Clean Energy Competitiveness

JRC work on competitiveness indicators for low-carbon energy technologies

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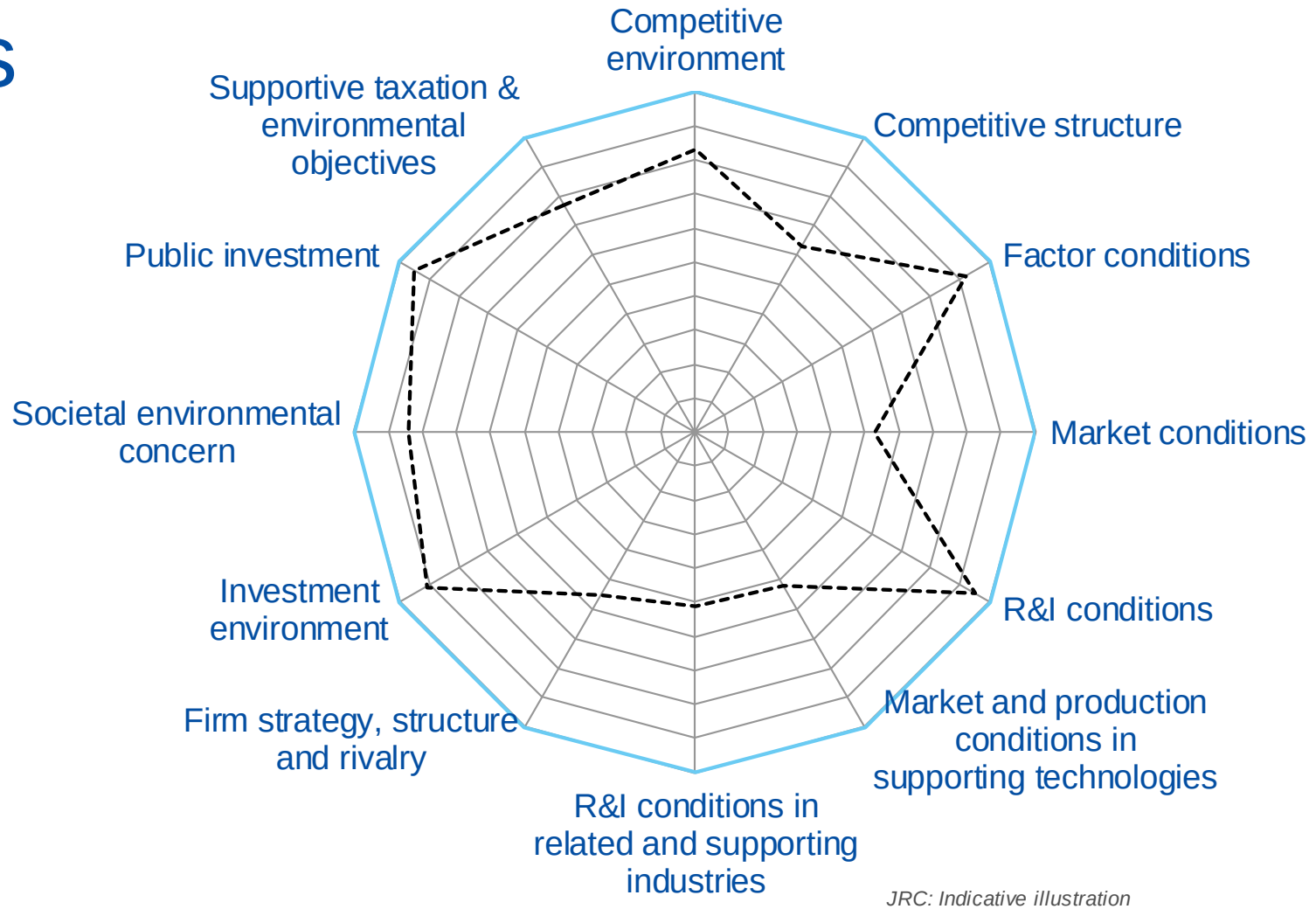
JRC work in support of policy

- Input to the Energy Union Governance and Report on Progress of Clean Energy Competitiveness
- What is ‘competitiveness’?
- Existing work and indices
- Proposed frameworks:
  - Council of the European Union
  - Clean Energy Industrial Forum
- Review of indicators and data availability

European Commission

Review of indicators on competitiveness

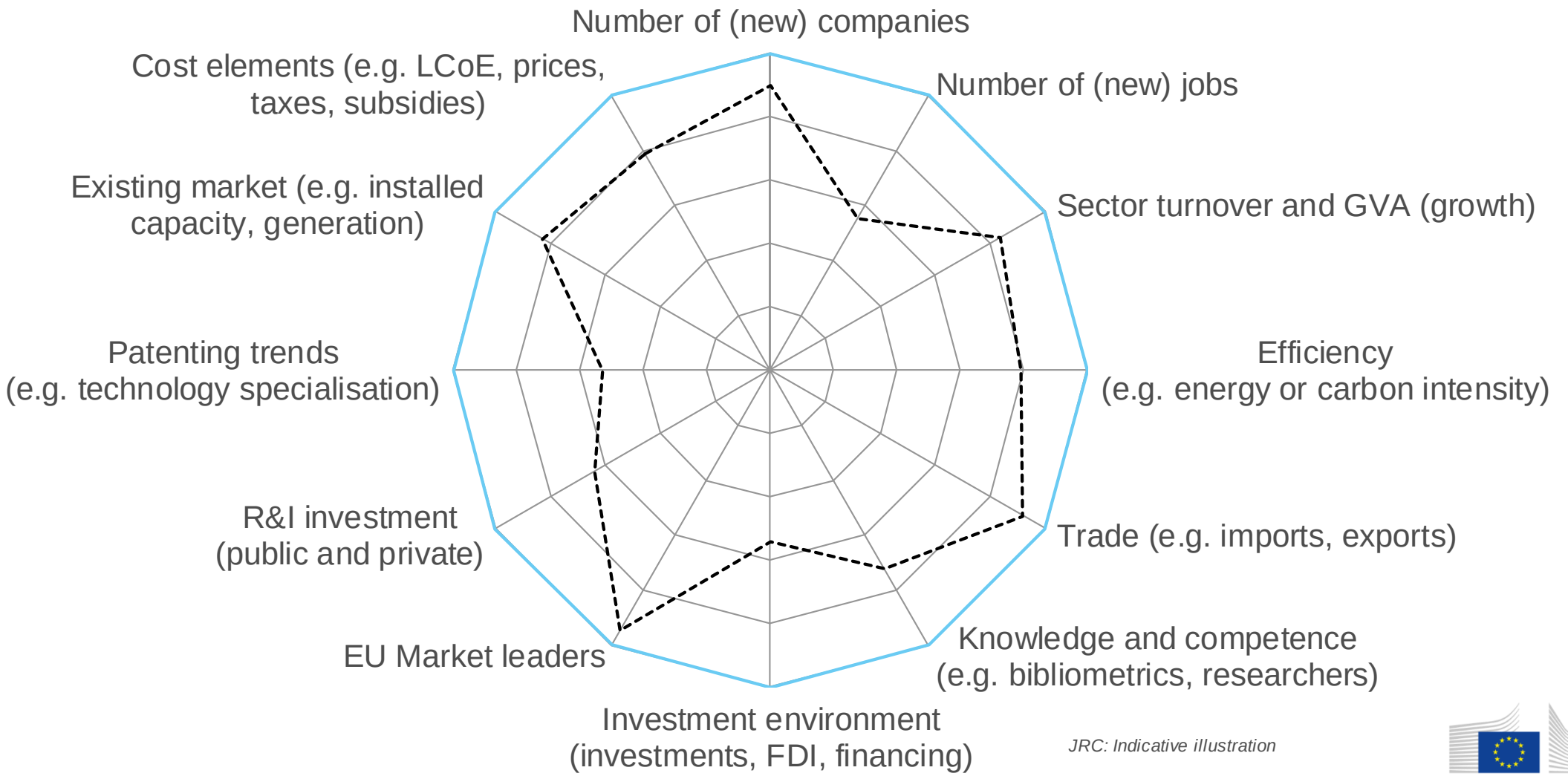
- As a rule composite indicators built on a number of variables
- Country or geographical areas (i.e. Europe) rather than the EU
- Cover the economy or varying definitions of ‘green’ sectors
- Not produced annually or consistently
- Limited data availability
- Feasibility of developing a composite indicator for the low-carbon industries?



JRC: Indicative illustration

European Commission

A more realistic approach to monitor clean energy competitiveness



JRC: Indicative illustration

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European Climate Neutral Industry Competitiveness Scoreboard (CIndECS - DG GROW)

INDICATORS

1. level of public investment in RD&I
2. early stage private investment
3. late stage private investment
4. patenting trends
5. companies
6. employment
7. production data
8. turnover
9. import and export data
10. trade balance

- **10** indicators - **12** technologies/solutions
- **Review** and amend / improve the framework
- Collect / revise the data for the **Scoreboard**
- Short **analysis** of trends
- Addition of solutions **+8** per year

TECHNOLOGIES / SOLUTIONS

- **Buildings** Prefabricated buildings; Super insulation materials; Heat pumps
- **Mobility** Batteries; Hydrogen Fuel Cells; Electric Power Trains; EV Charging Infrastructure
- **Power supply** Wind rotors; PV solar panels
- **Integrated Solutions** Digital integrated systems to manage energy in buildings; Digital integrated systems to manage energy in grids; Hydrogen production

Timeline: Jan 2021 – Dec 2022

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European Commission

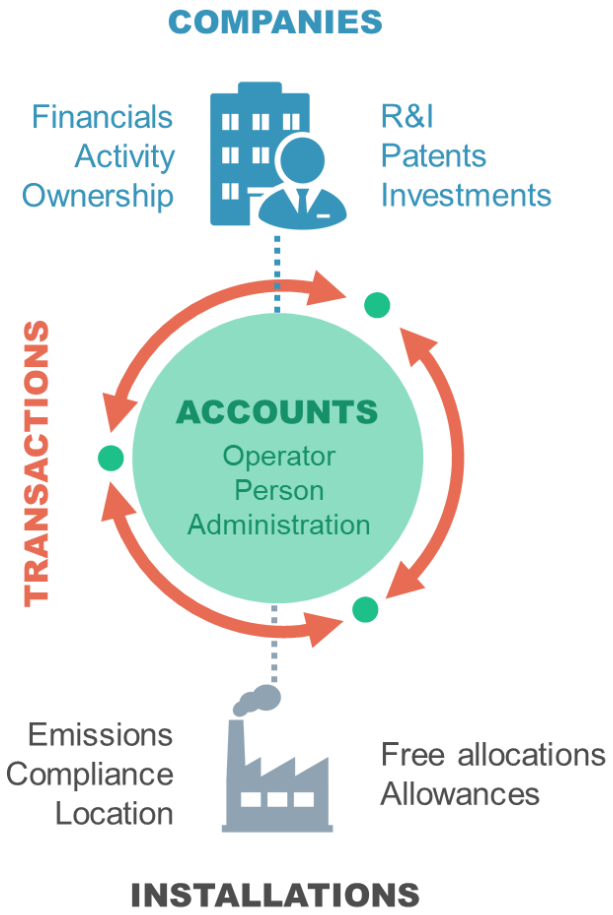
Company data on EU ETS stationary installations
(COLECO project DG GROW)

Outline

- Matching EUTL dataset to company data
- Enrichment of the EUTL dataset
- Timeline: June 2021

Outcome

- Support econometric studies
- Open and validated dataset
- Application to future cases



Potential insights using EUTL-enriched corporate micro-data

- Corporate claims and use of sustainable finance
- Induced innovation and impact of innovation performance on emission reduction
- Emissions in strategic value chains and ecosystems
- Impact on competitiveness, investments and emerging markets
- Best and poor performers characteristics
- Ultimate ownership of emission allowances and carbon market dynamics

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Thank you

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Source: JRC unless otherwise stated on slide

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