

An EU 2030 Framework for Climate and Energy

Jesse Scott

EURELECTRIC

Lessons from the 2020 Framework

EURELECTRIC's priorities

EURELECTRIC commits to:

Combat climate-change:

- Carbon-neutral electricity by 2050;
- Boost energy efficiency by electrifying transport, heating/cooling...

Deliver cost-efficient, reliable electricity:

- European, market-based solutions

Climate policies must be cost-effective, this requires

1. Focus on emissions reduction (not renewables, imports)
2. Economy-wide targets (not just a few sectors)
3. EU-level instruments (not national)
4. Market instruments (not command)
5. A steady pace of change (early + high ambition, not delay + low ambition; stable framework, not stop/start)

...Do not replicate the 20/20/20 package

What ambition, when?

Power Choices Reloaded – high cost of a Lost Decade

Power Choices Reloaded's *Lost Decade* modelling scenario assumes a complete lack of action in the decade 2020-2030, therefore the entire decarbonisation action has to occur in the last two decades to 2050

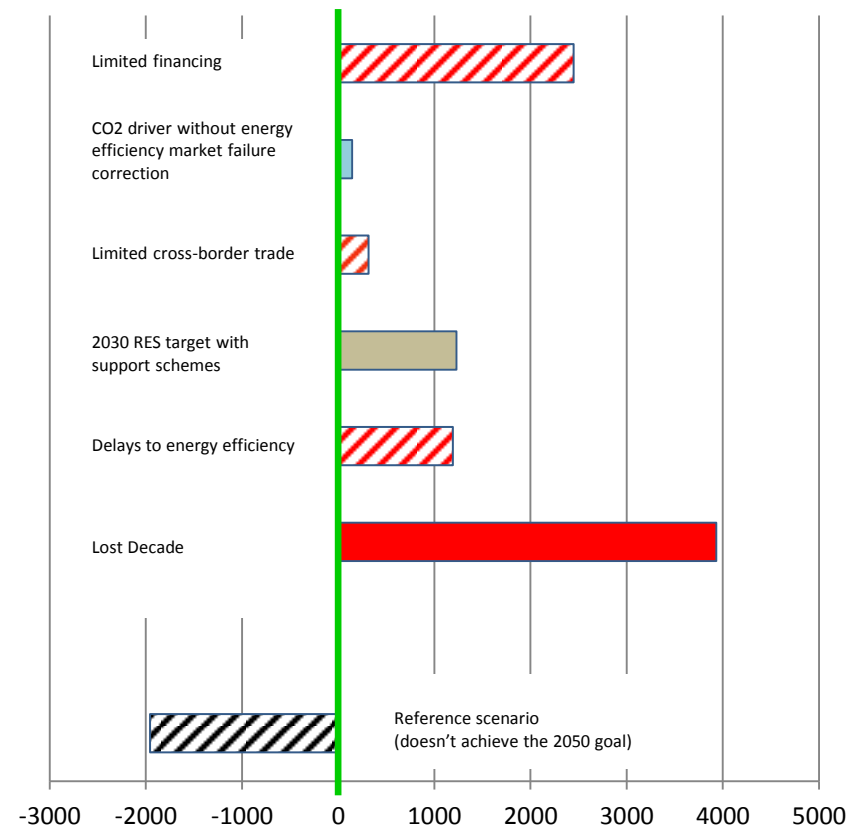
Infrastructure, power sector decarbonisation, mobility electrification and technology R&D, as well as energy efficiency in the demand side sectors will have to develop in a very short period of time post-2030

The changes required in the system from 2030 to obtain the necessary cumulative emissions reductions by 2050 result in this scenario being barely feasible in true life

Key failures involved in the Lost Decade case

- **Weak carbon market until 2030**
- **Limited financing under uncertainty hampering investment**
- **Market coordination failures delaying infrastructure**
- **Non-completion of IEM leading to low cross-border energy trade**
- **Slower pace of technology progress: learning curves and build up of supply chains**
- **Delays to energy efficiency persisting up to 2030, especially on the demand-side and in electrification**

Difference of Cumulative Energy System Costs
(excl. auction and disutility from the optimal scenario / bn €2010)



What ambition, when?

Early, economy-wide, high ambition

- Climate is a lower political priority than before the economic crisis, BUT there is still some priority and therefore some policy ambition
- The power sector is always the first (easy) target for climate policy
- Therefore we face a choice:

No ambition

(Not a realistic option
for the power sector)

Low ambition
= few sectors (power)
= stop/start policies

Costs the power
sector investment in
low-carbon
technologies and loss
of market share from
energy saving

High ambition
= whole-economy
= stable policies

Gains the power
sector new market
share through
electrification of
additional sectors

Who and how?

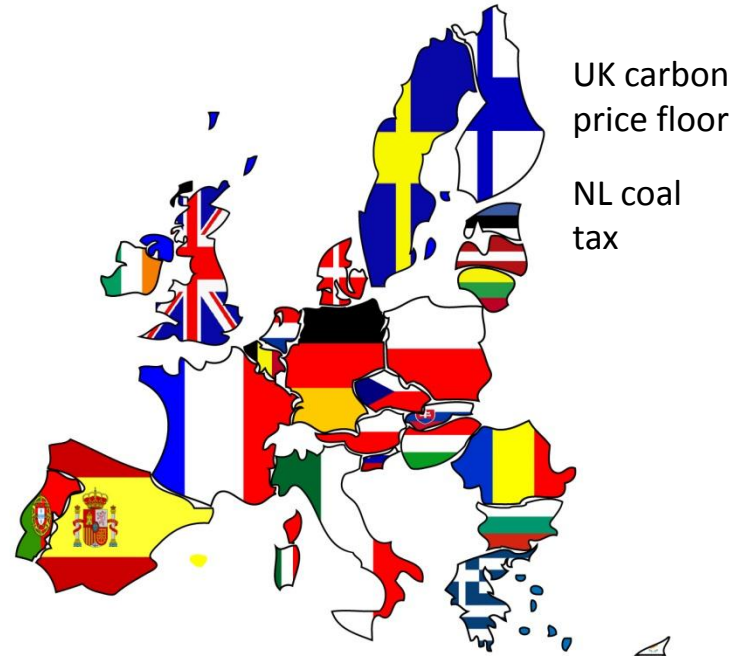
EU + market, not 28 x command chaos

ENERGY MARKET INTEGRATION
AND (MORE) PREDICTABLE POLICIES



ETS as the key driver
Strong innovation policy

MARKETS ARE FRAGMENTED AND POLICIES
ARE START/STOP

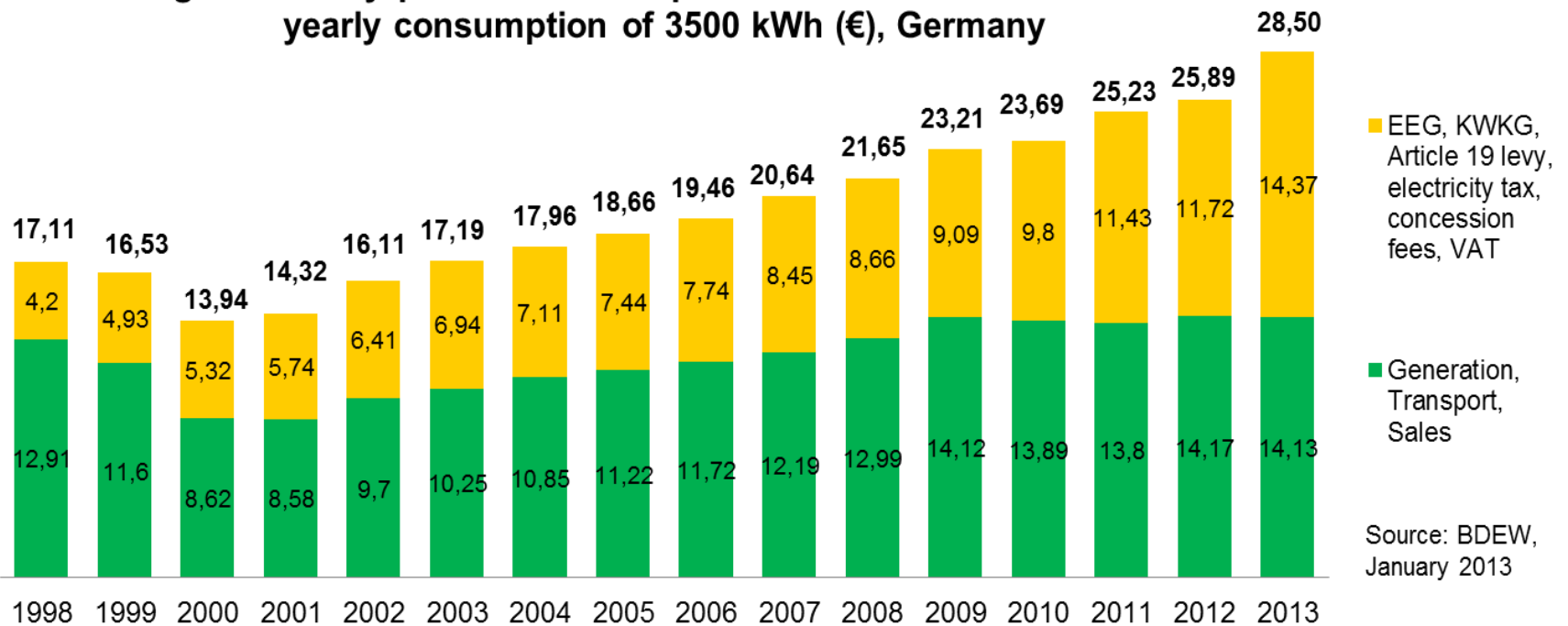


National RES and EE schemes
National carbon price floors/taxes
National capacity mechanisms

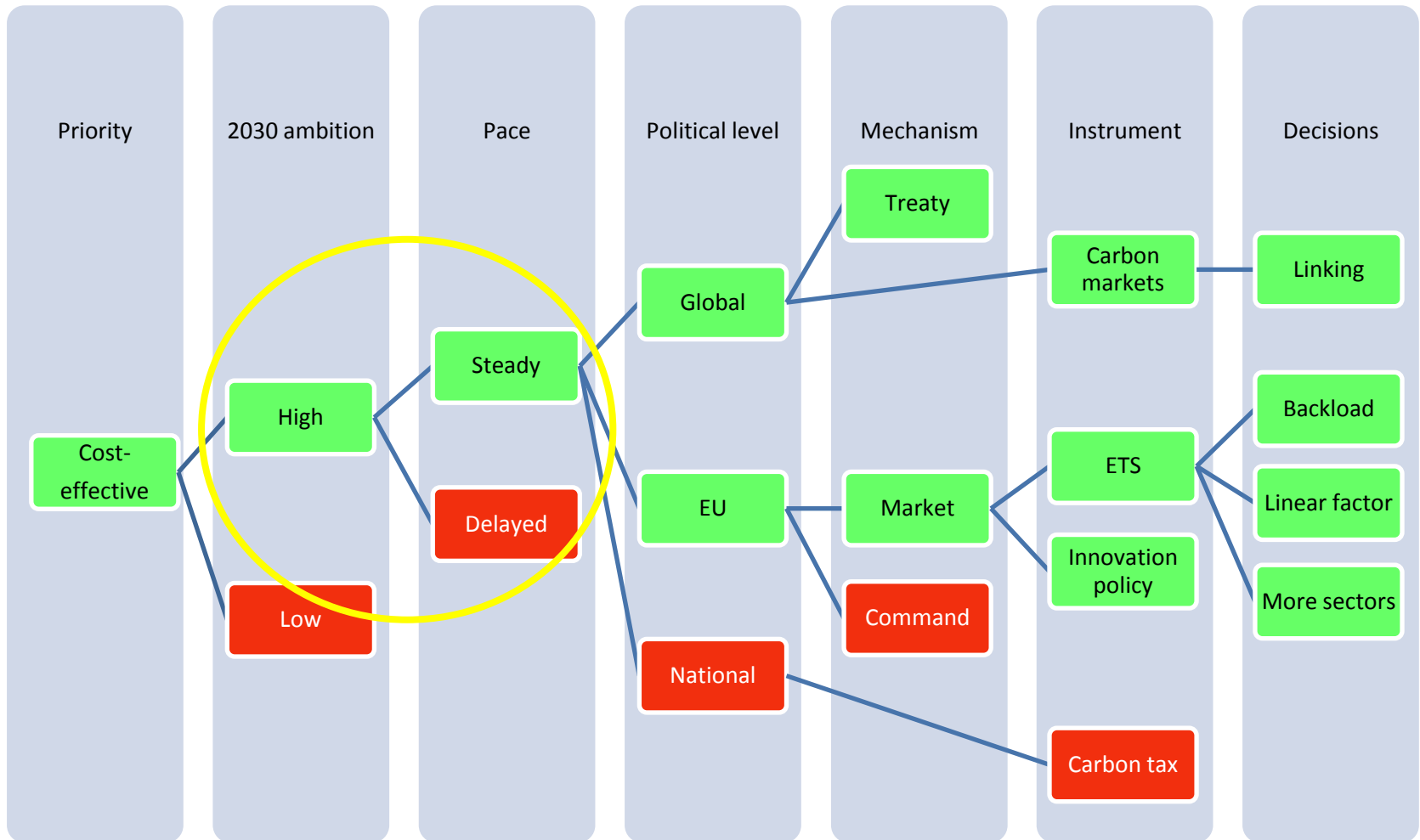
Get the analysis right:

Prices rises are due to policy surcharges

Average electricity price for a three-person household in ct/kWh with a yearly consumption of 3500 kWh (€), Germany



Summary: The best road 2050



Power Choices Reloaded results

EURELECTRIC's recommendations

EURELECTRIC commits to:

Combat climate-change:

- Carbon-neutral electricity by 2050;
- Boost energy efficiency by electrifying transport, heating/cooling...

Deliver cost-efficient, reliable electricity:

- European, market-based solutions

Through a 2030 framework built on:

- At least a 40% emissions reduction target
- The ETS as the key driver policy for investment choice in low-carbon technology, infrastructure and processes
- Extend the ETS to additional sectors
- Phase out all energy subsidies and market distortions
- Bring renewables fully into the market, fulfilling the same balancing and scheduling responsibilities as other technologies
- Support energy innovation
- Demand-side energy efficiency measures if necessary to correct market failures
- 2014 completion of the internal energy market