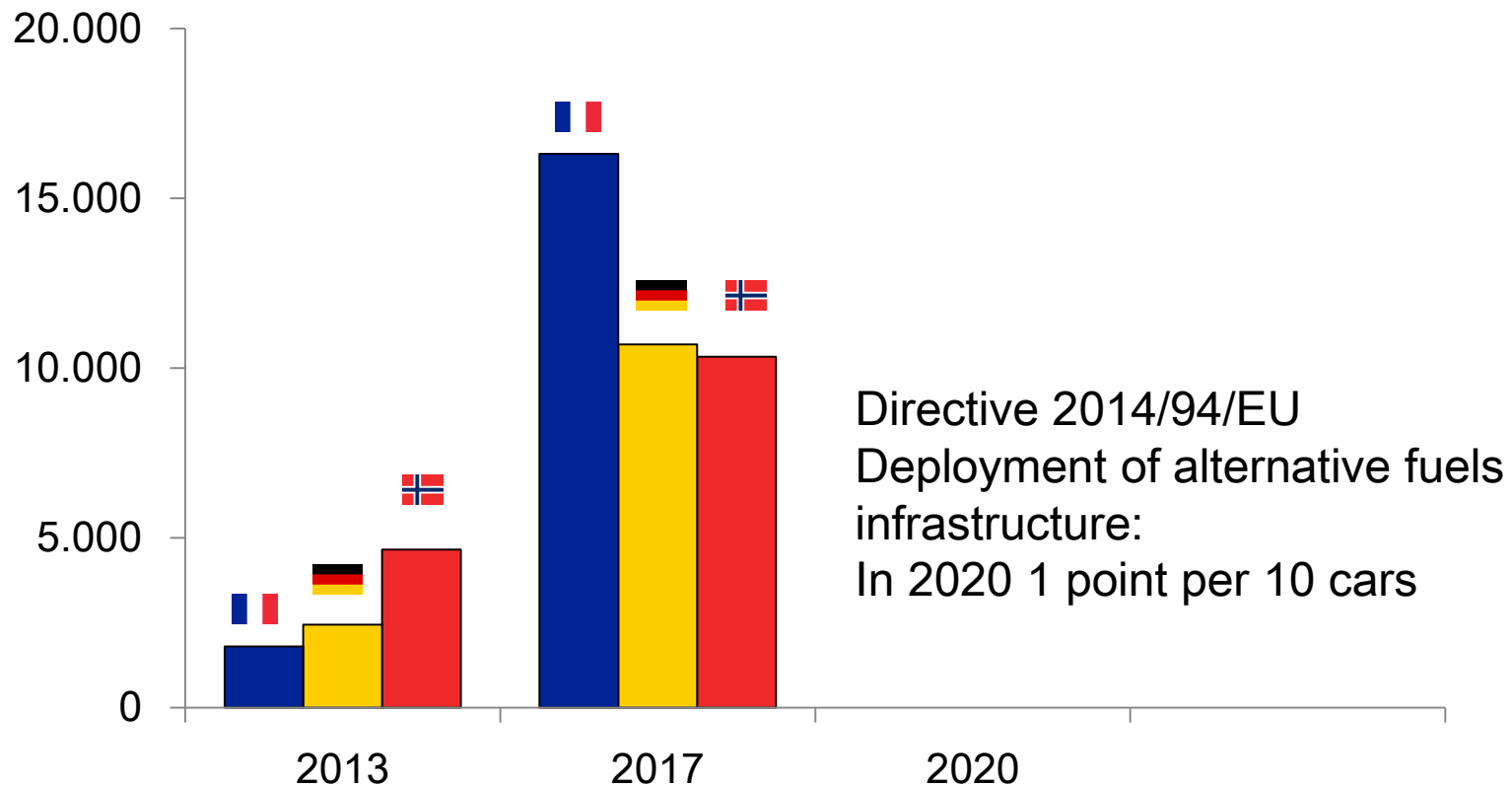
Electricity prices in €/kWh



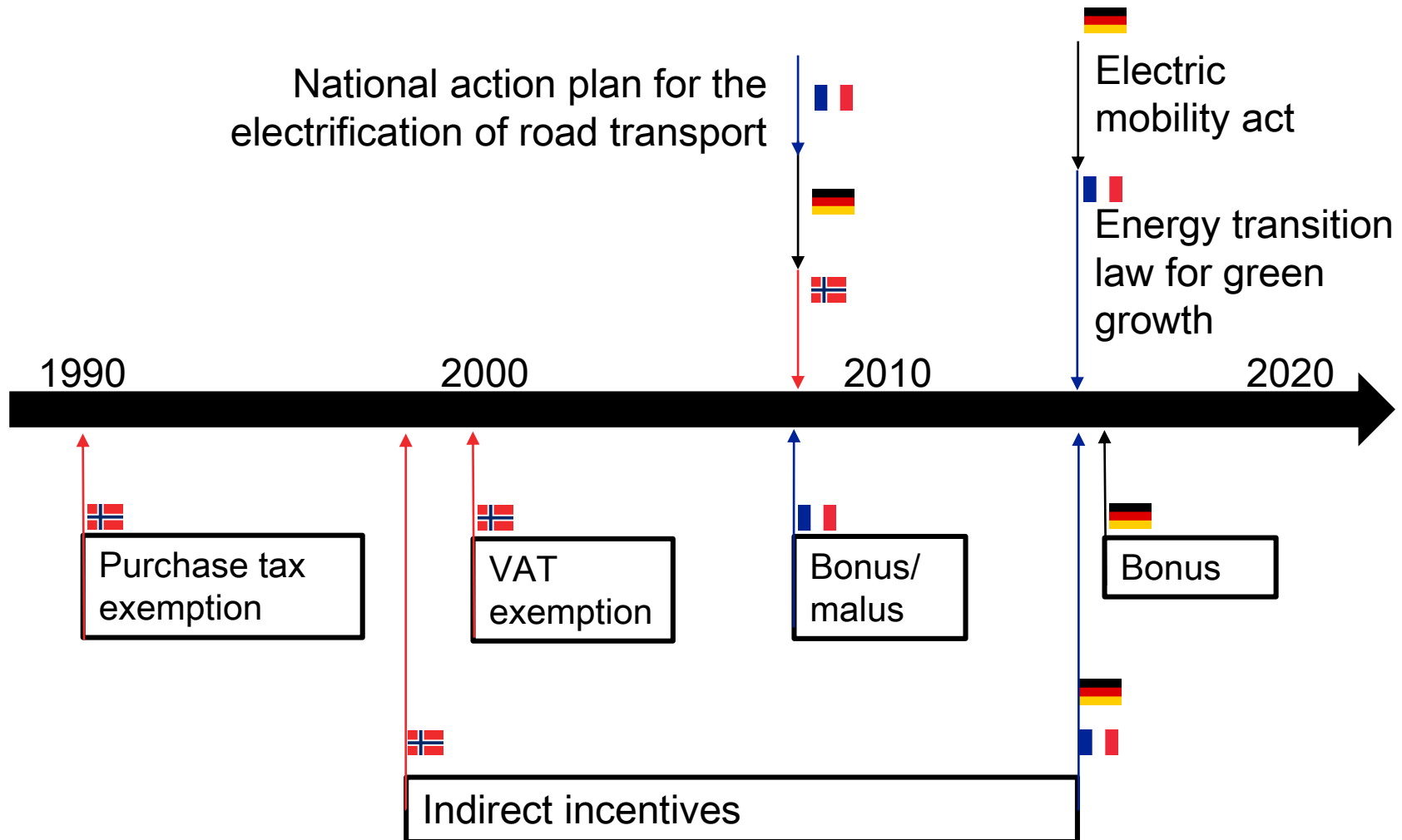
Fuel price in € per 100km



Public charging points



A matter of time?



Conclusions & outlook



Early significant monetary incentive



National simple and unified plan



New mobility patterns