

Municipal Utilities: Motivations, Perceptions and Investment Decision Making

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Background: Actors

- “The Big Four”
 - attract political attention; in public/research focus
- IPP
 - heavy political support in past two decades
- Municipal Utilities (MUs)
 - operate some 13 GW (~10% of German capacity)
 - Additional 2.2 GW under construction
 - 40% share in electricity sales

MUs are different

- 'Economy meets public/local politics'
 - provide services of general interest
 - price and product policy within social context
 - local politics influence MU business
- Sustainability aspects:
 - Long experience in decentralized production
 - Smaller capacities \Rightarrow more technology alternatives
 - diversification
 - also: more “alternative” technologies suitable

Research questions

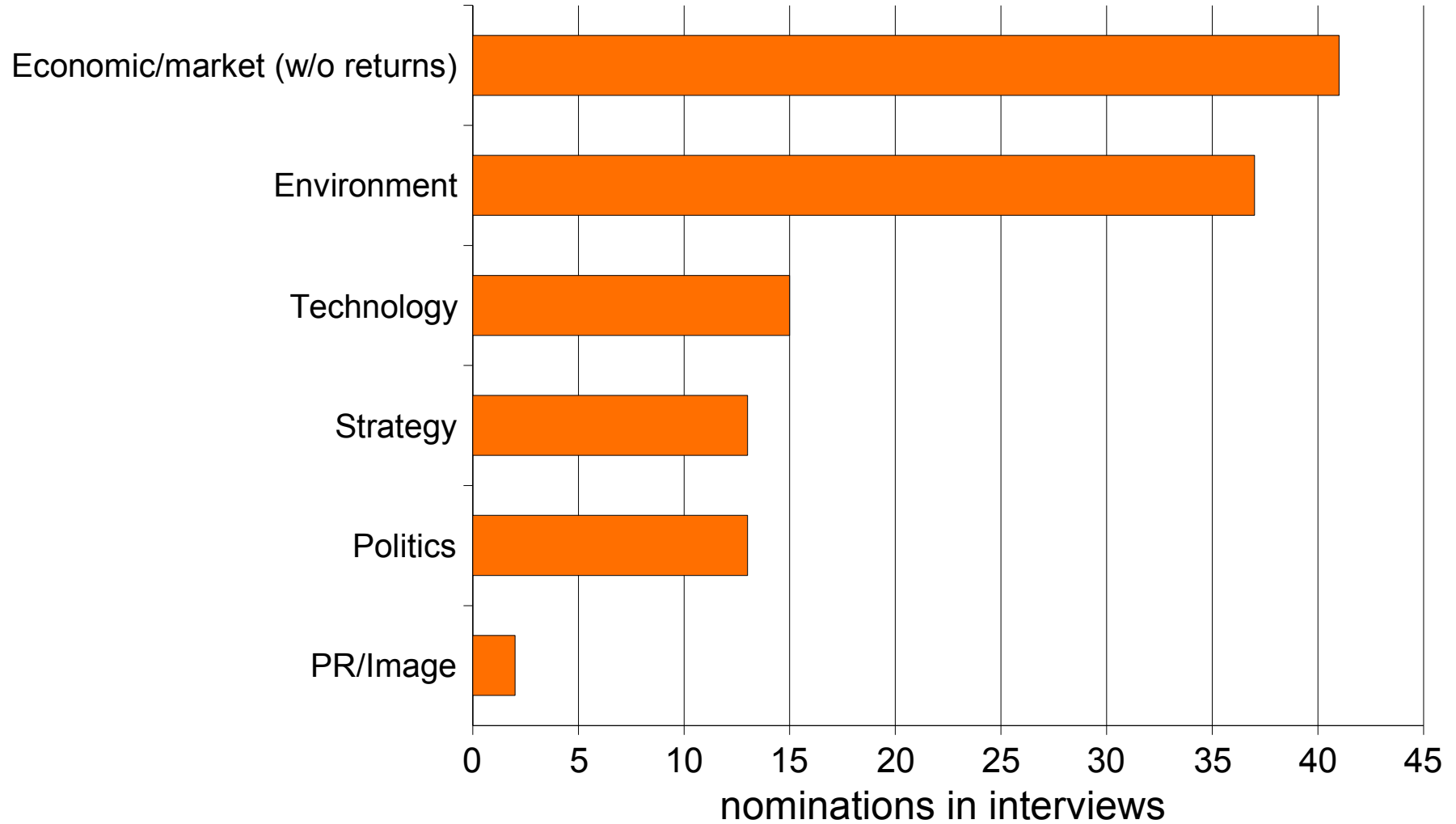
Are MUs agents of change?

- What are motivations for MUs to invest?
 - What role does environment/climate play?
 - What is the role of RES?
- What factors and risks have been considered in recent investment decisions?
- What kind of policy support necessary?
 - More investment or more environmental investments?

Method

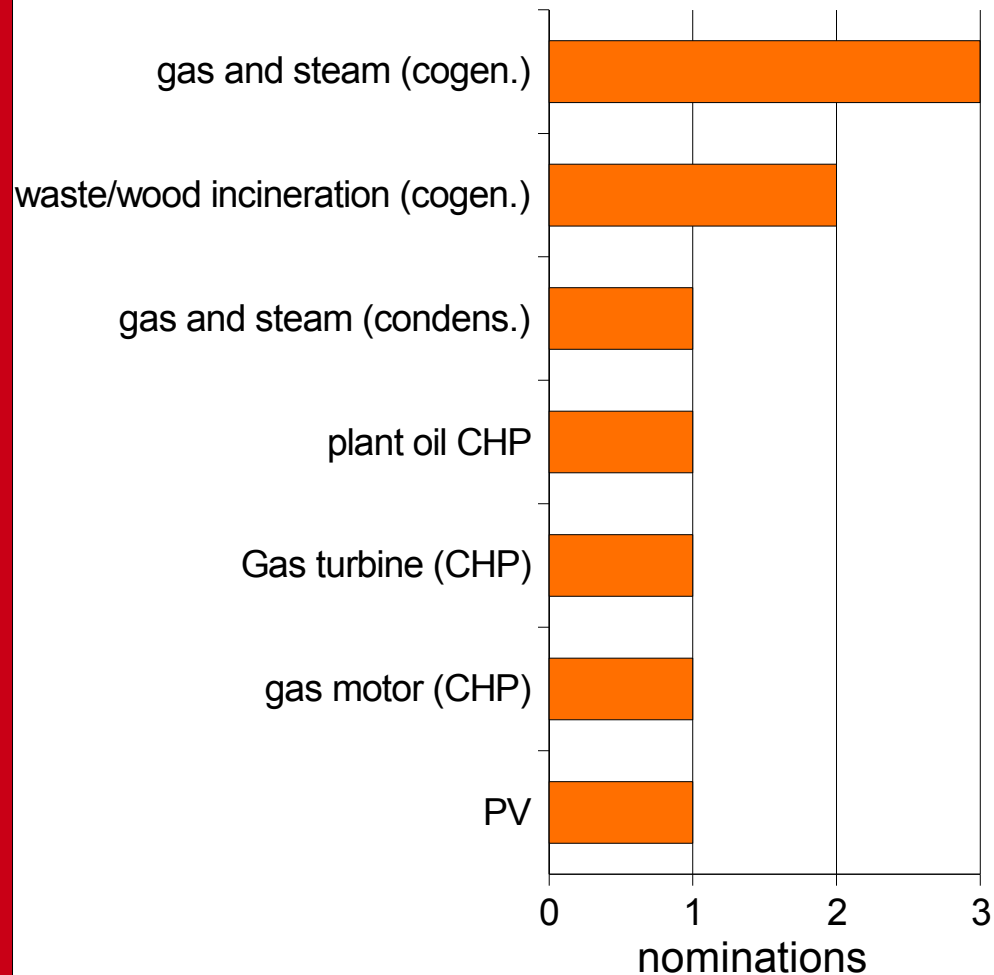
- 12 Semi-structured face-to face Interviews
 - 11 in Germany
 - 10 MUs, 1 MU-related company
 - 1 in UK
 - medium-sized producer (1.3 GW)
 - 1 or 2 interviewees:
 - members of management board / department heads
 - 90-120 minutes, audio-taped, transliterated
 - semi-quantitative & qualitative content analysis
 - !! small sample, not representative !!

Motives to Invest



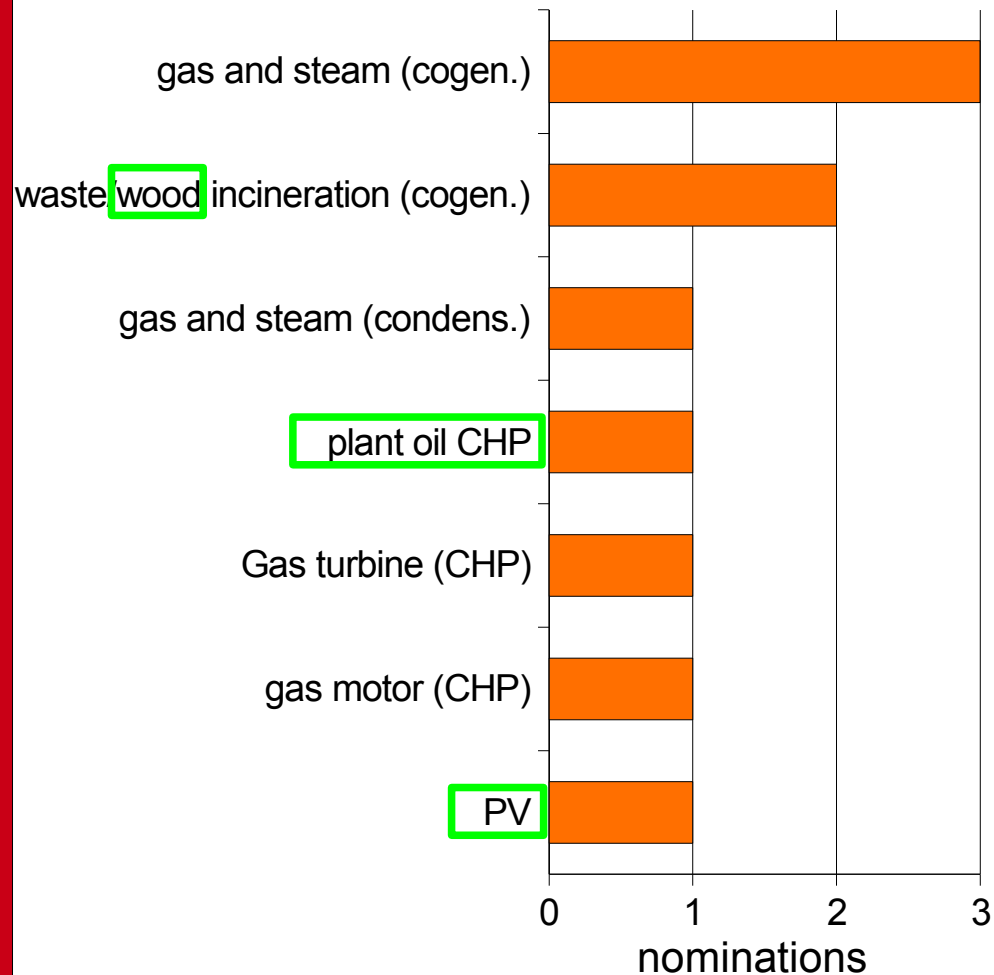
Recent Investments

Technologies (D)



Recent Investments

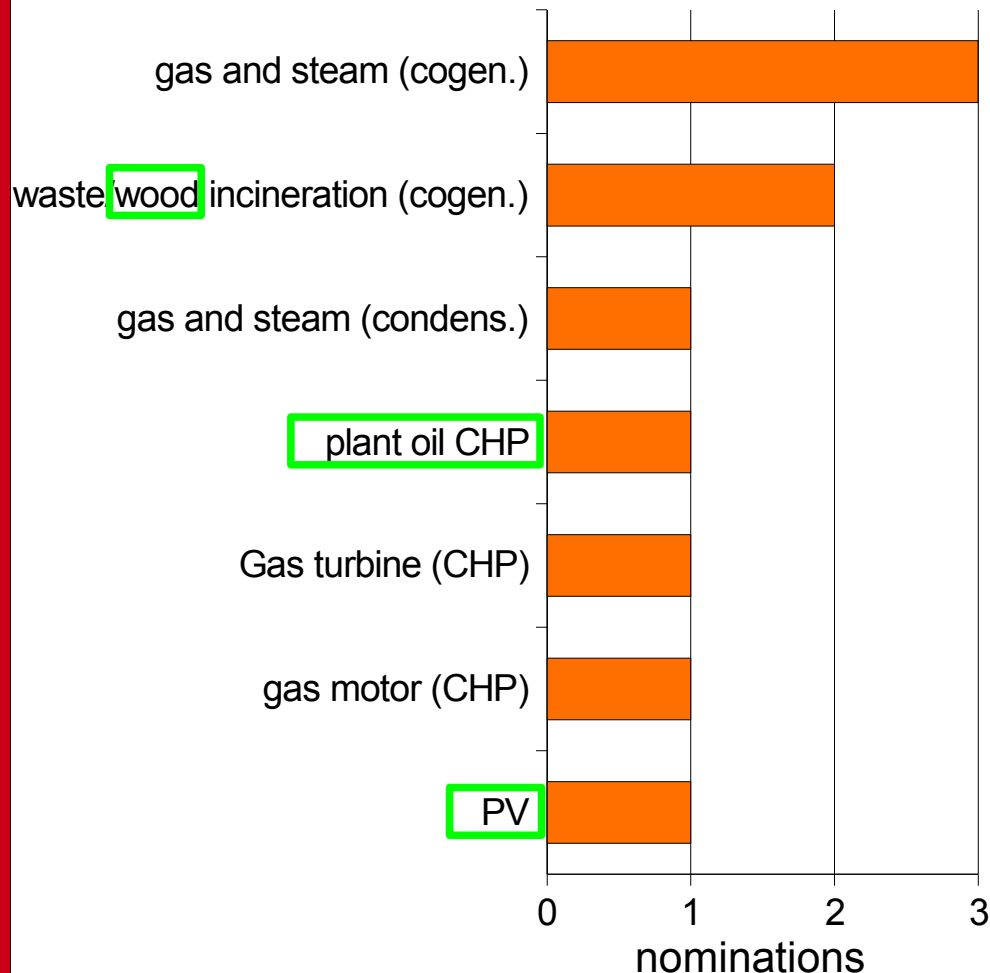
Technologies (D)



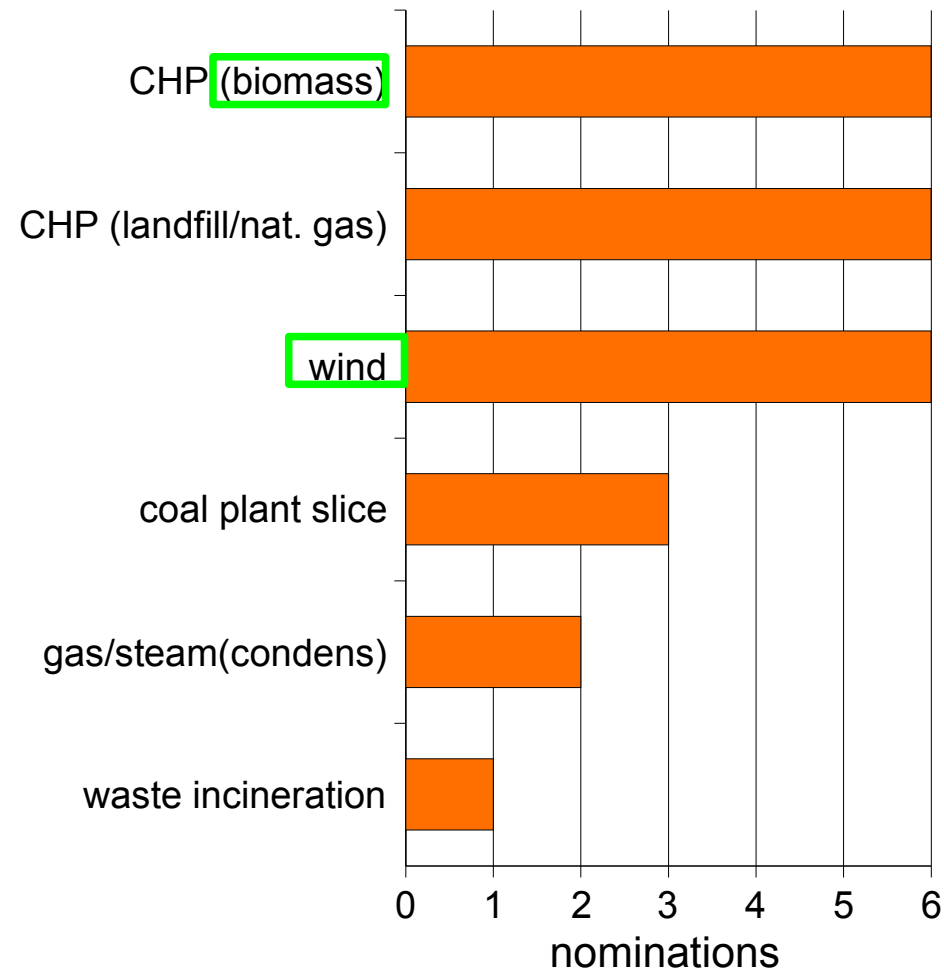
 = renewables

Recent Investments

Technologies (D)

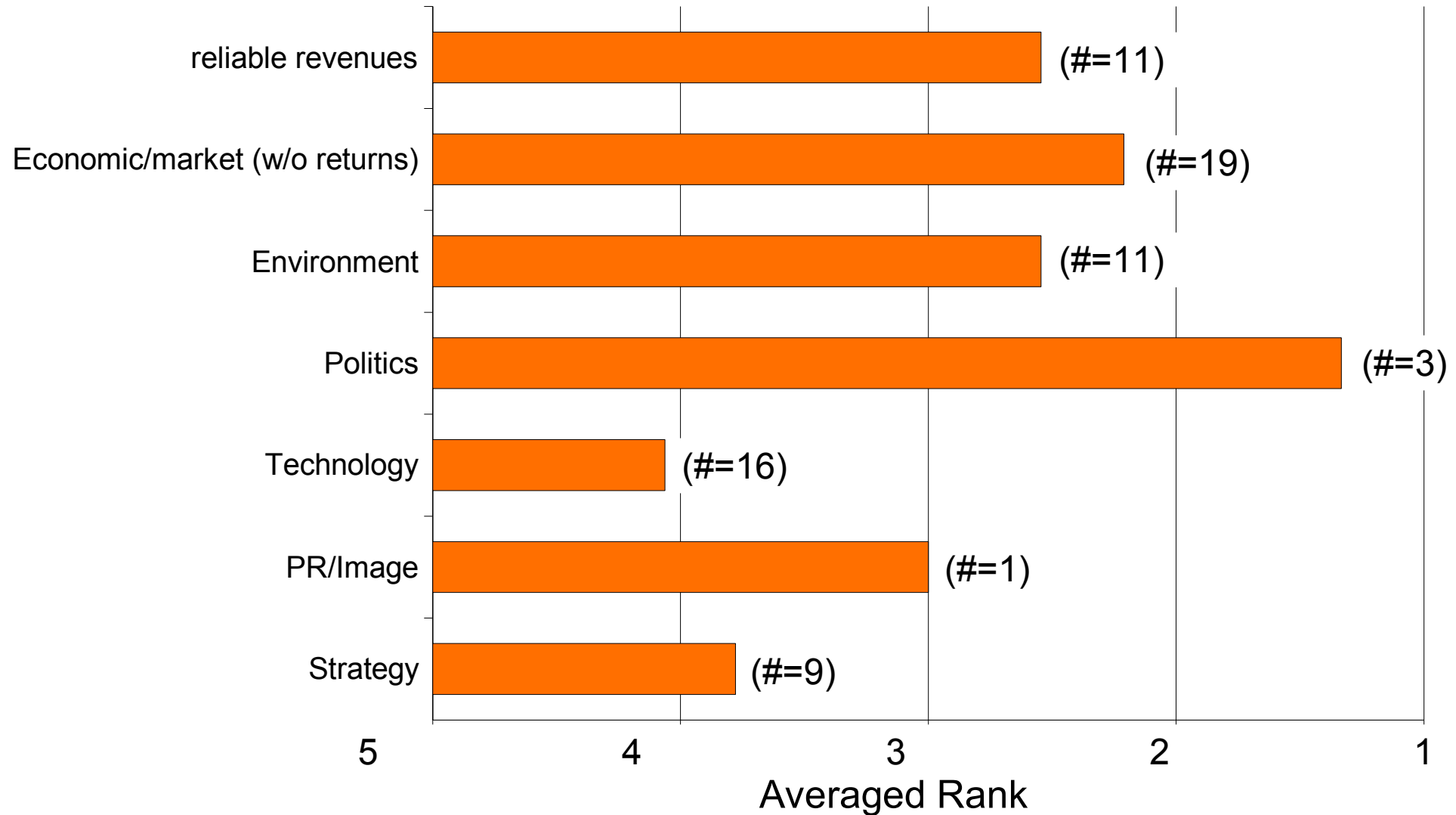


Additional Technologies (D)



 = renewables

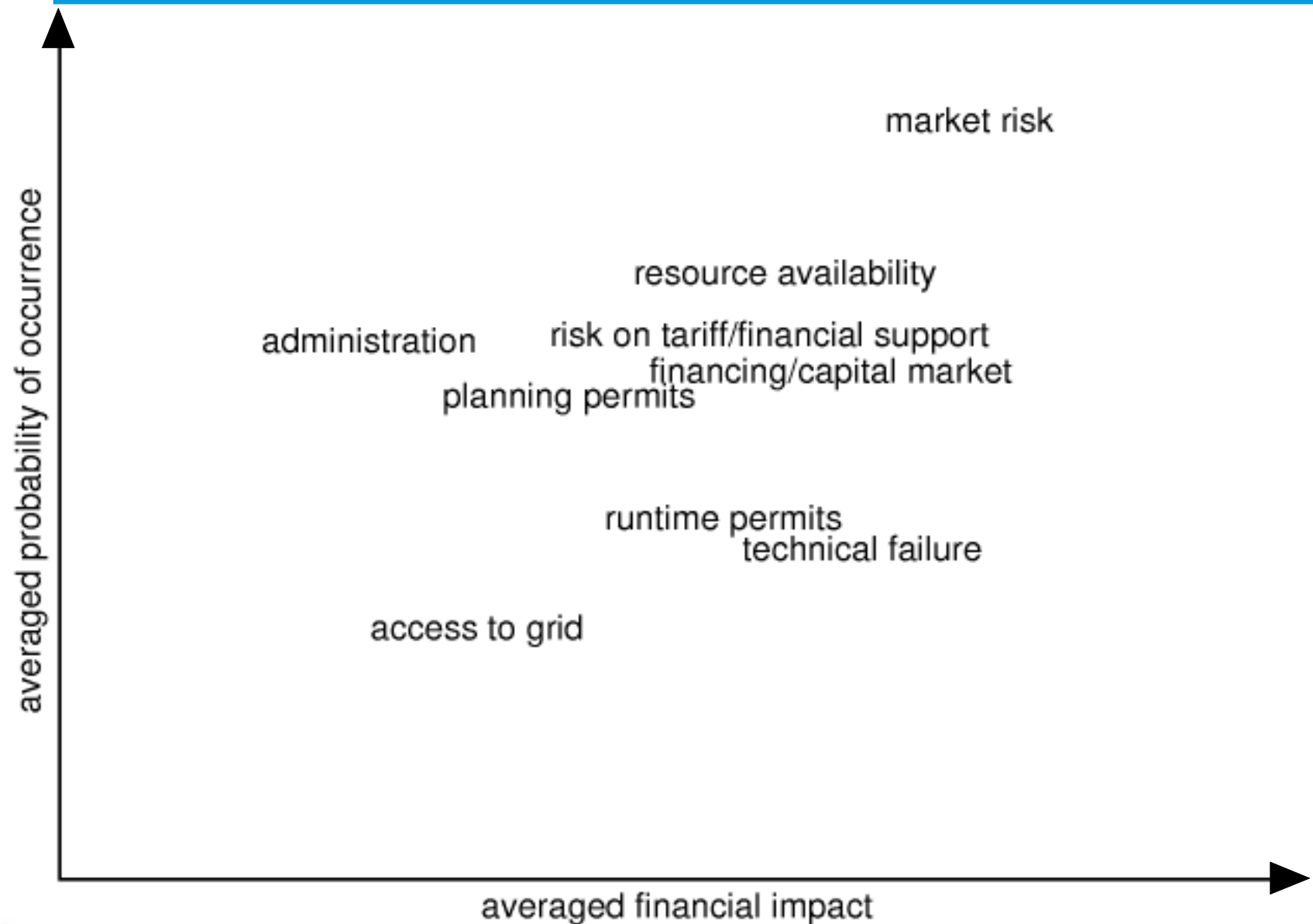
Factors Involved in Decisions



Wrap-up: Drivers

- Freely stated motivations match factors involved actual decisions:
 - Economic aspects are key, followed by environmental aspects
 - Technology and strategy less important
- Less often, but very important if present:
 - political issues
 - PR/Image

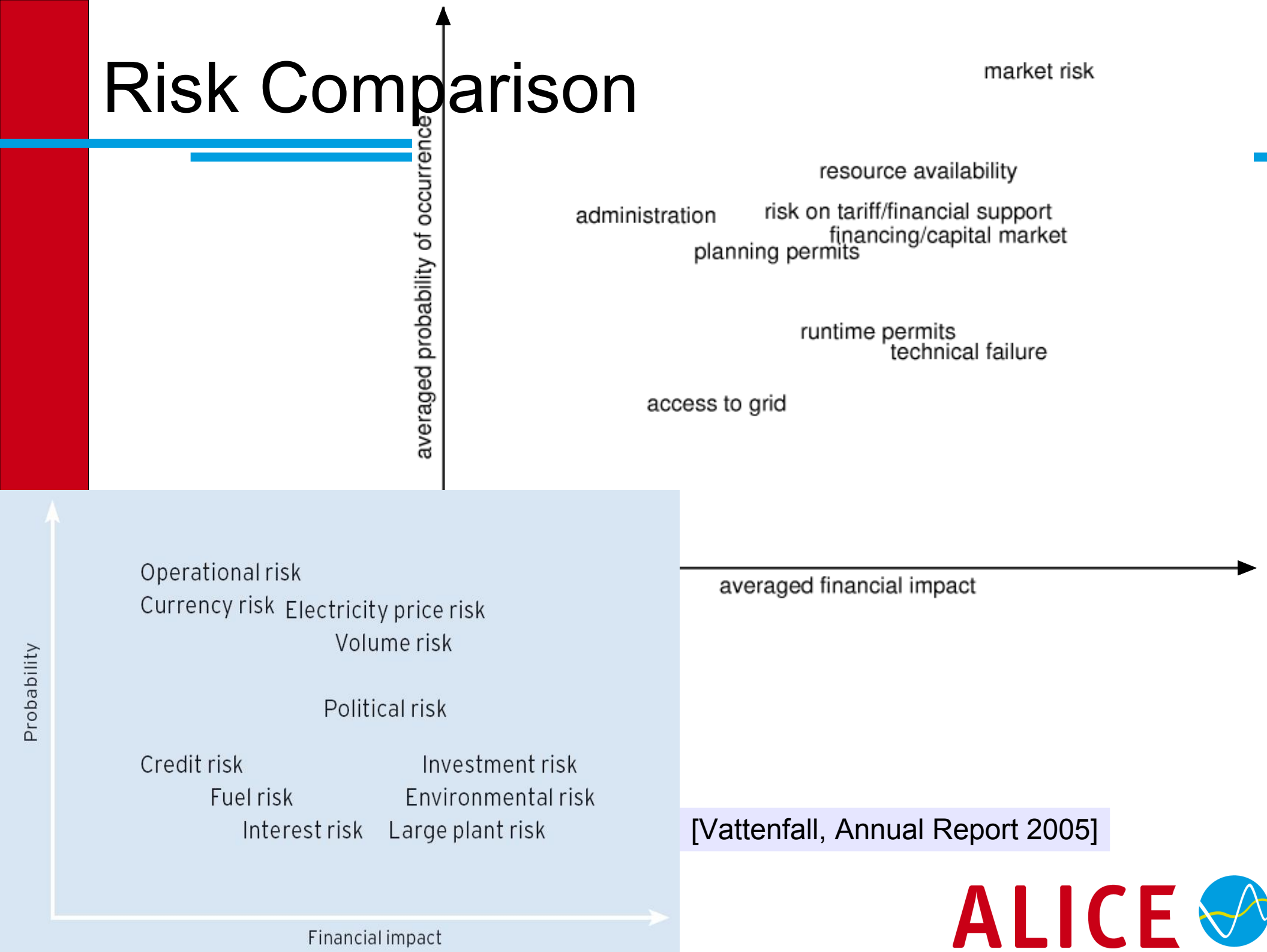
Risk Perception



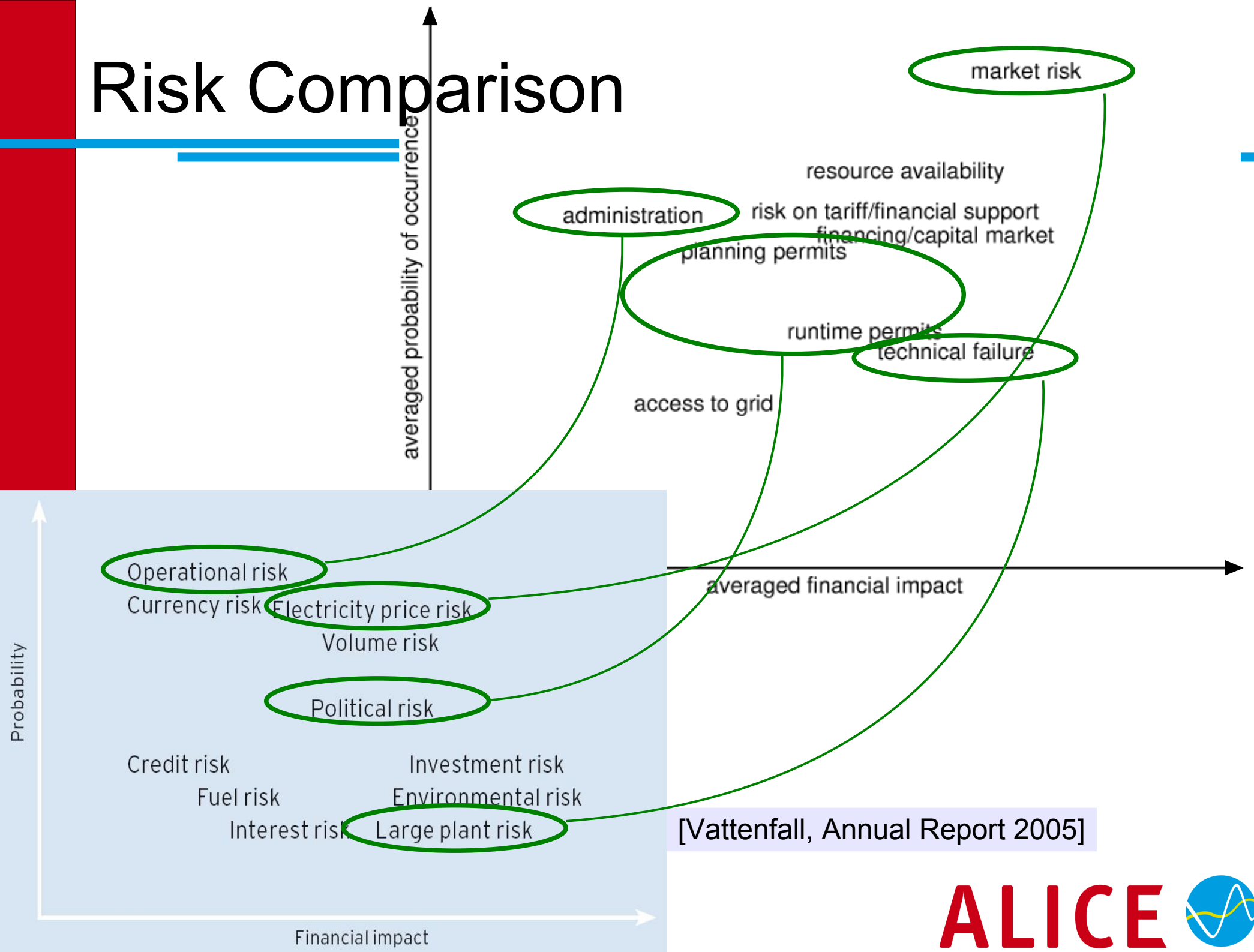
Wrap-up: Risk Perception

- Major risk is in the market
 - prices, demand, customers
- Next important cluster:
 - resources (fuel) / financial support / capital market
- Policy risk perceived as medium
- Administration: less risky and manageable
- Grid access no issue
 - different to situation in the RES sector

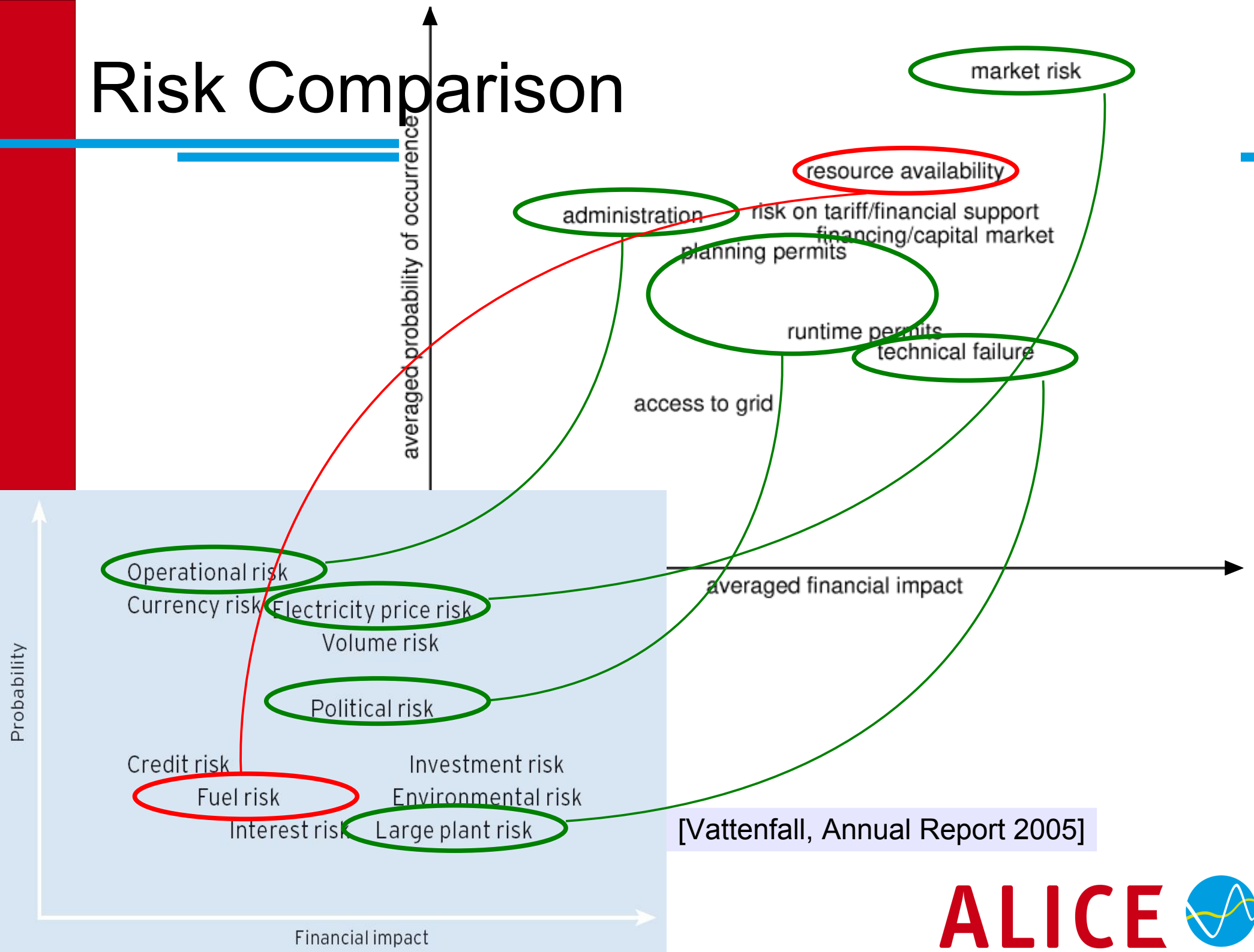
Risk Comparison



Risk Comparison



Risk Comparison



Wrap-up: Risk Comparison

- On average, MUs perceive risks similar to big utilities
 - fuel / resource risk differently assessed
- However: risk assessments of individual MUs may deviate significantly
- Policy measures may be good for everyone (on average)
 - but miss individual cases (probably many!)

Conclusions

- Potential to be agents of change is there
 - Environmental motives second most important
 - MUs generally no pioneers: „proven technology“
 - Predominant choice of cogeneration plants
 - RES often only for smaller plants
- Risk perception
 - market risks prevail as least controllable
 - in part reflects current issues at the time of interview (financial crisis)

Implications for RES

- RES need support in the future
- RES expansion via
 - market incentives („reliable revenues“)
 - risk reduction
- Technology support programme to support quick establishing of new technologies

Thank you!

Wishlist

- Keep EEG support
 - extend to big RES projects
 - FIT depending on (bio)fuel prices
- Improve law-making
 - match planning horizons (legislation vs. business)
 - clear signals; no experiments
 - long-term synchronized planning (development plan)

Wishlist (cont.)

- Support
 - grid access
 - preference for wind in planning processes
 - preference for supply that matches demand
 - govt. financial guarantees in case of technical failure
 - incentives for electromobility
- Miscellaneous
 - research in MU collaborations
 - reduce revenue expectations -> invest gains

Conclusions

- Environmental motives second most important
 - Predominant choice of gas-fired cogeneration plants fits to this observation
- Technology and PR issues less important
 - MUs generally not technical pioneers: „proven technology“
- Risk perception in part reflects current issues at the time of interview
 - market risk prevails as least controllable

Motivation

- Historically, ...
 - ... electricity production evolved in Germany within regional monopolies
 - ... “the Big Four” still dominate electricity market: 80% of total generation
- Municipal Utilities (MUs) tended to be seen as phase-out models
- MUs slightly „off the (research) focus“

Background

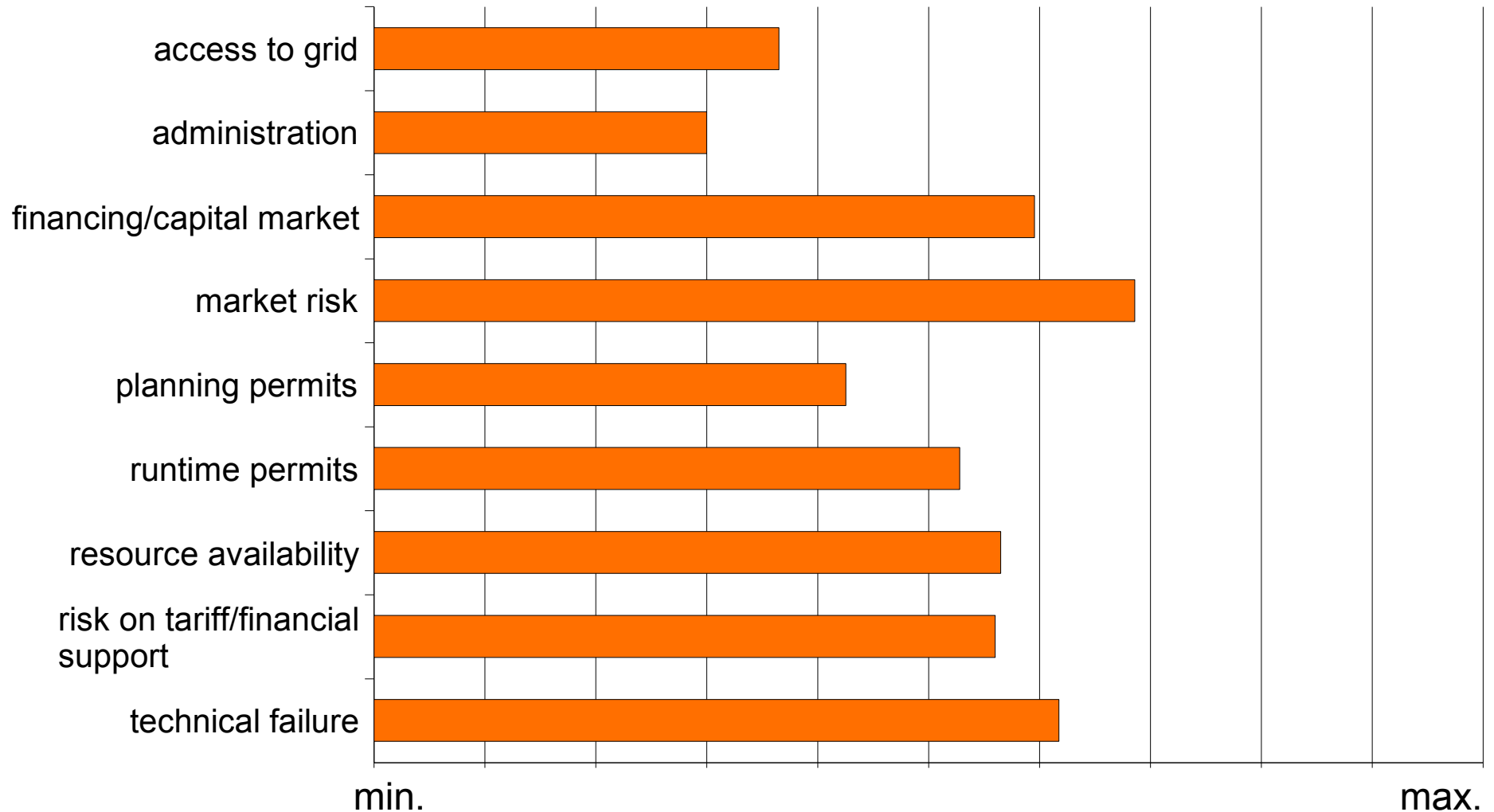
- ALICE project investigates conditions of power generation investments
 - motives, drivers, risks
 - environmental/climate focus
- What can be done to achieve the 2°C target?
 - technologies
 - actors

Recent figures & trends

- Municipal Utilities operate some 13 GW (~10% of German capacity)
- Additional 2.2 GW under construction
- 40% share in electricity sales
 - large customer base
 - mostly small industry and households
 - strategic advantage?

Risk Perception

averaged financial impact



Risk Perception

averaged prob. of occurrence

