



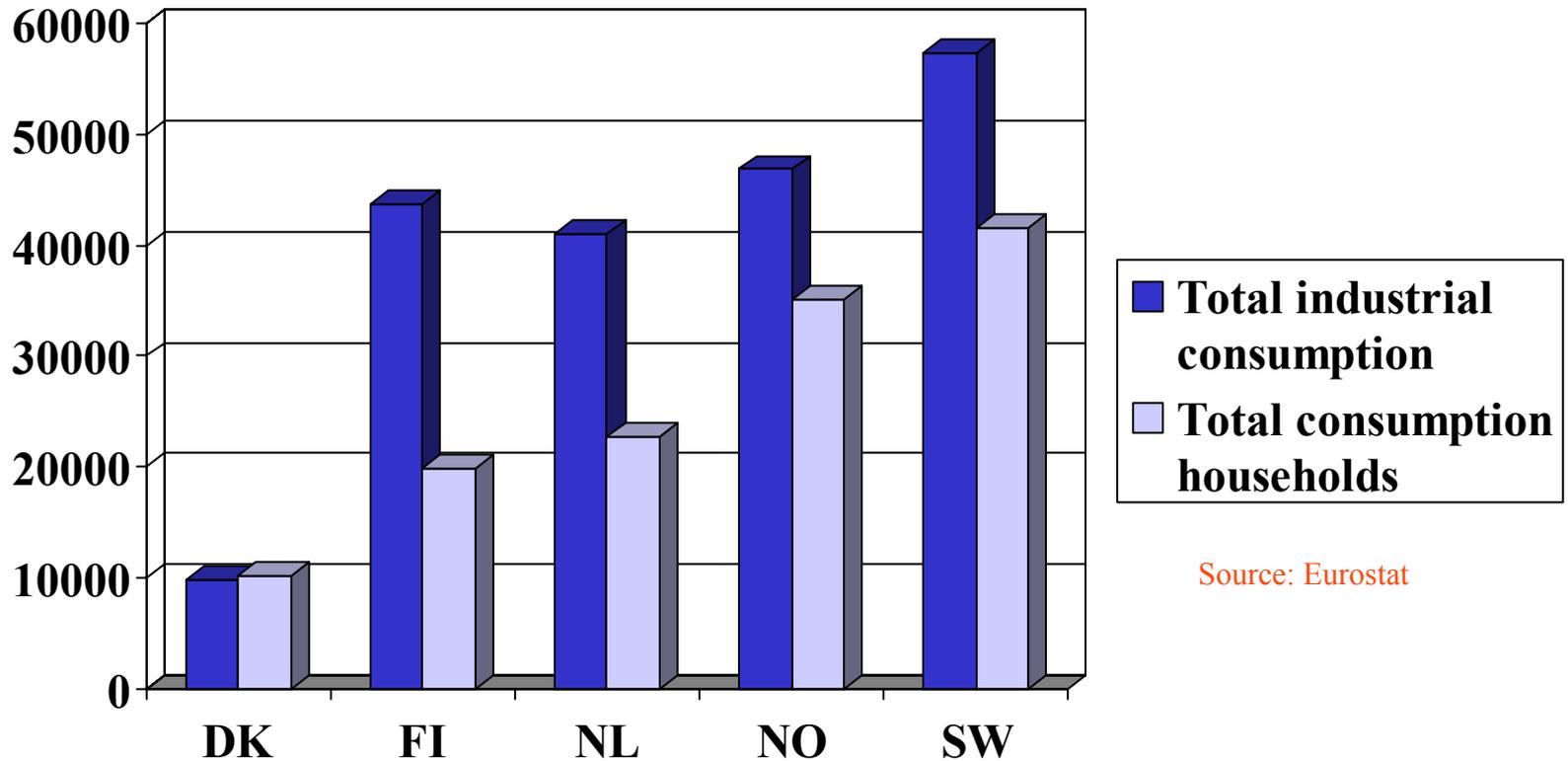
REALISE FORUM

Norway
Sweden
Finland
Denmark
Netherlands



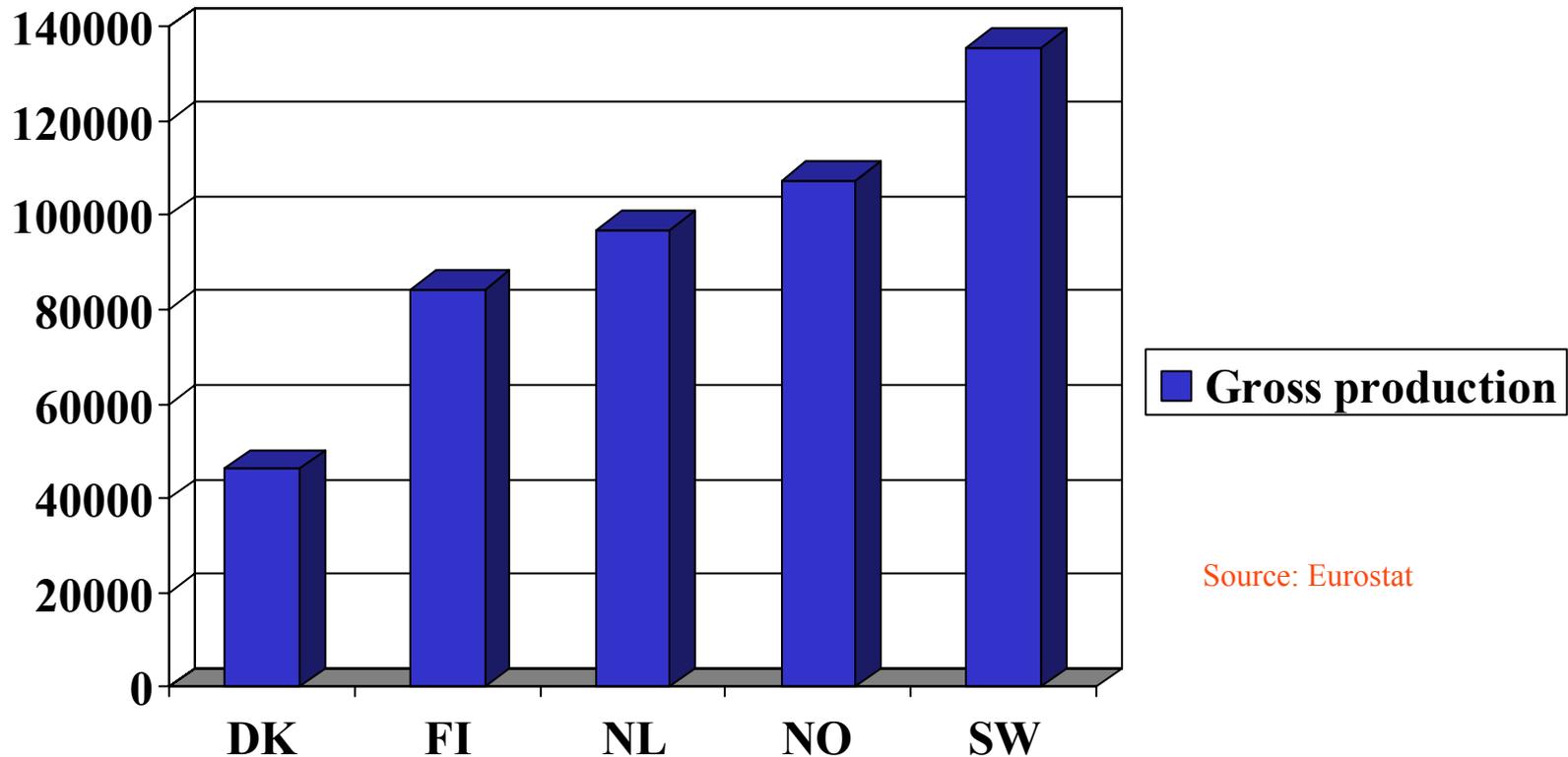
Maarten Arentsen

Electricity consumption 2002 in Gwh



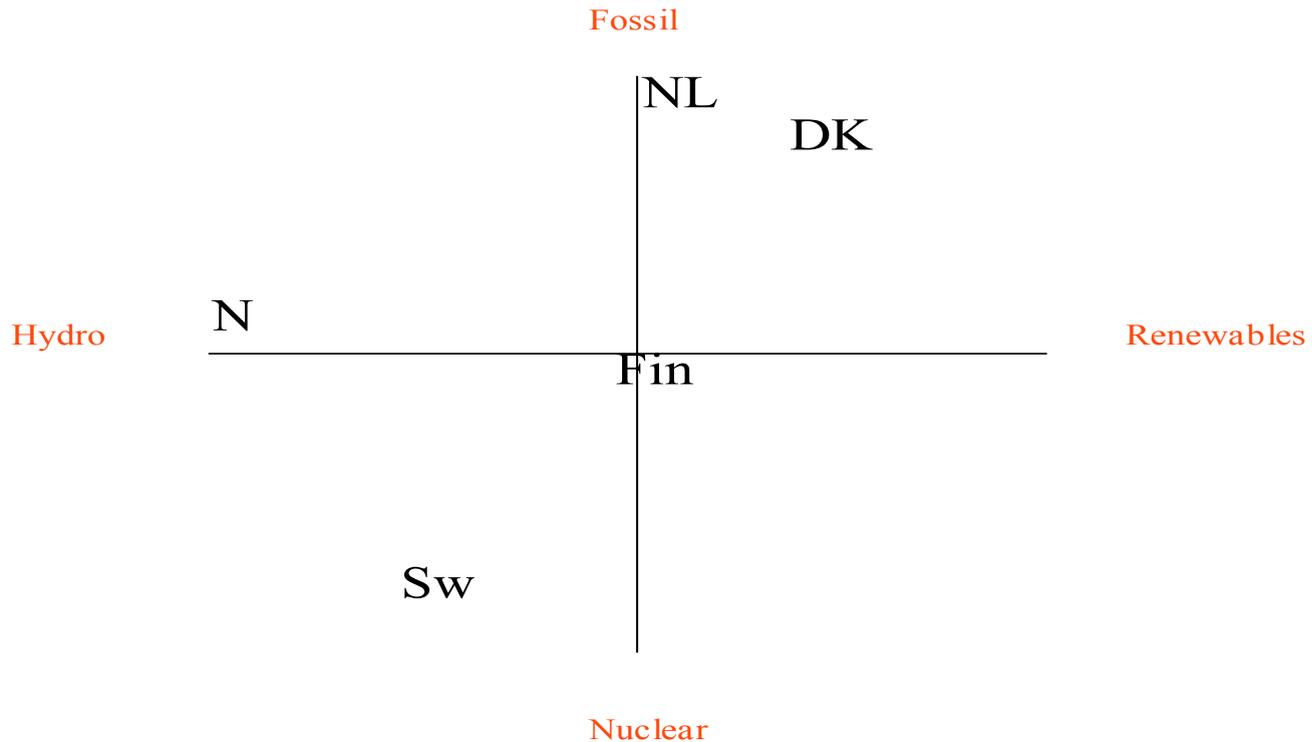
Source: Eurostat

Gross electricity production in 2003 in Gwh

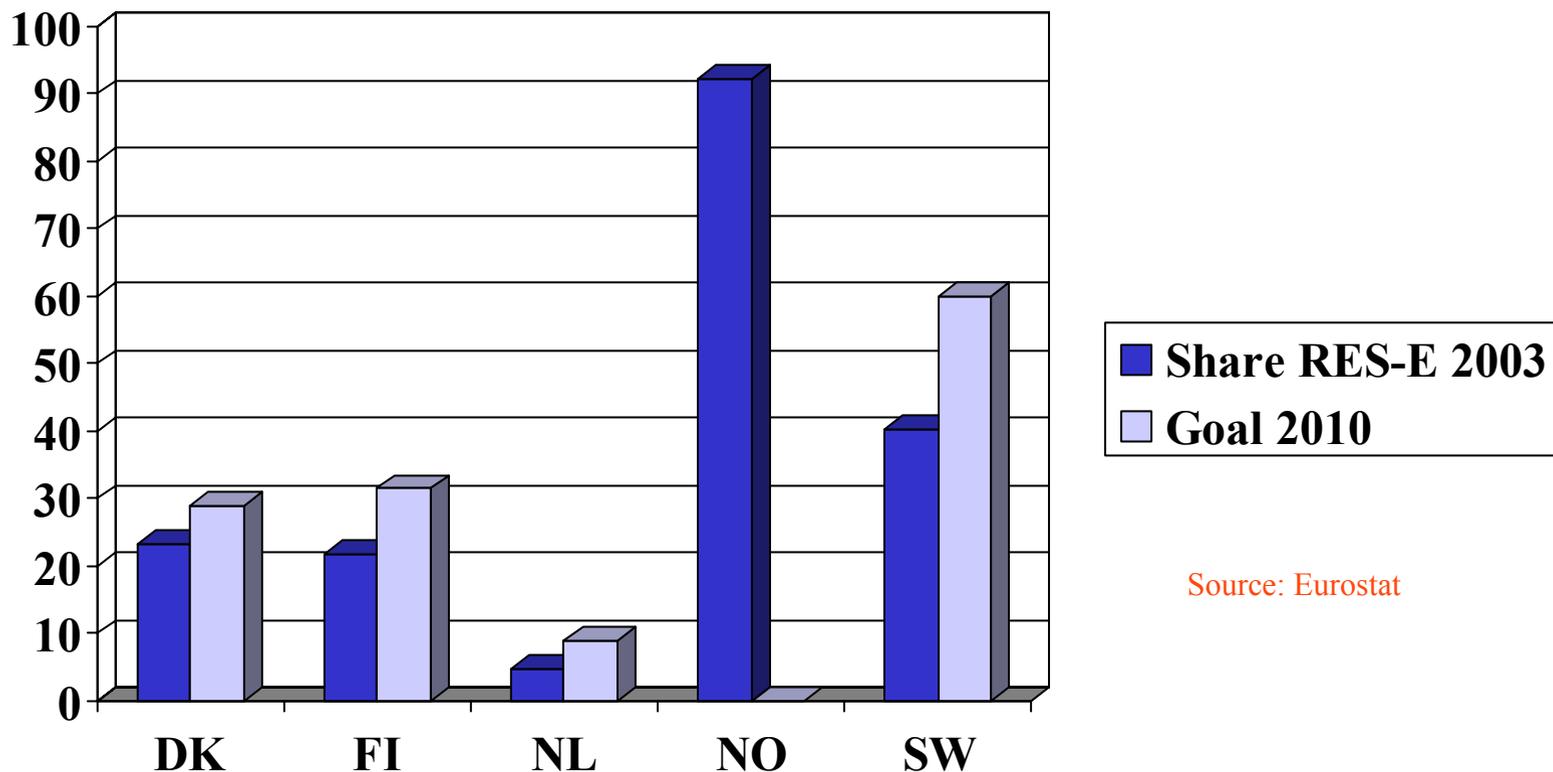


Source: Eurostat

Fuel base electricity production

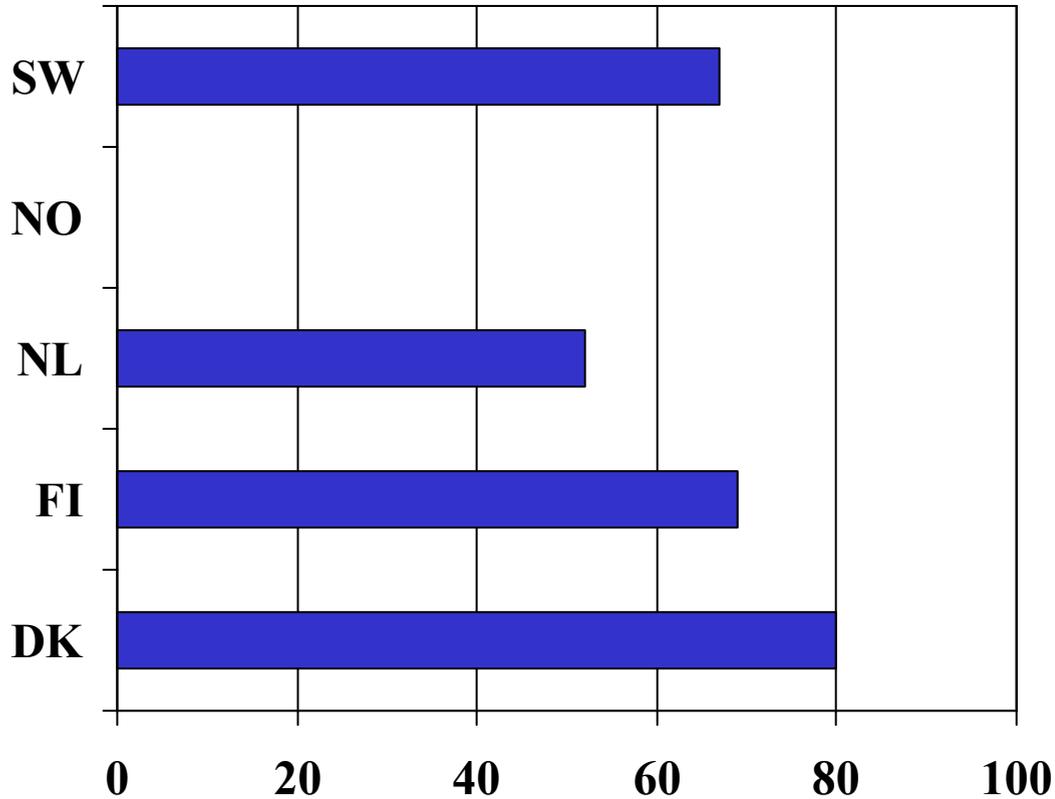


Share RES-E in gross electricity production and national indicative target 2010



Source: Eurostat

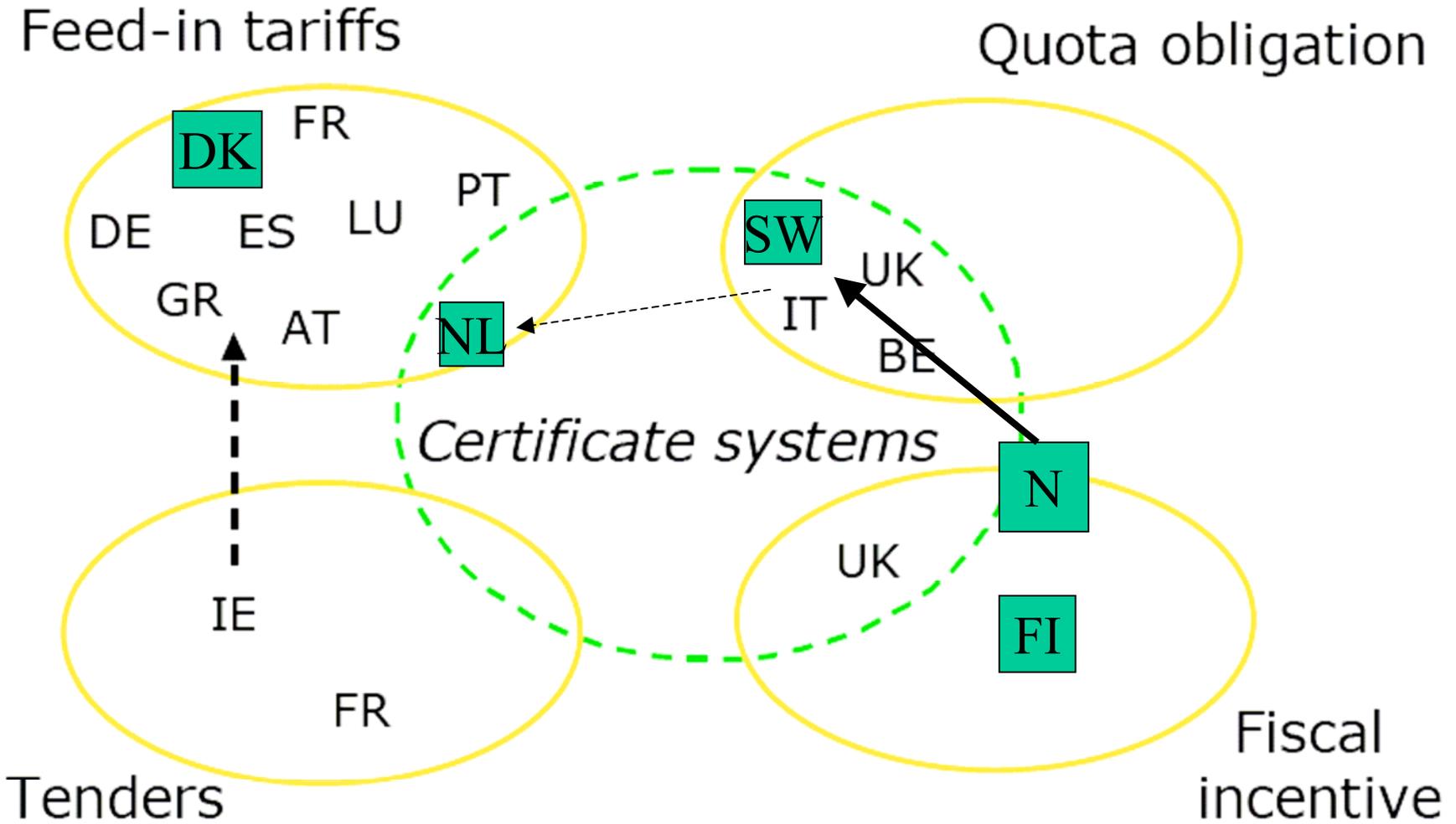
RES-E 2010 ambition realized in 2003



■ Share RES-E realized

Source: Eurostat

Type of support 2003



Stakeholder perceptions in five countries

- Change of political coalitions (liberalist) and impact on support
 - Increased market orientation in support is okay, but regulatory intervention should be adequately organized
 - Sobering of support not that bad given overcapacity (Denmark)
- Need of further EU harmonization
 - Increase of scale of market
 - Regional markets: Nordic market, Nord-west European market
 - Equalizing competitive conditions

Stakeholder perceptions continued

- Consistency and stability of support
 - Secure investment climate
 - Support independent of budget and political decision making
 - Independent national fund for RES-E (Netherlands)
- Perspective of support
 - Short term goal attainment versus longer term technological innovation
 - General versus technology specific
 - Special treatment offshore wind and PV

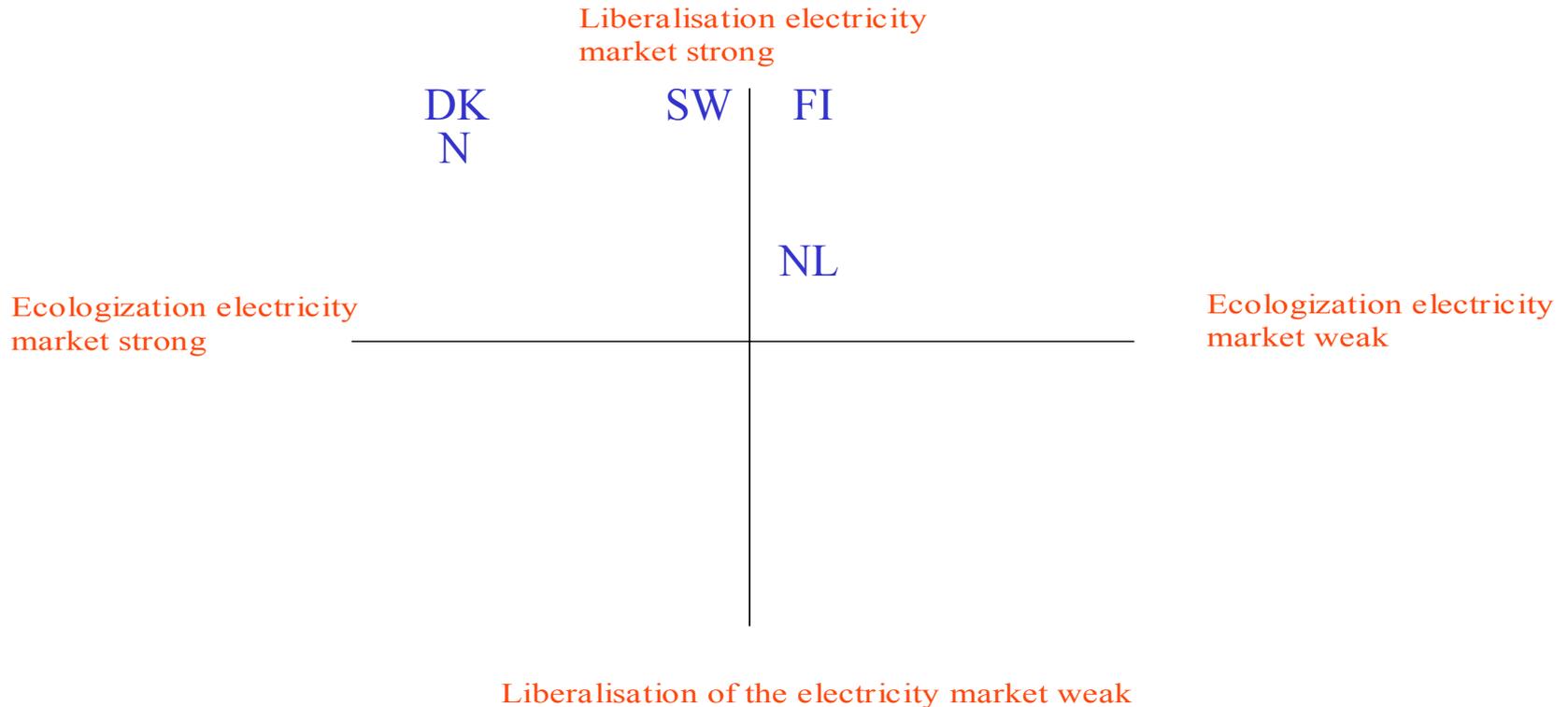
Stakeholder perceptions continued

- Widening of perspective renewables
 - Security of supply next to greening electricity supply
 - Connection with energy efficiency
 - RES part of future resource portfolio (RES, hydro, clean fossils, nuclear)

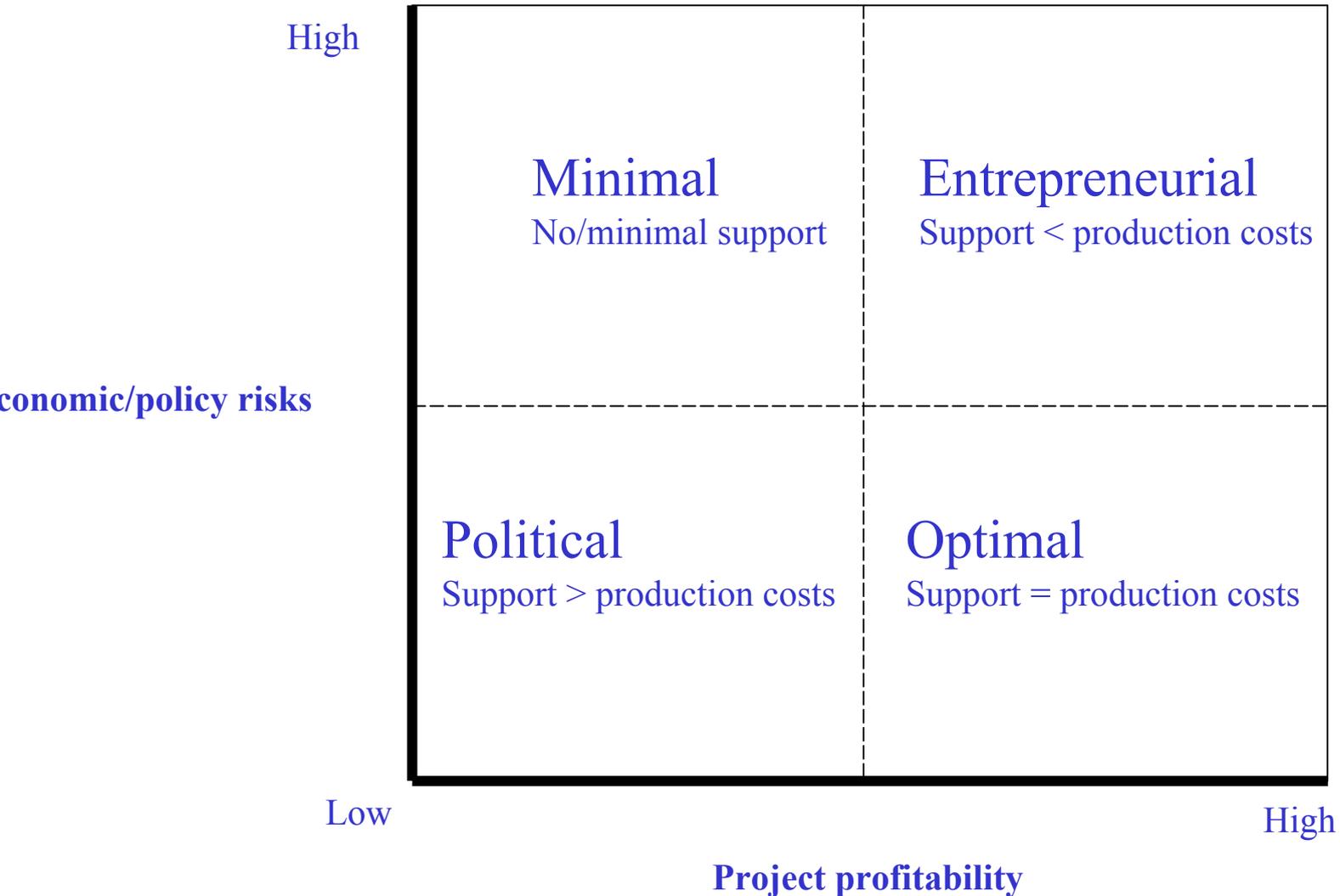
Realise Forum contribution

- Does context matter?
 - Does type of electricity market influence stakeholder perception?
- Are there advocacy coalitions on RES-E support in EU?
 - Groups of actors sharing preferences on
 - Future role of RES in electricity production
 - Type of support needed, desirable
- Policy lessons?
 - EU
 - National

Example context: Electricity market

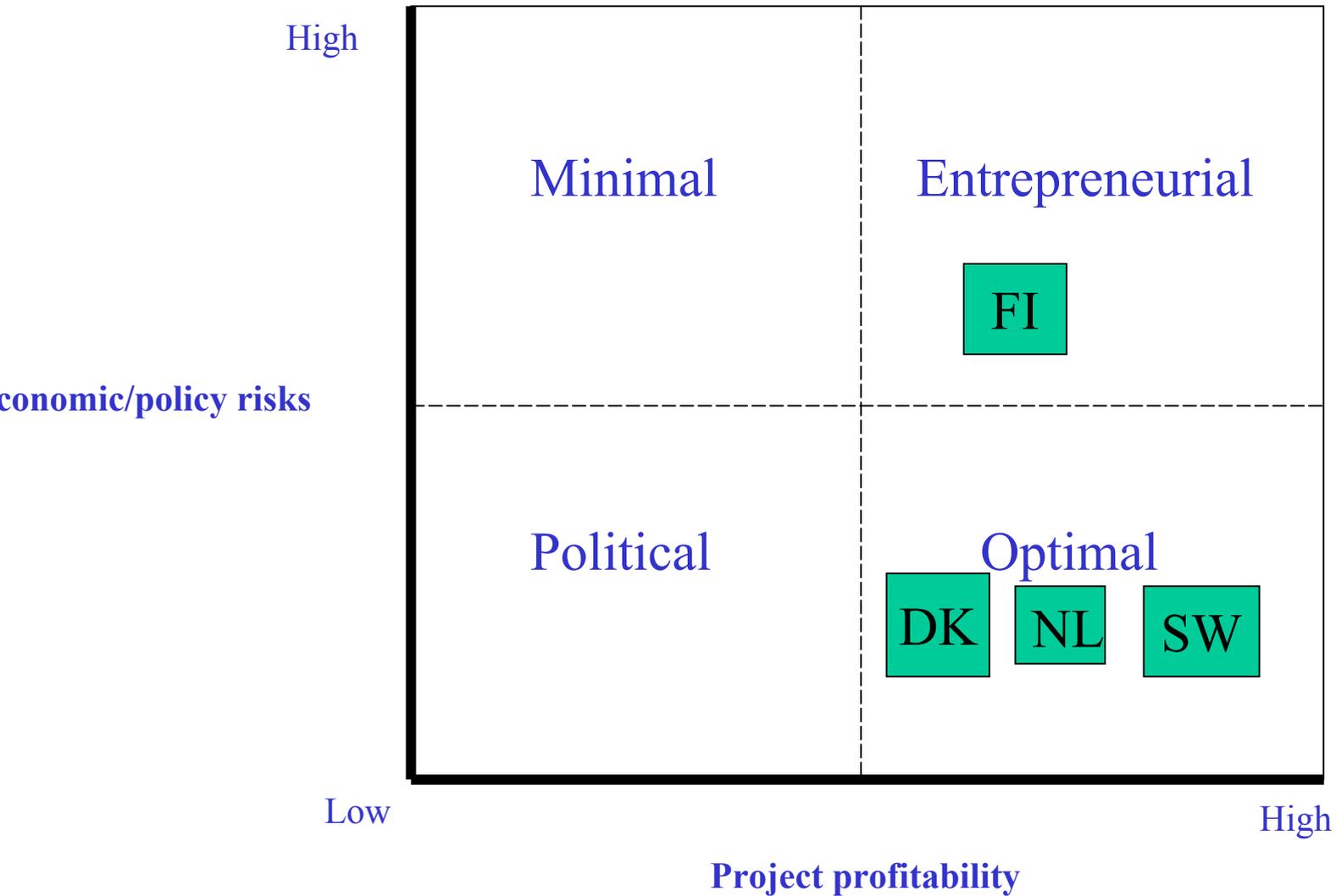


Example: National investment context



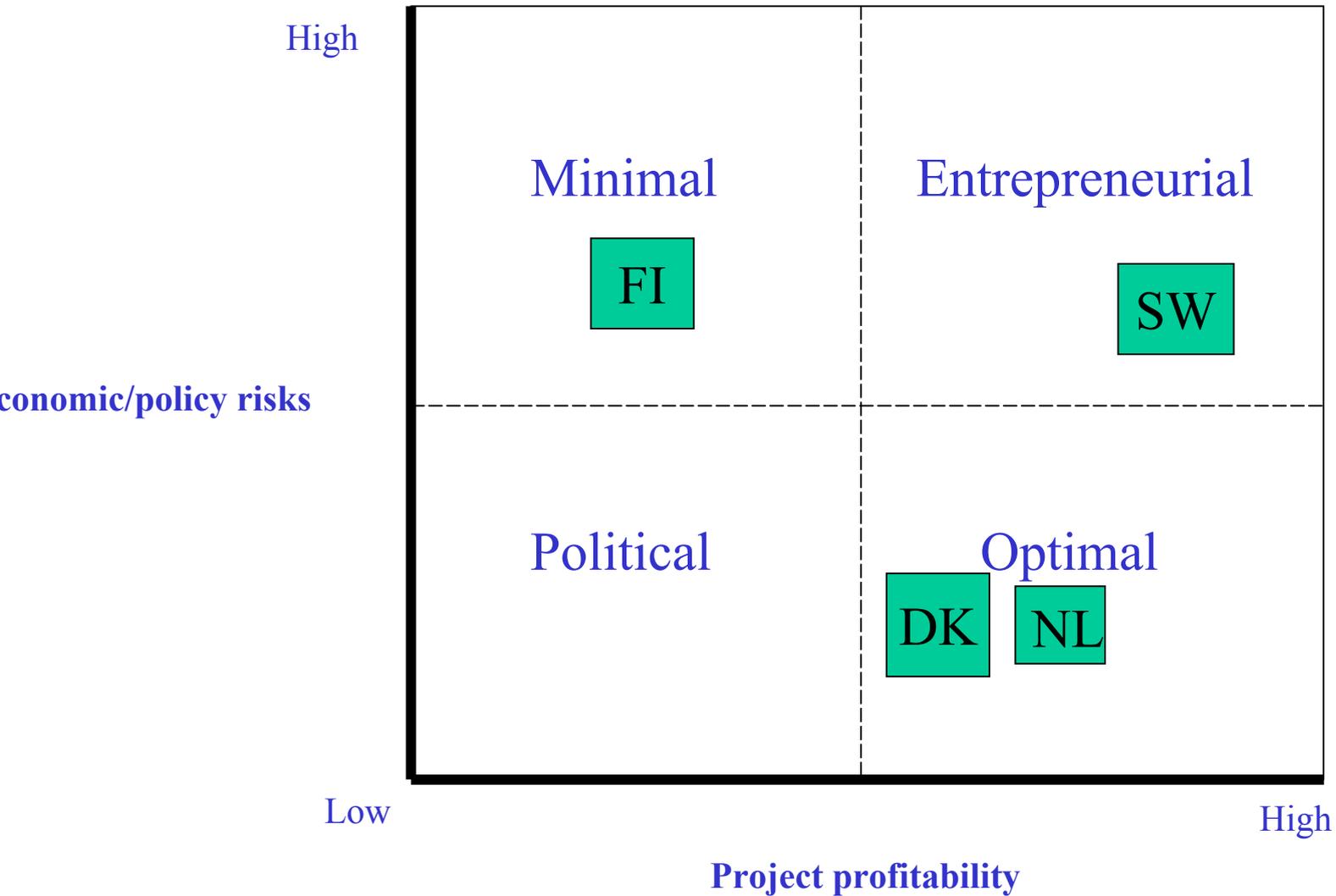
National investment context

Wind



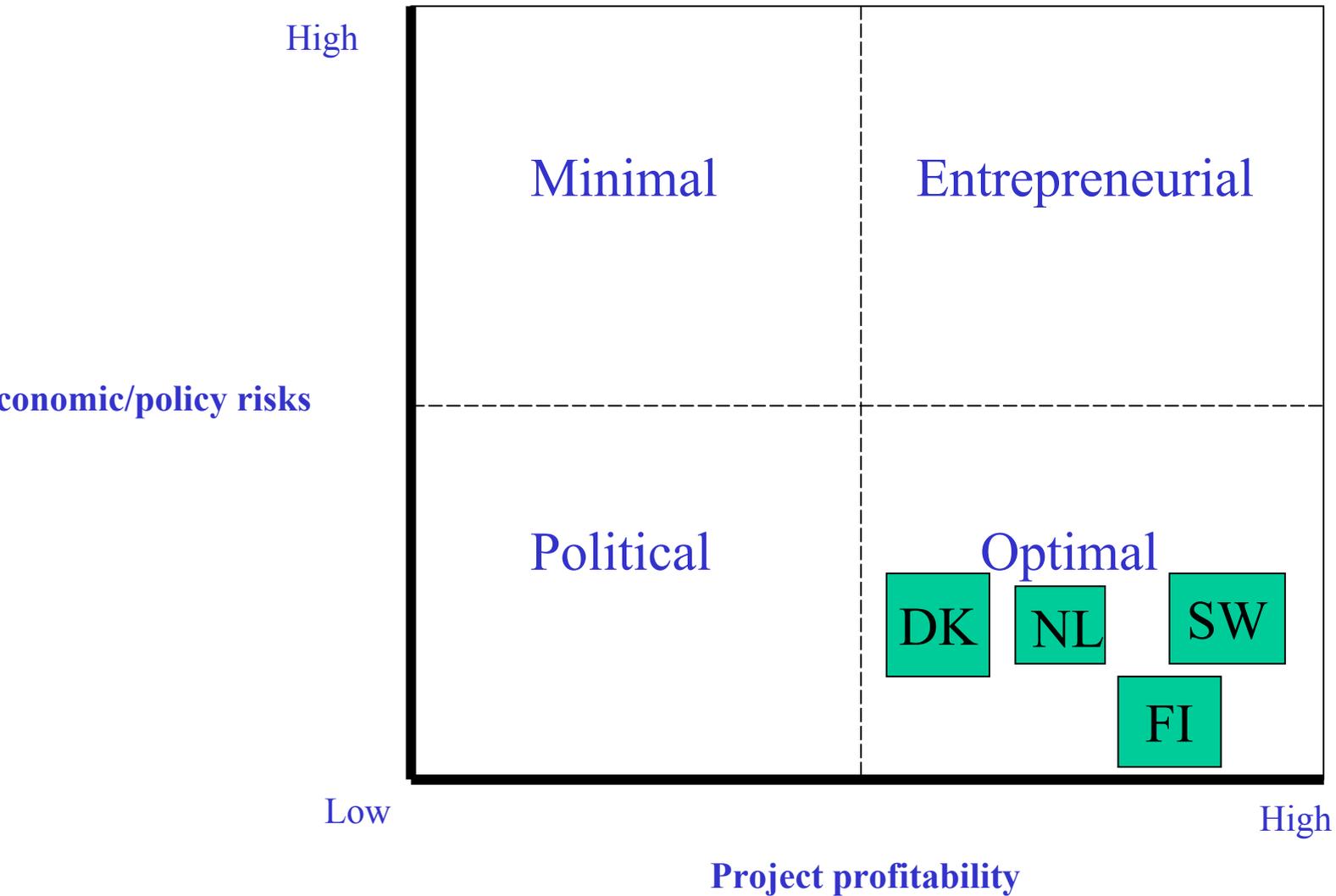
National investment context

Biogas



National investment context

Biomass

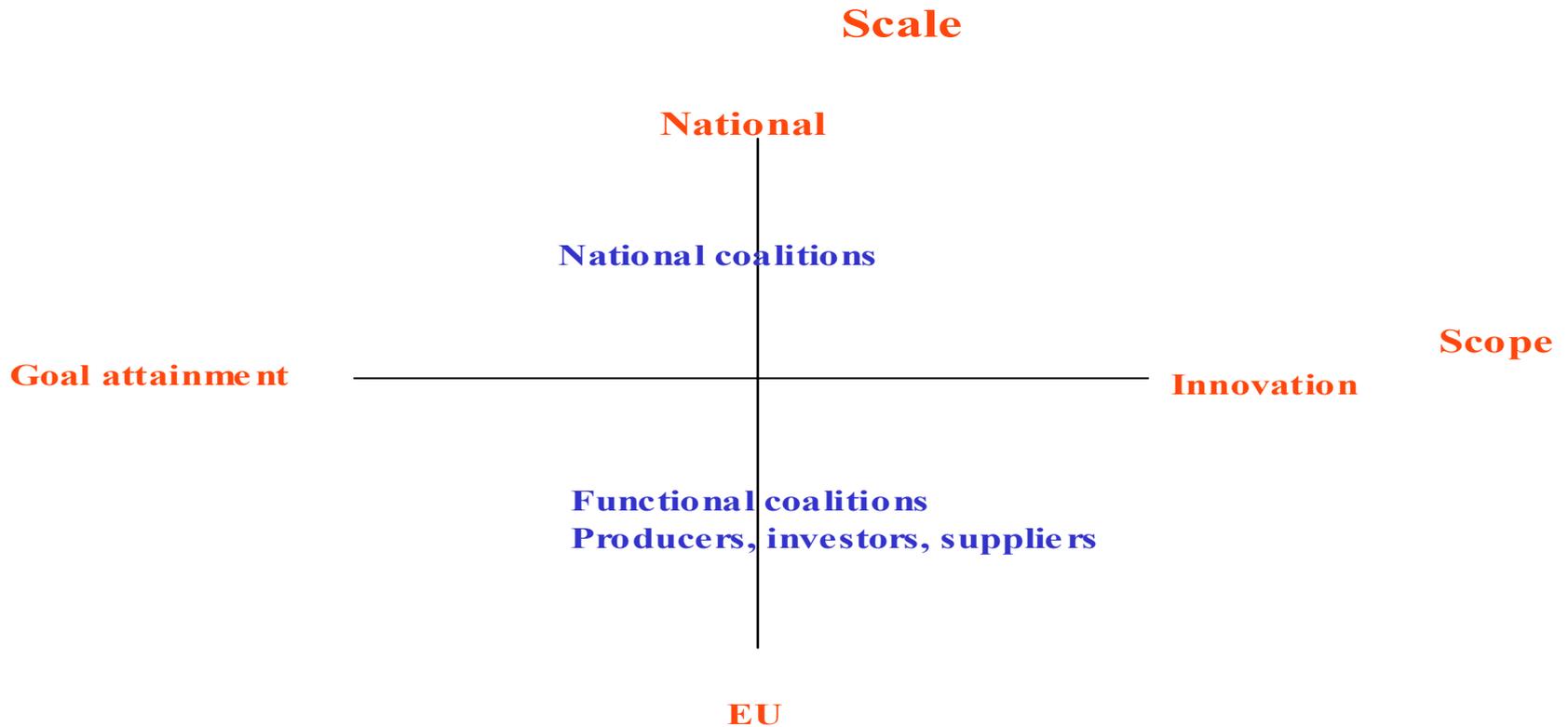


Advocacy coalitions?

Coalitions according to:

- Scale of RES-E development and RES-E support
 - Nationalists versus Europeanists
- Scope of RES-E development and RES-E support
 - Goal attainment versus innovation
 - Realists versus Idealists

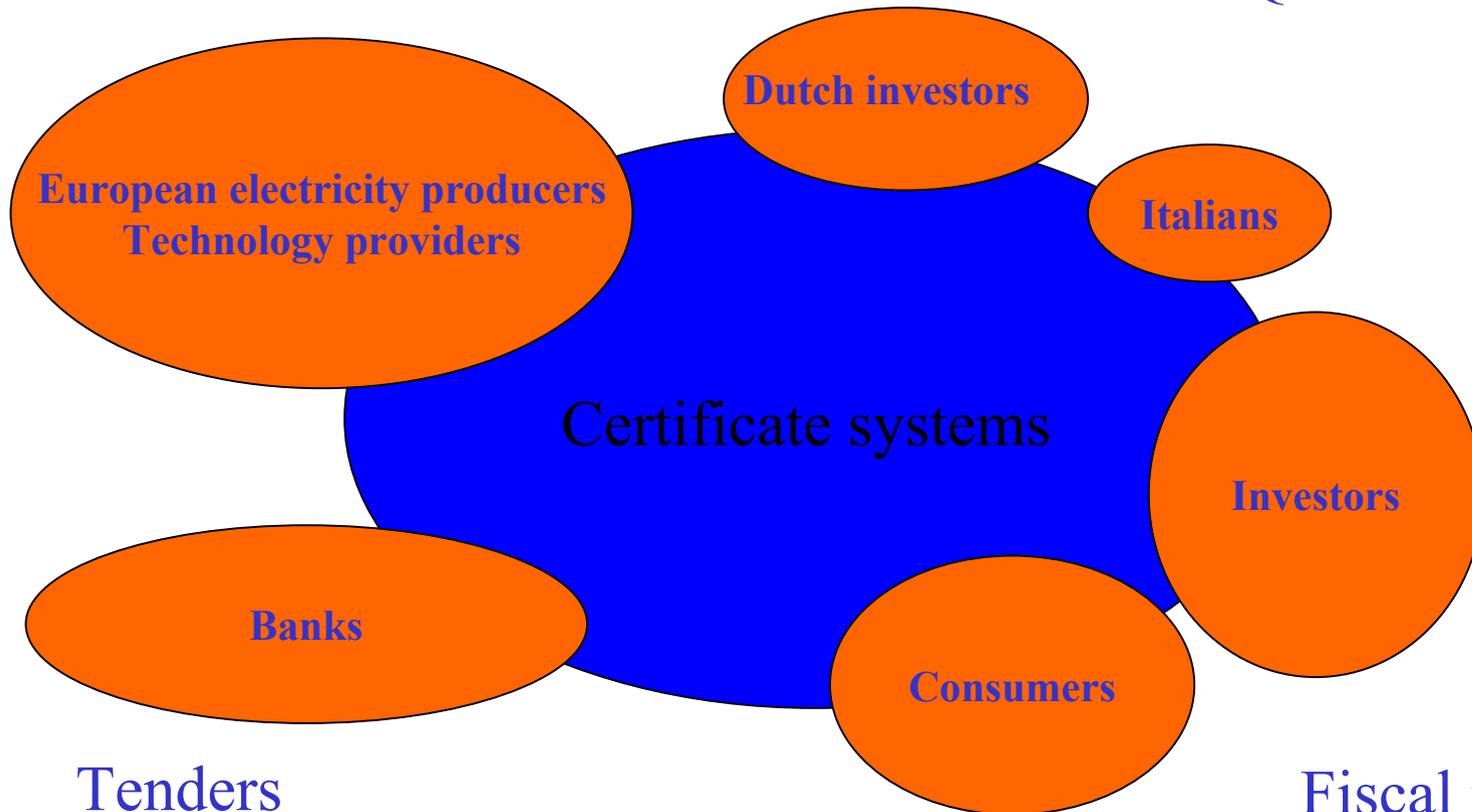
Advocacy coalitions



Example: Advocacy coalitions on support scheme

Feed in tariffs

Quota obligation



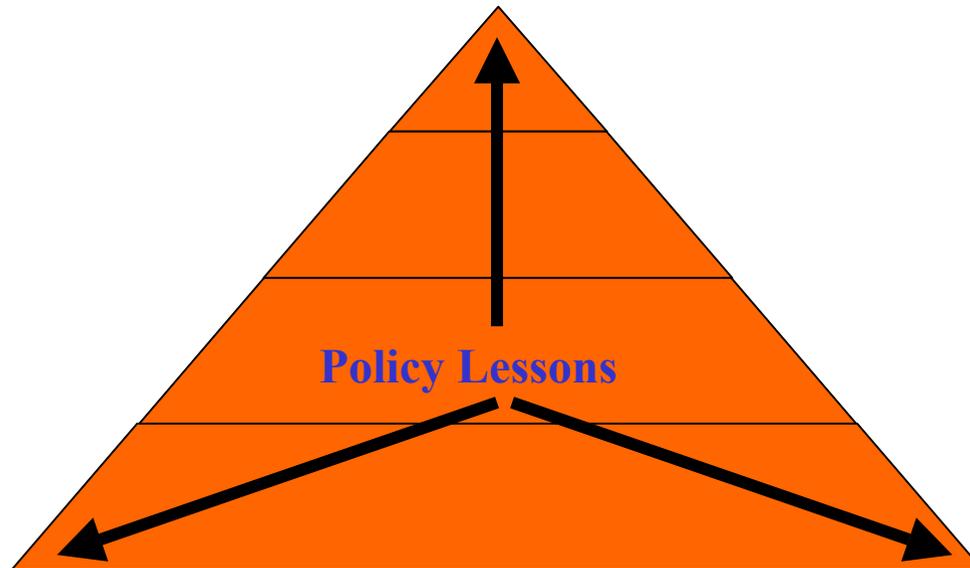
Policy lessons?

- Change preferences of coalitions
- Develop new coalitions (consumers)
- Provide for secure, reliable and predictable investment context
- Provide for longer-term perspective to investor:
 - Desirable/necessary fuel mix of future electricity production (national and EU). 2050 perspective

Summary

Type of market
Greening of electricity supply
Investment climate

Context



Policy Lessons

Support schemes

Certificate-based
Other

Advocacy coalitions

Scale and scope
National - functional

Thank you for your attention

Point of departure

- Expected results REALISE
 - Experiences with different support schemes in liberalising electricity markets
 - Policy lessons for harmonizing support of renewables in EU
- Methodology REALISE
 - Stakeholder consultation / hearings

Major Approach

- Actor centered analysis in context
- Two multidimensional concepts:
 - Type of electricity market
 - Actor cohesion on support scheme

Type of electricity market

- **Liberalisation**

- Degree of competitiveness
- Degree of openness

- **Ecologisation**

- Penetration renewables in national E-production
- Penetration renewables in national E-consumption

Actor cohesion on support scheme

- **Consensus on national support scheme in use**
 - Degree of competitiveness
 - Degree of risk
 - Degree of specification

- **Willingness to change support scheme in use**
 - Degree of competitiveness
 - Degree of risk
 - Degree of specification

Types of analysis

1. Country Classification

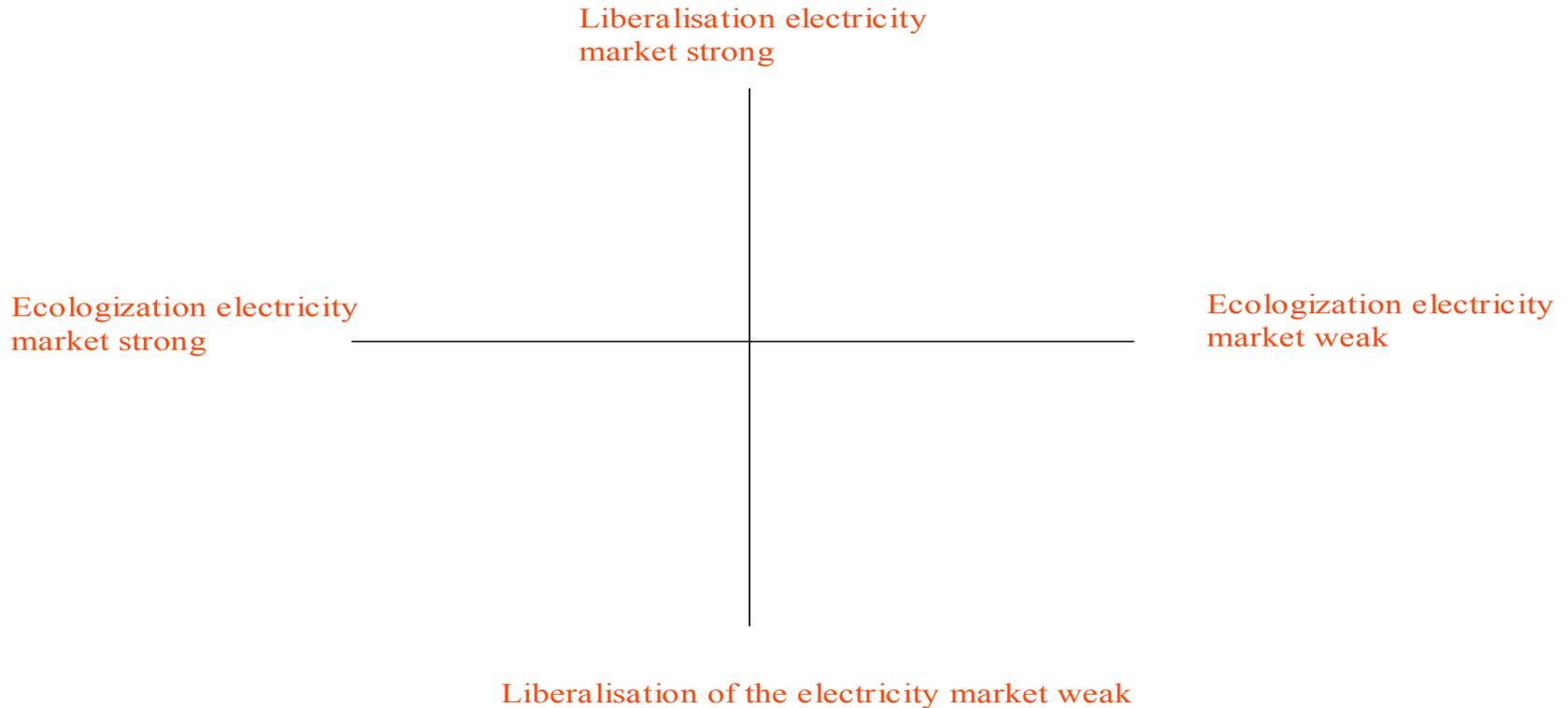
- Type of market
- Actor positions support schemes in use
- Willingness to change
- Combinations

2. Analysis of (perceived) causes of (non) change

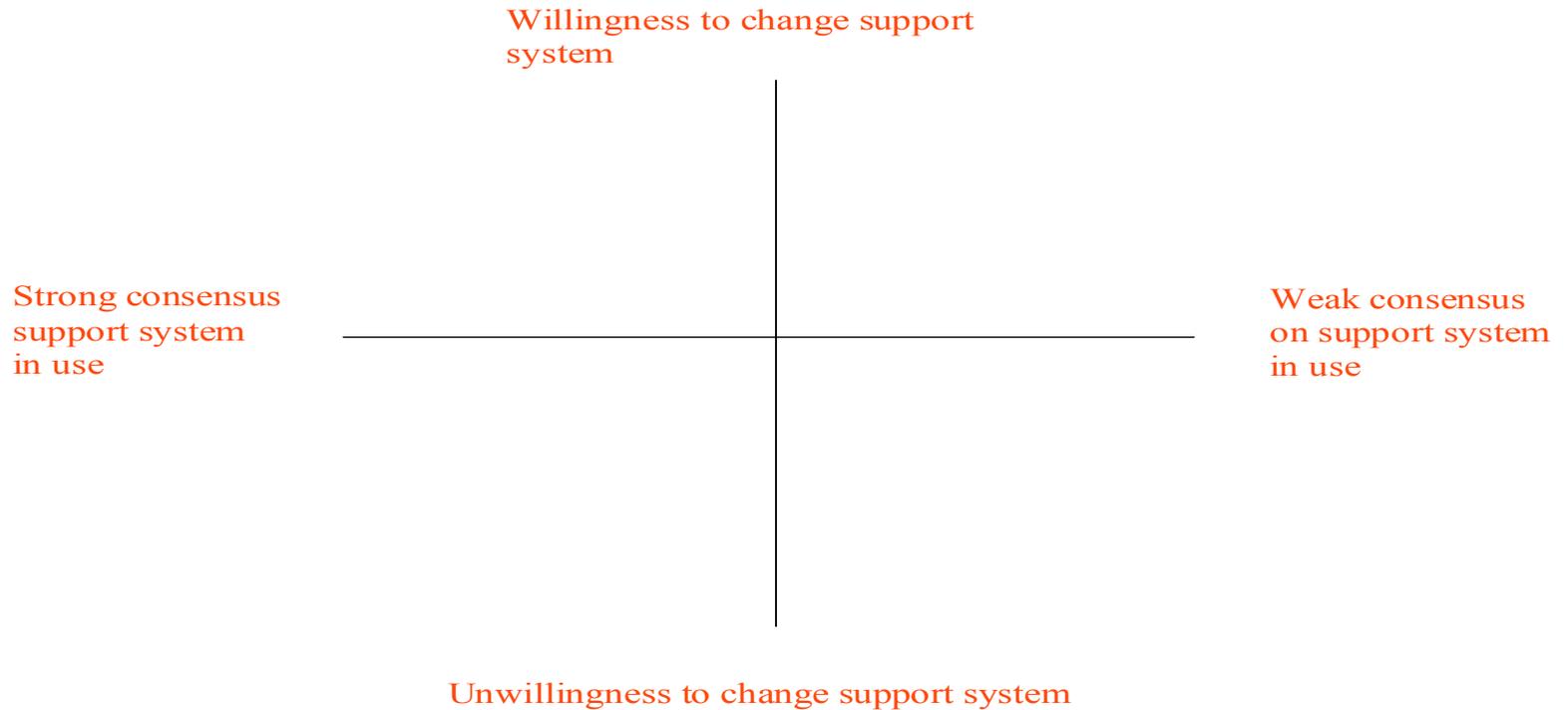
3. Interplay between actors and factors and ways to proceed

- Policy learning
- Policy convergence
- Policy diffusion

Country classification I



Country classification II

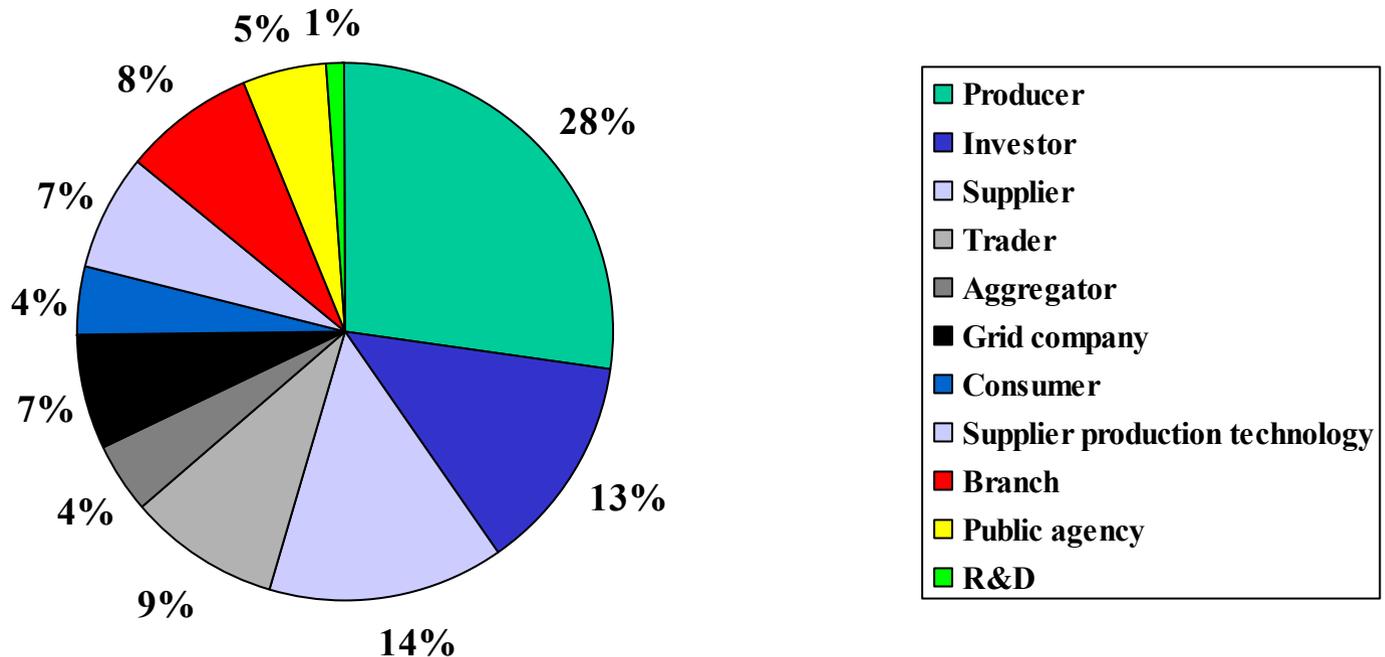


Survey The Netherlands

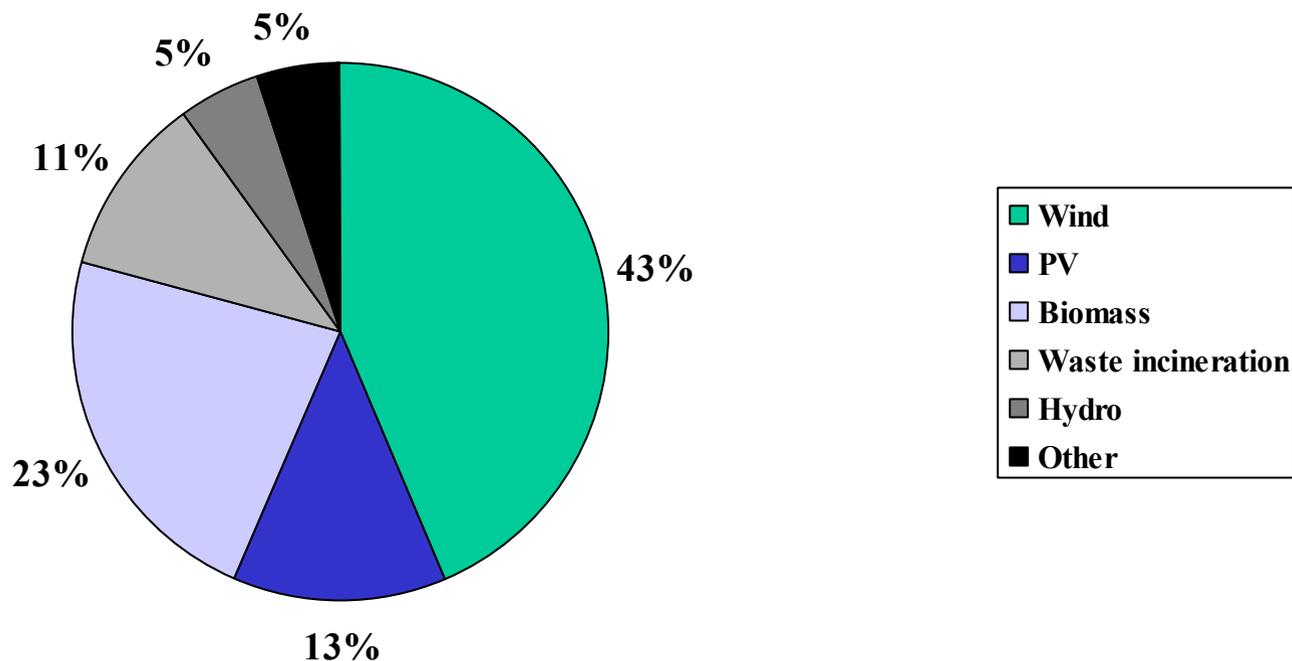
- On line survey all groups of stakeholders
- May June 2005
- Repetition in 2006

Survey response

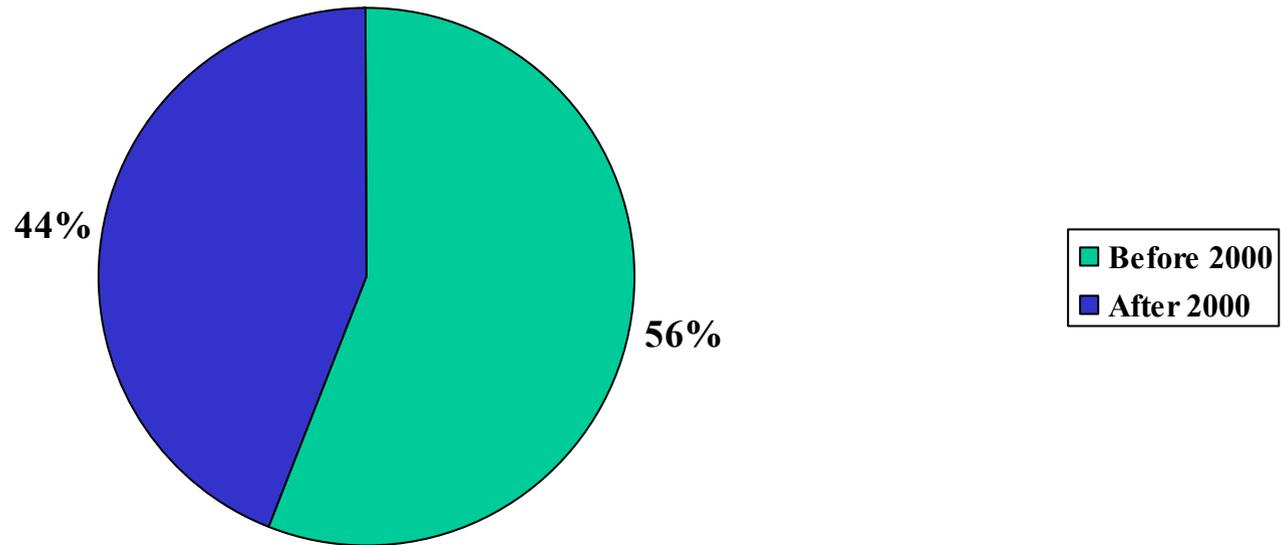
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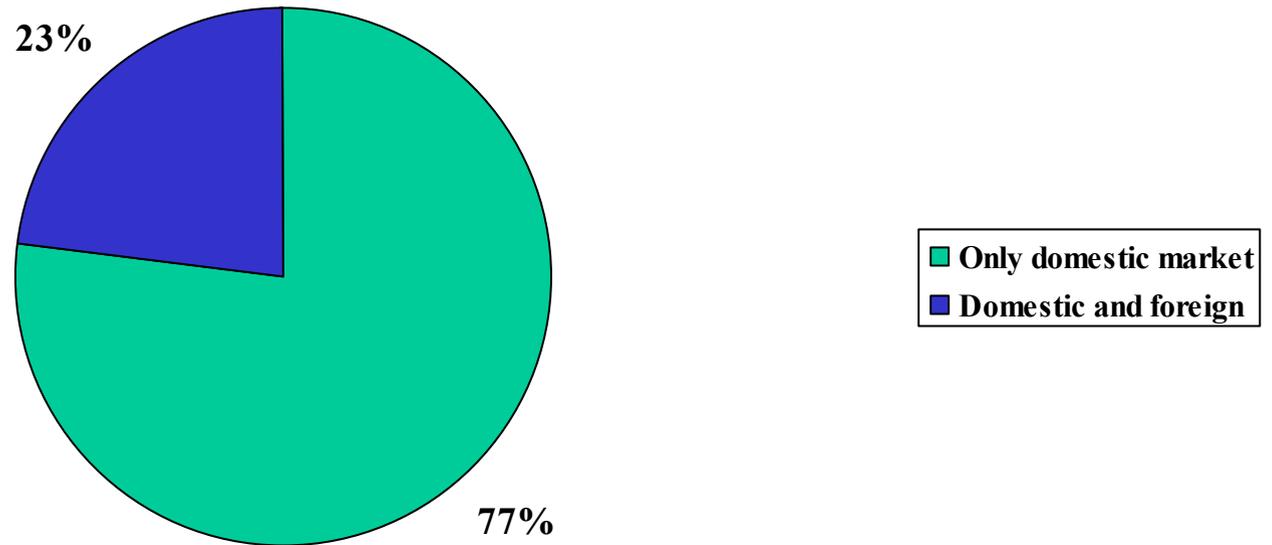
Resources and technology



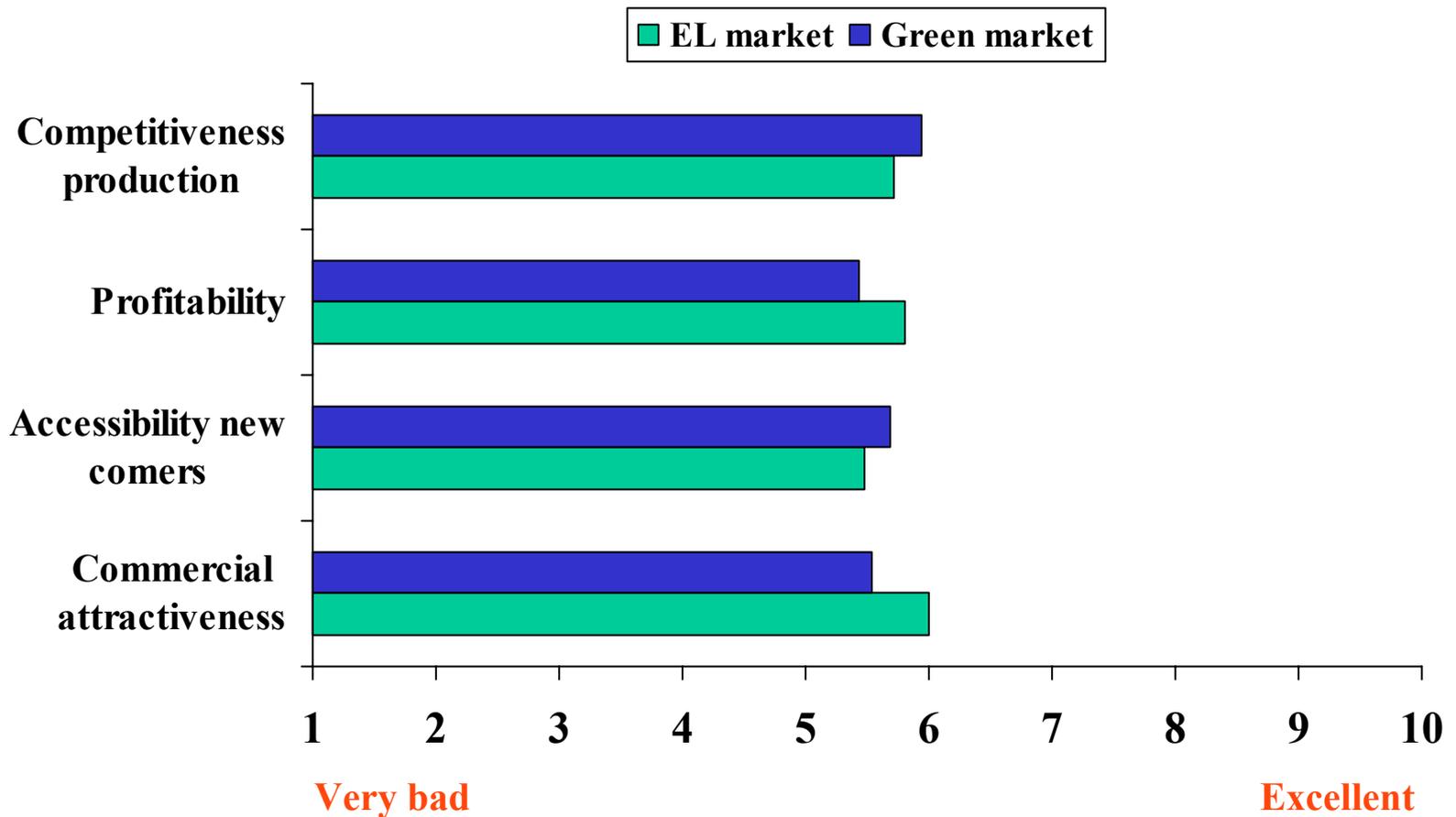
Entering Dutch green electricity Market



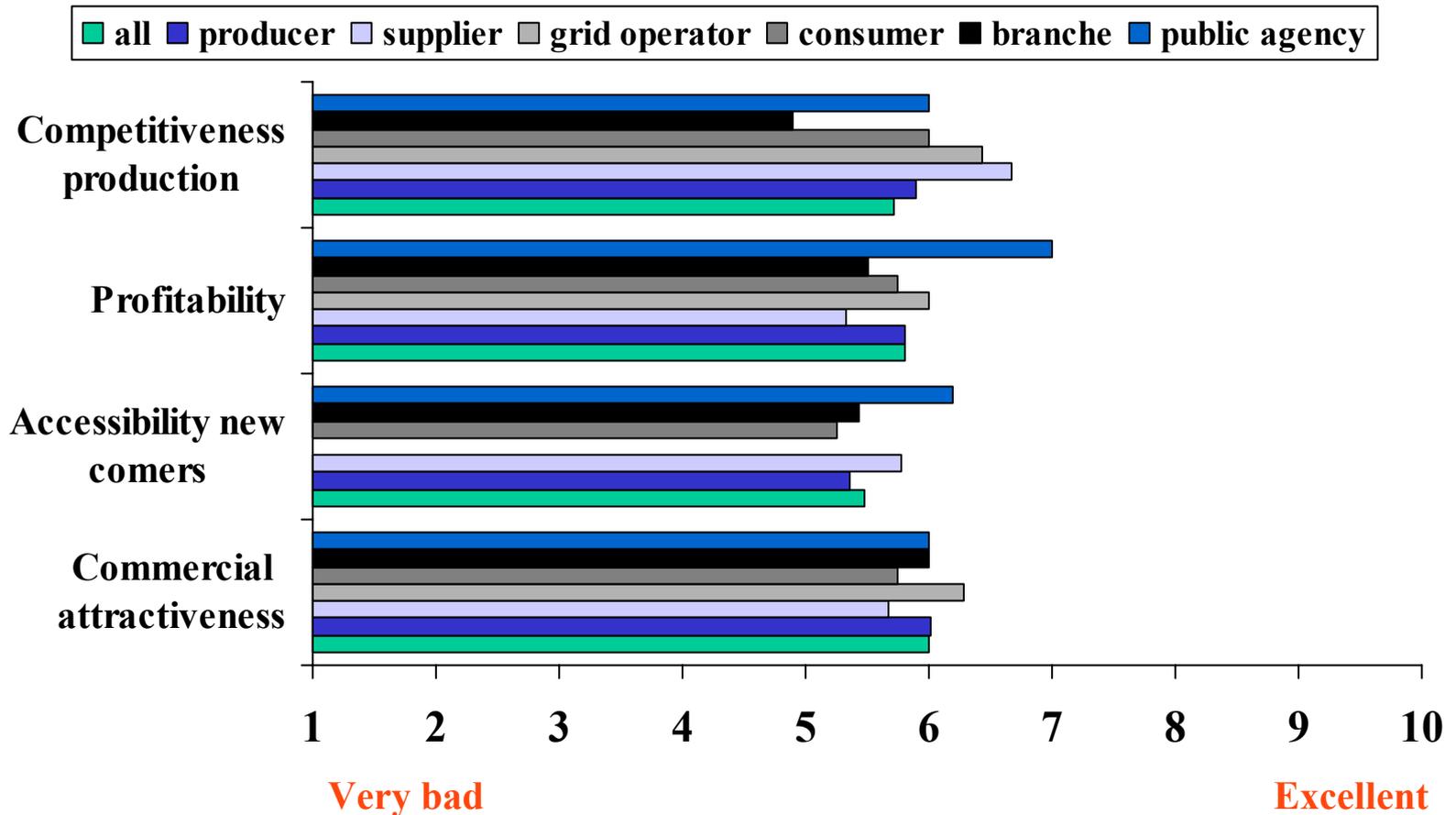
Which Green electricity market



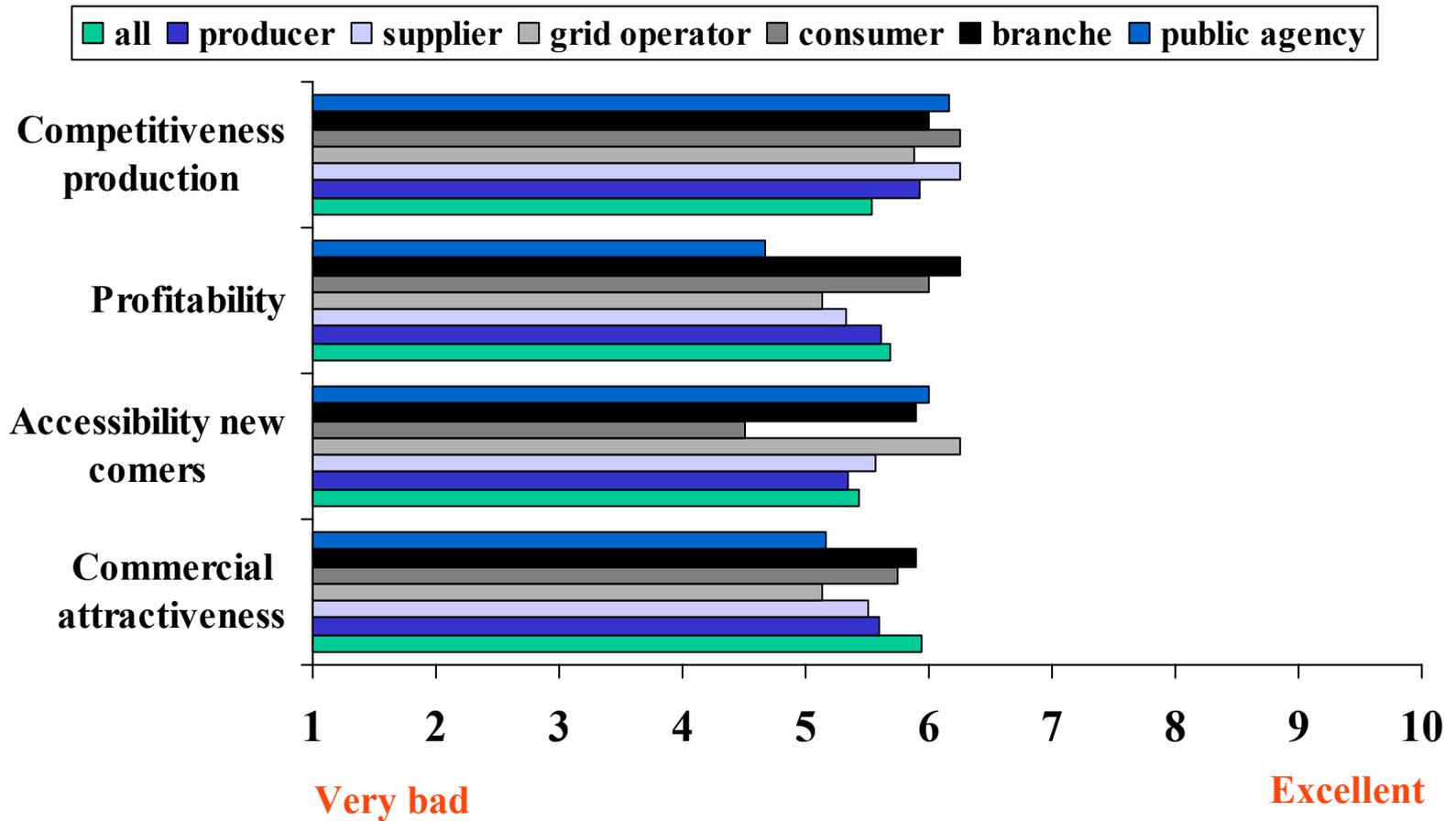
Assessment Dutch (green) electricity market



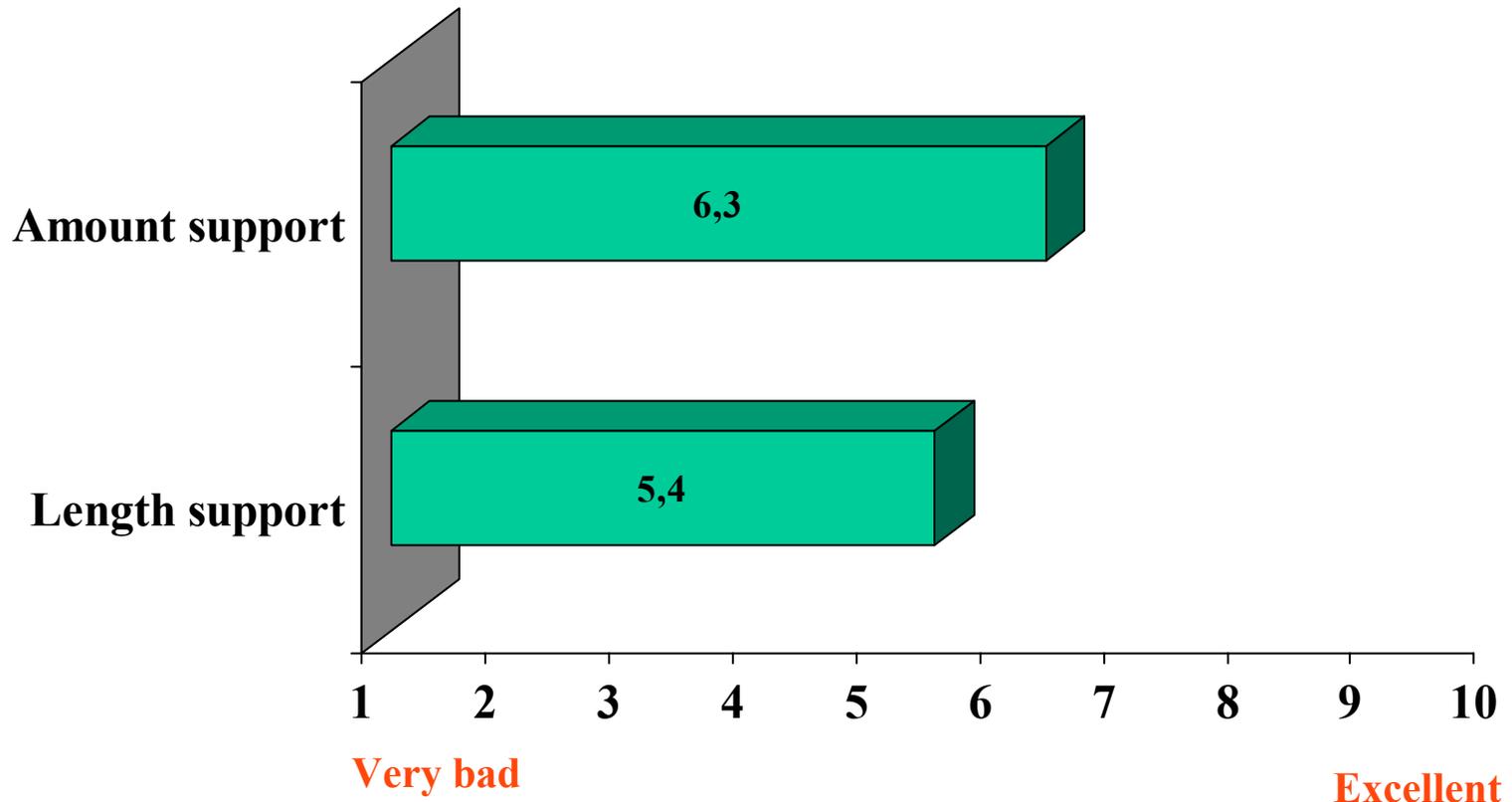
Assessment Dutch electricity market



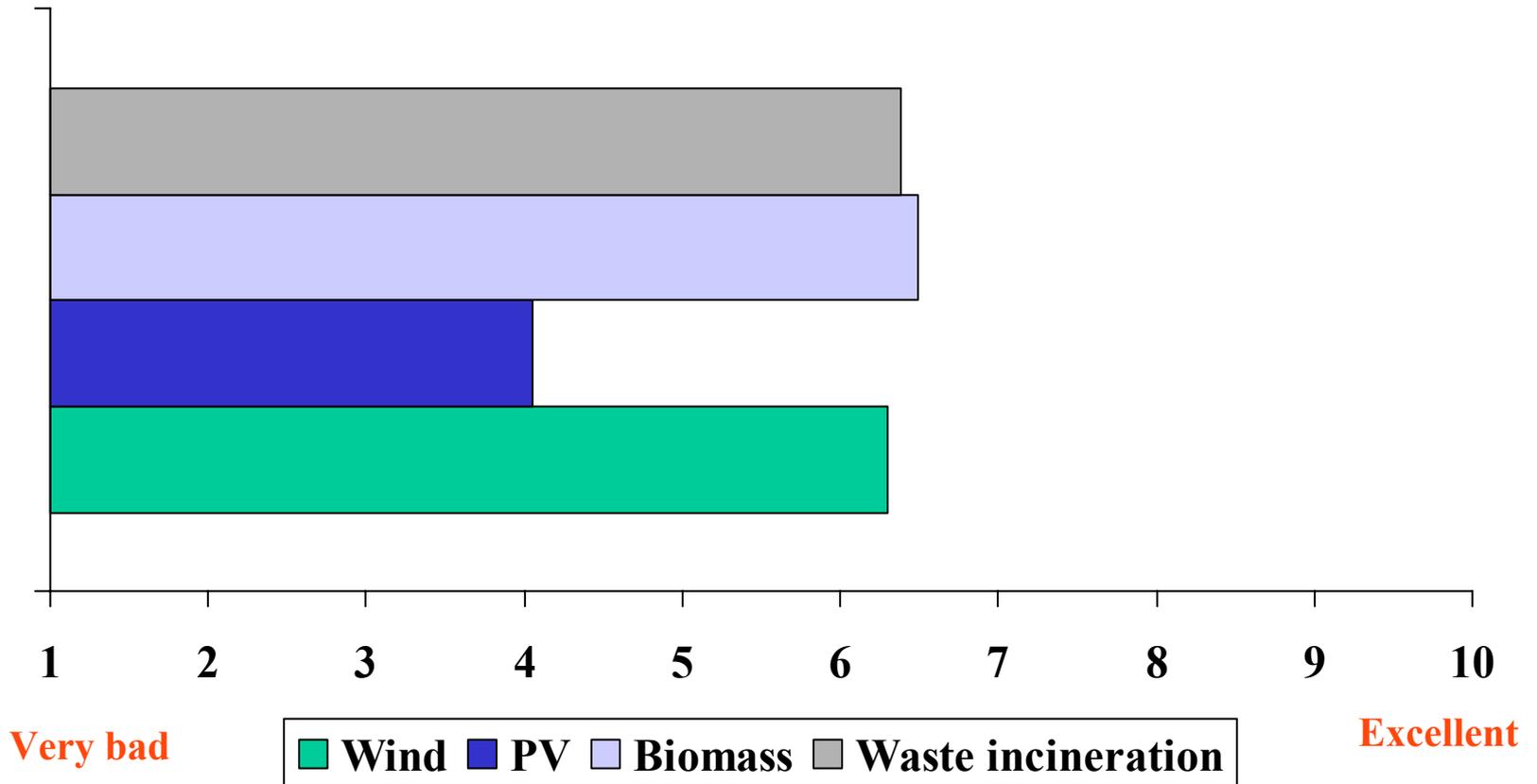
Assessment Dutch green electricity market



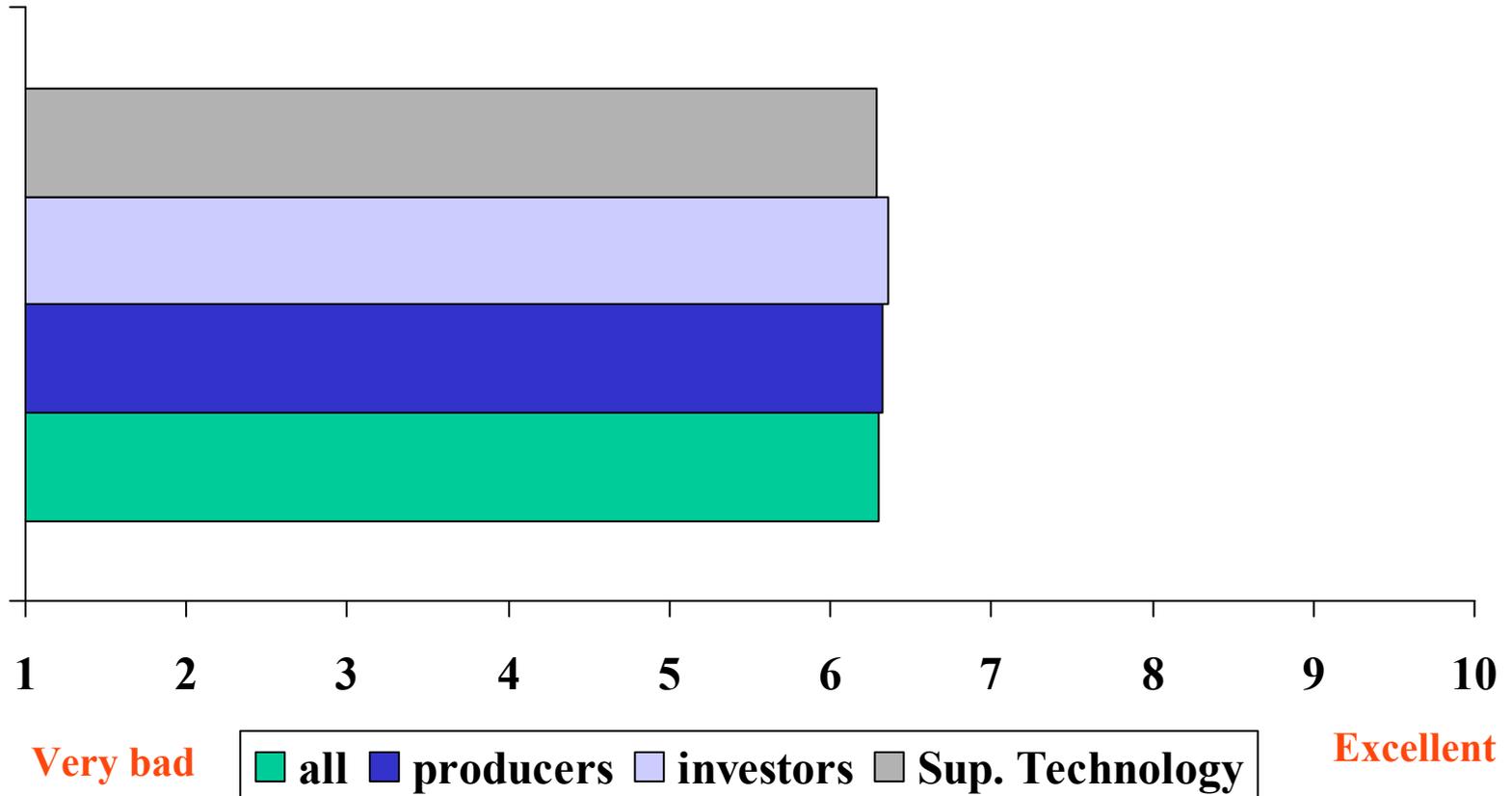
Assessment Dutch support scheme



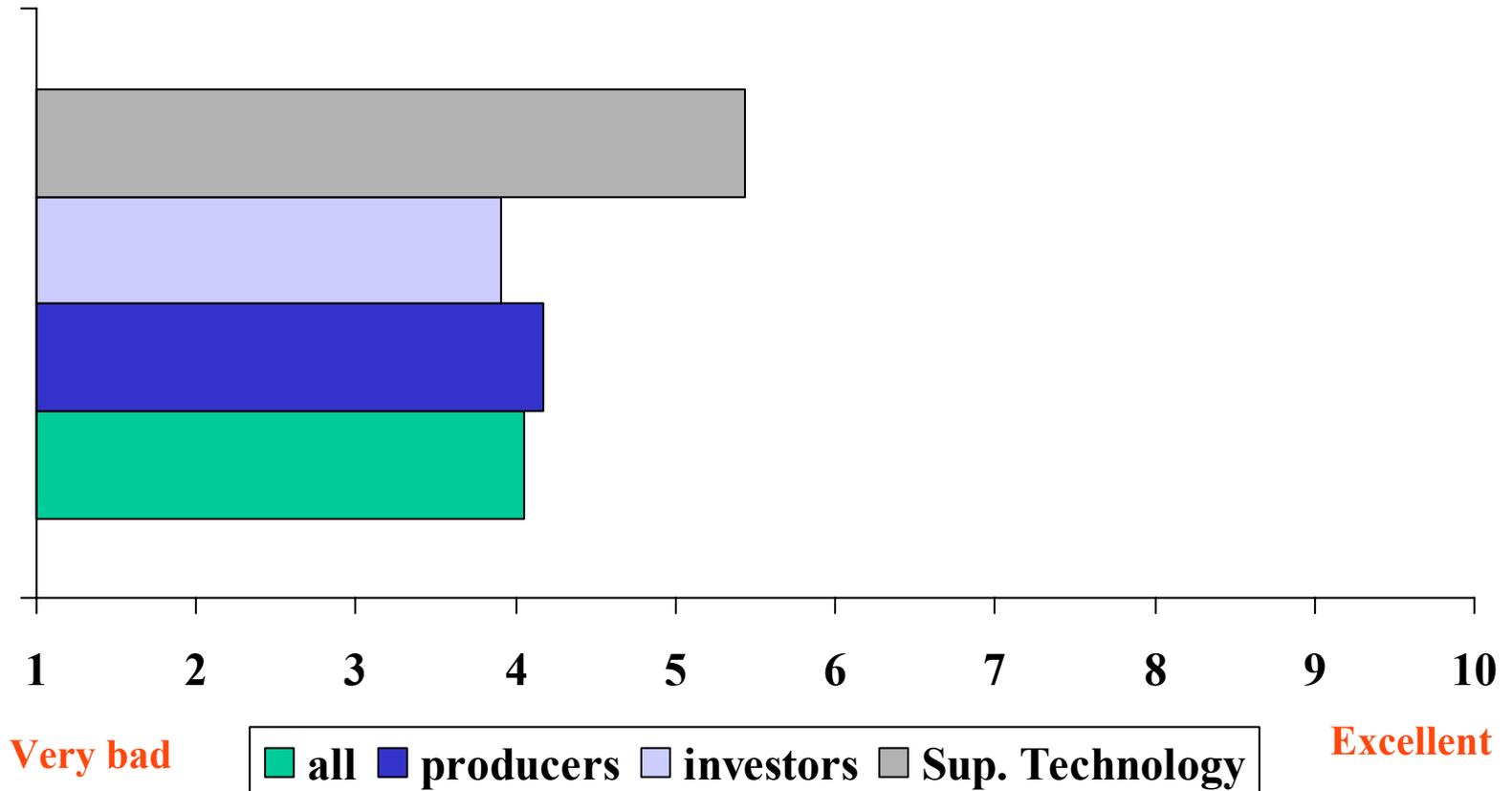
Assessment amount per technology



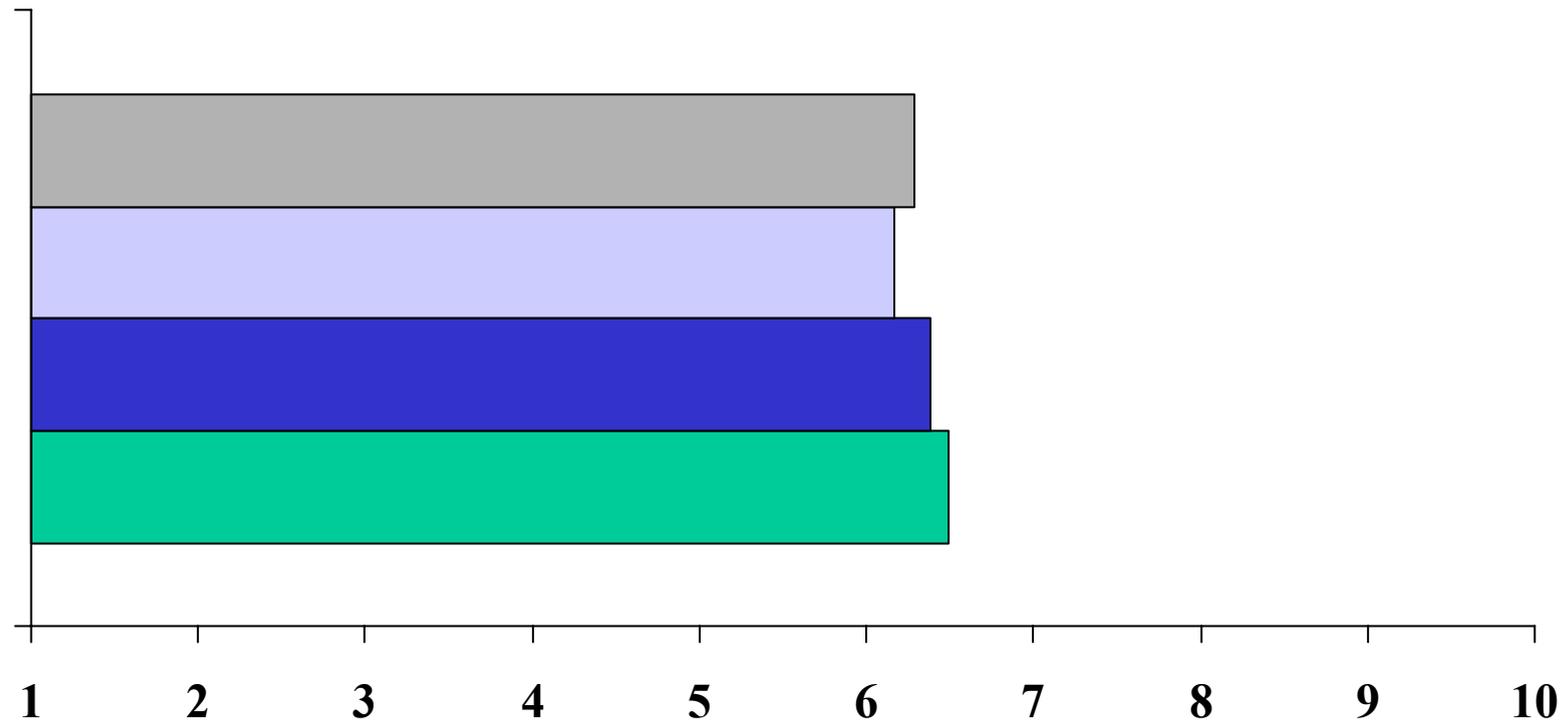
Group assessment support wind



Group assessment support PV



Group assessment support biomass

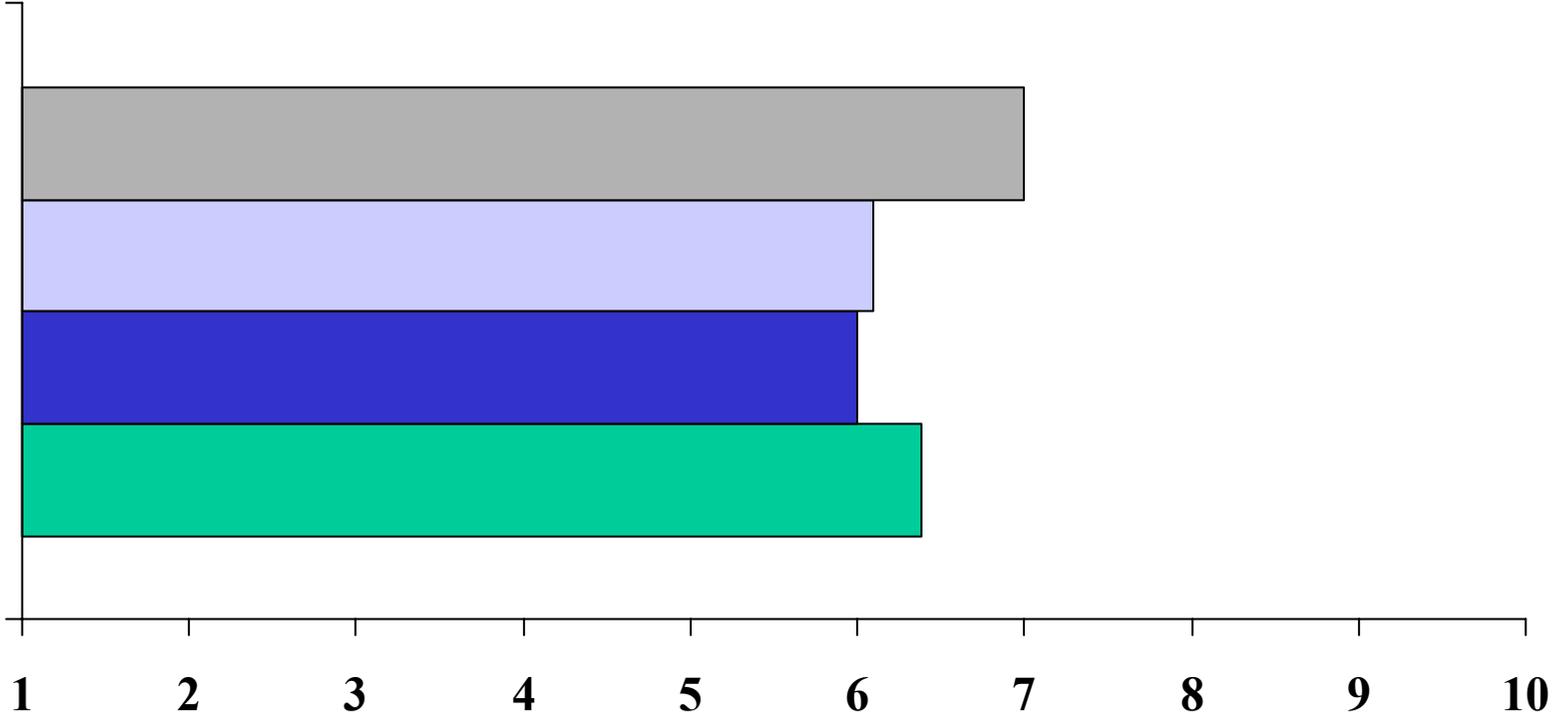


Very bad



Excellent

Group assessment support waste incineration

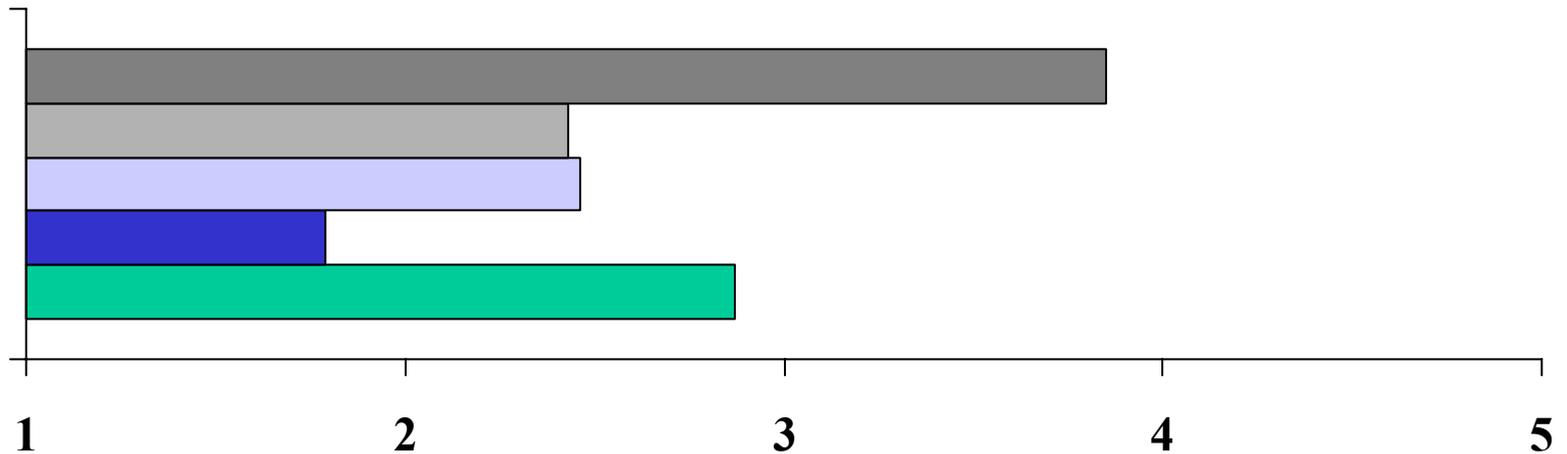


Very bad



Excellent

Assessment national investment climate

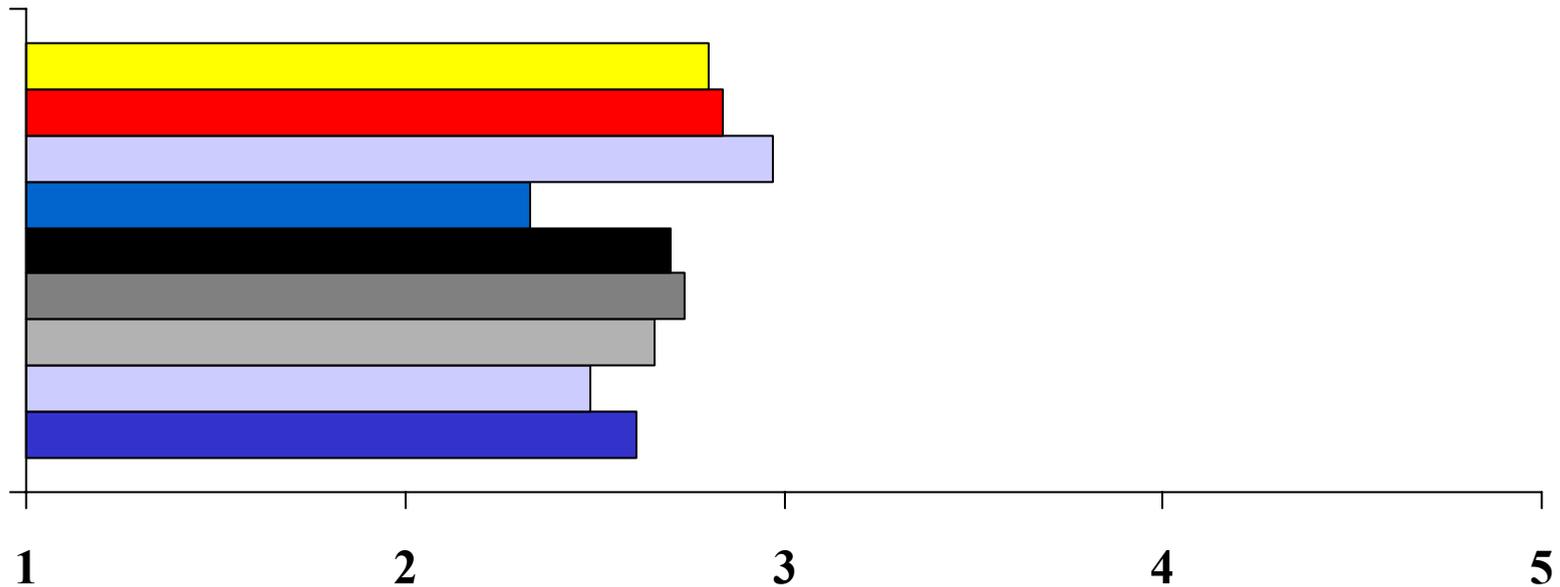


Fully agree

Fully disagree

- 20% RES in 2020 possible without policy change
- Administrative procedures major national barrier
- Renumeration tariffs barrier production GE
- Without support no investments
- Thanks to support goal attainment in 2010

Group assessment national investment climate

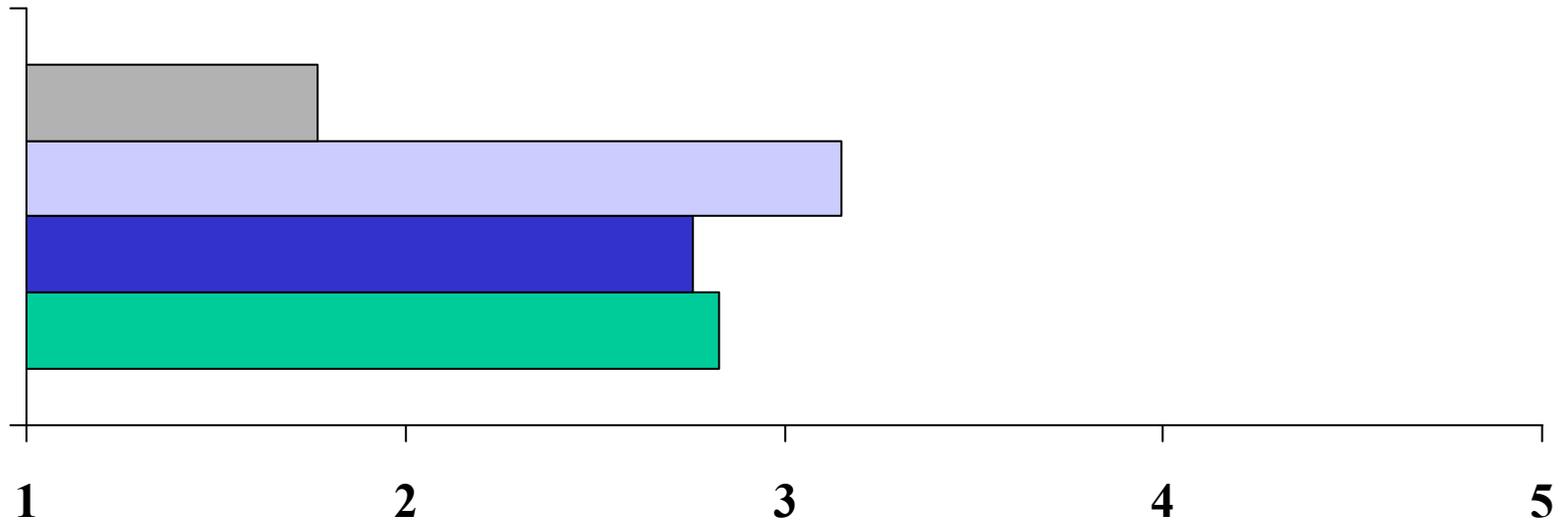


Fully agree

Fully disagree



Assessment EU Harmonisation

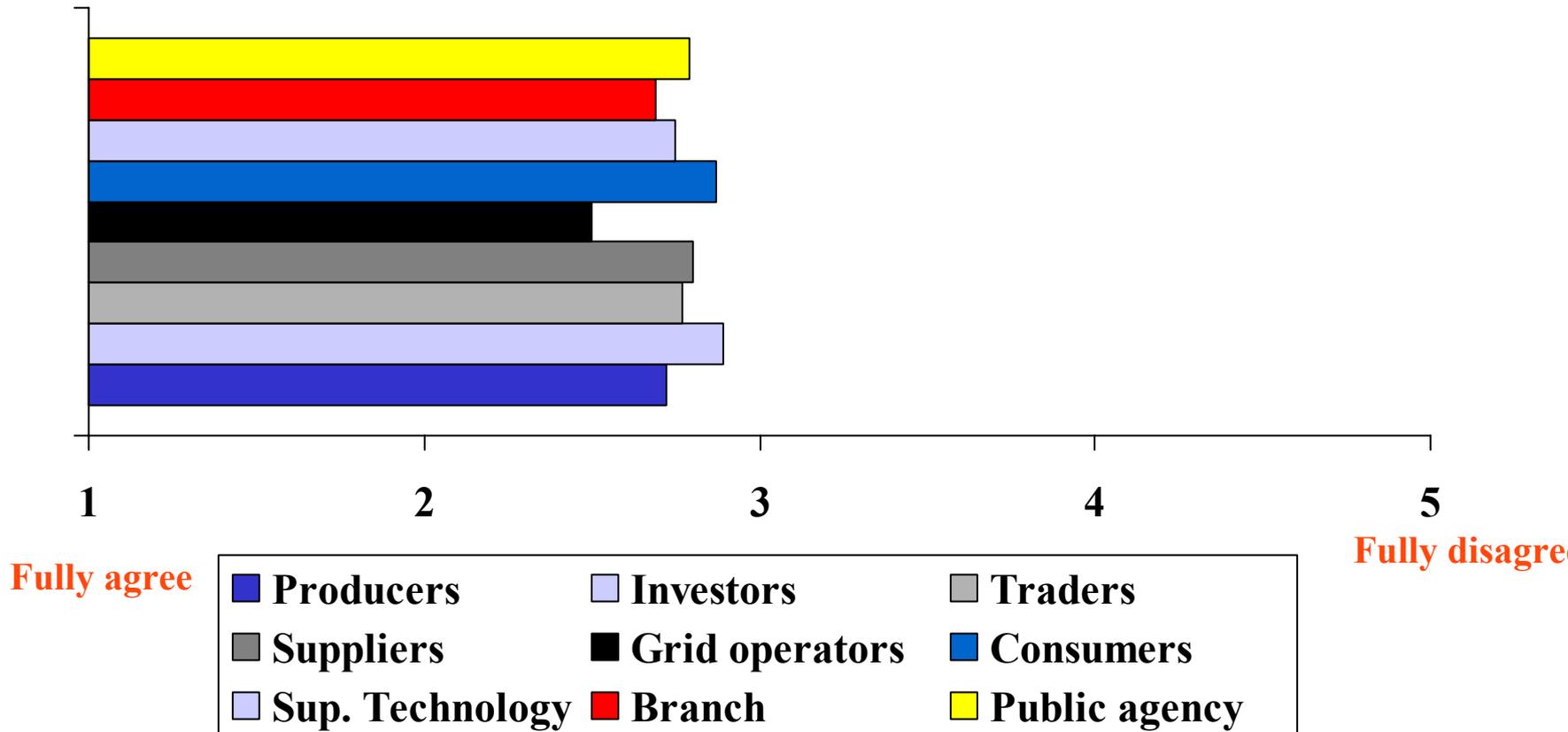


Fully agree

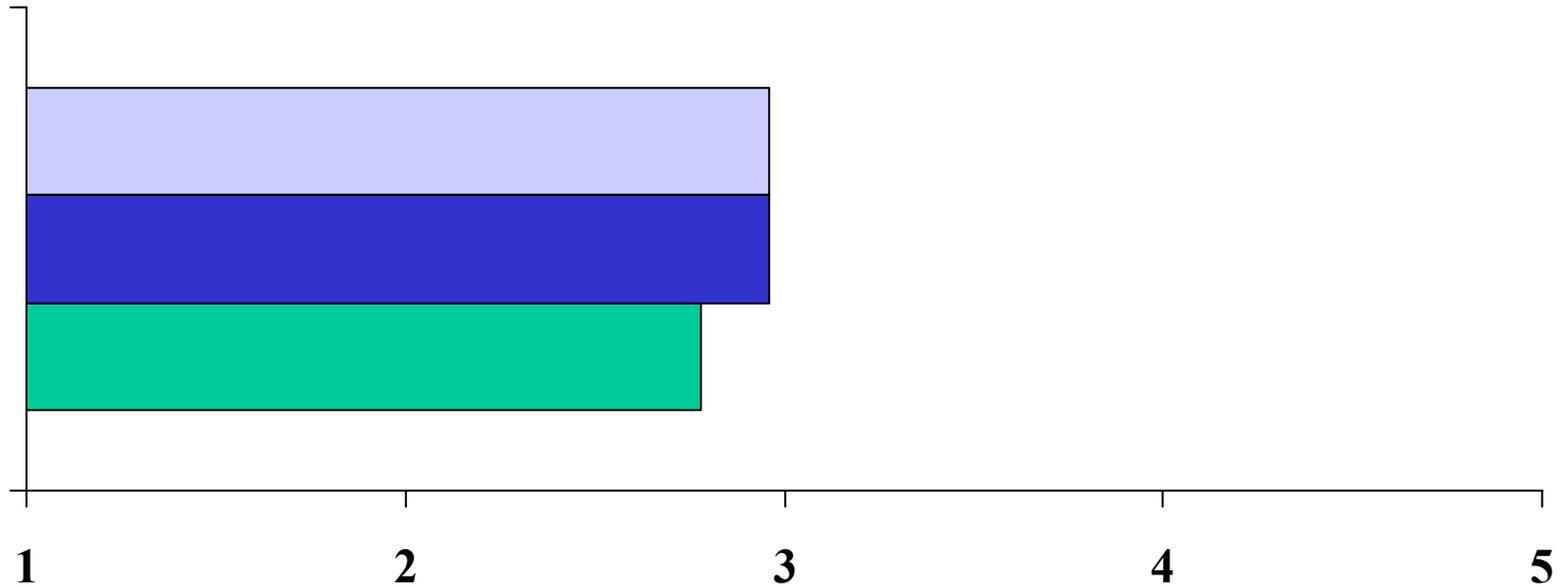
Fully disagree

- New EU goals for 2020 are important for increase RES
- EU harmonisation no matter type of support scheme
- EU harmonisation more important than nat. support
- Nat. support more important than EU harmonisation

Group assessment EU harmonization



Willingness to change

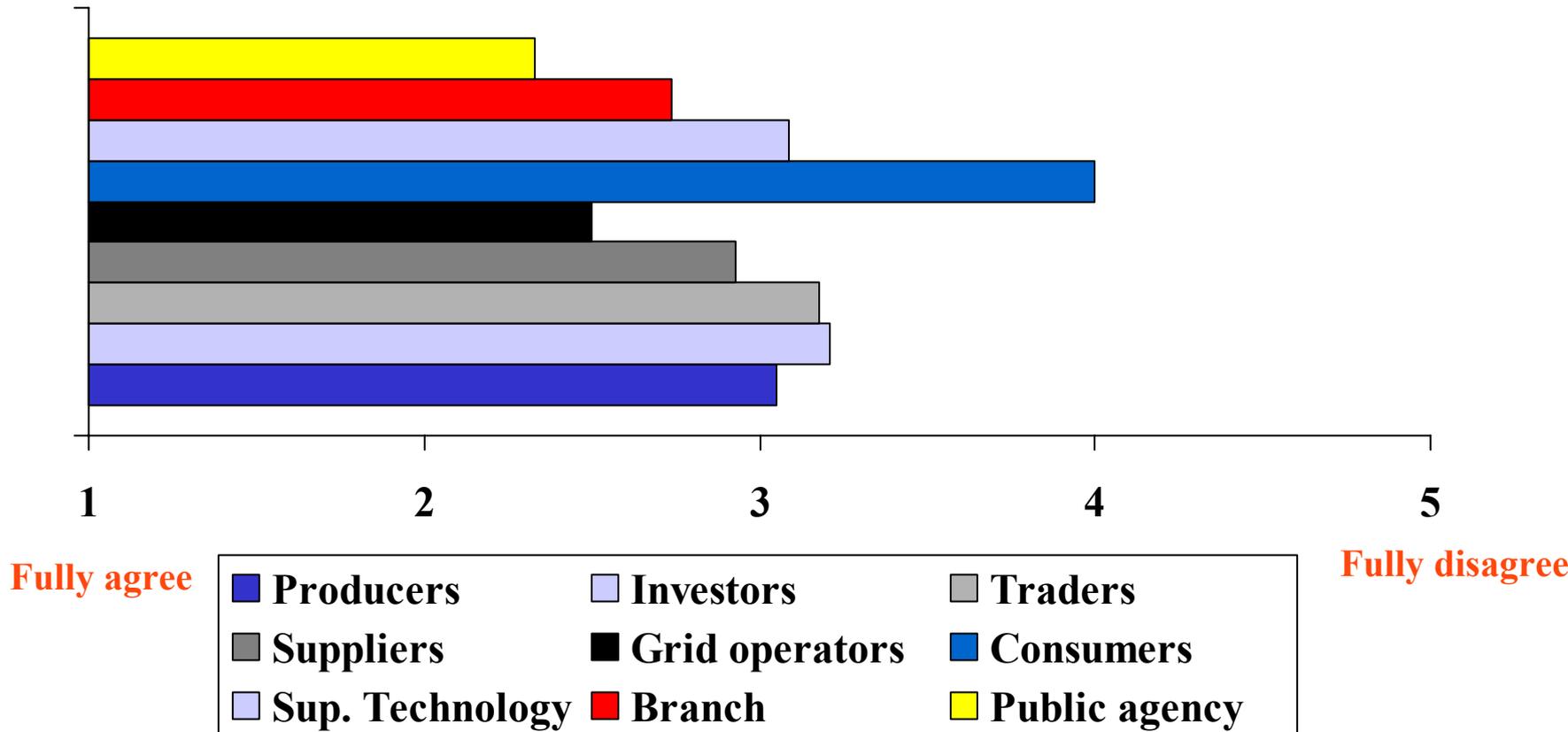


Fully agree

- Change in amount of support for benefit of EU-harm.
- Change in length of support 'yes' for benefit EU-harm.
- Certificate trade 'yes' for the benefit of EU harmonisation

Fully disagree

Willingness to change



Fully agree

Fully disagree