

Task 4.3: Enabling policies from investor & stakeholder perspectives

Highlights & Outlook

SCCER CREST Annual Conference, St. Gallen, September 12, 2017

Common Thread: The triangle of social acceptance of renewable energy innovation

Source: Wüstenhagen et al. (2007)

Socio-political acceptance

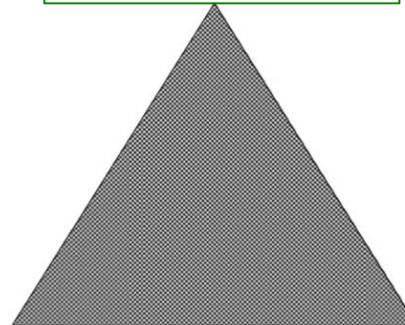
- Of technologies and policies
- By the public
- By key stakeholders
- By policy makers



Aya Kachi (UniBas):
New directions in socio-political acceptance studies: Reflections on recent energy policy debates & a call for policy communication to address “knowledge polarization”



Adrian Rinscheid (IWÖ-HSG):
How political campaigns shape citizens’ perceptions and emotions towards energy technologies: a case study of the public acceptance of nuclear power



Community acceptance

- Procedural justice
- Distributional justice
- Trust

Market acceptance

- Consumers
- Investors
- Intra-firm



Anna Ebers (IWÖ-HSG): Investor acceptance, investor diversity and the price of policy risk: Lowering the financing cost of renewable energy infrastructure

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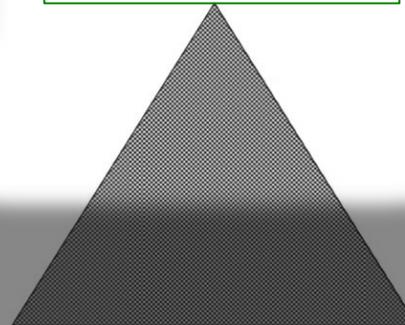
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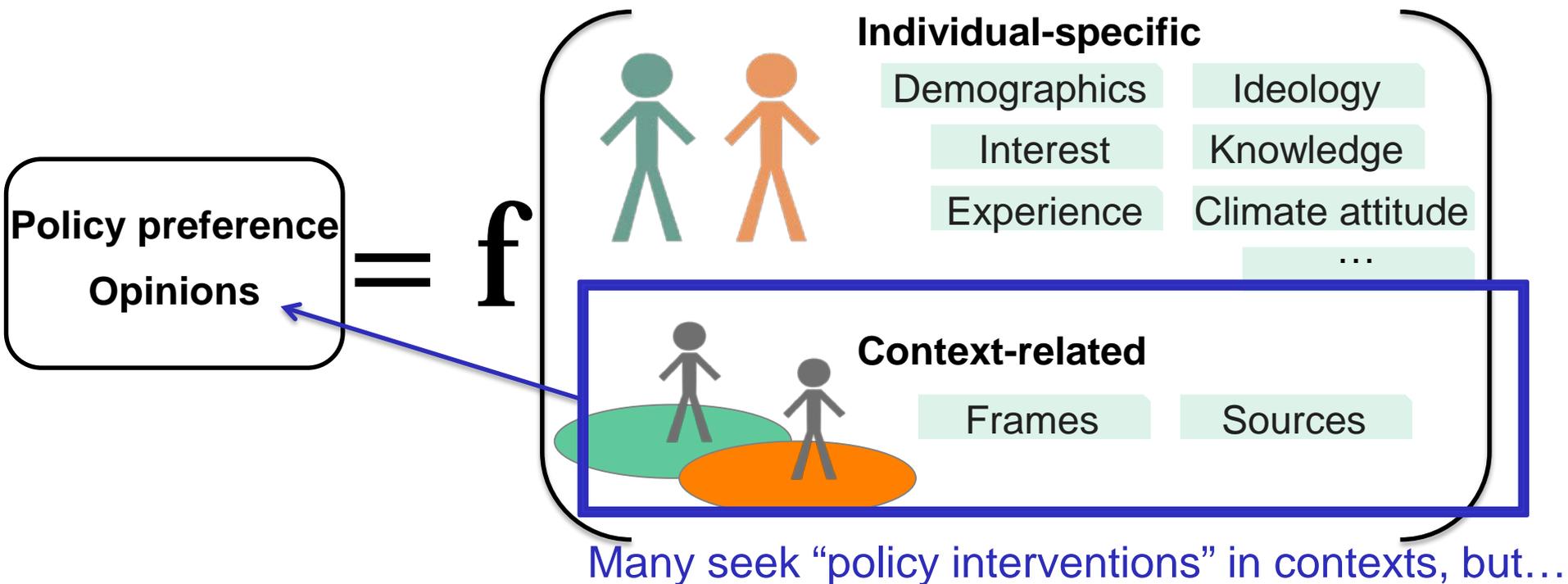


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Public Opinion perspectives

Kellstedt (2008), Druckman & Lupia (2000), Bolsen et al. (2014), Kachi et al. (2015) and many more



Real, useable lever for sound public policy

≠ Policy communication for “Opinion Convergence”

Public discourse suffered from opinion-targeted policy communication and campaigns: Case of ES2050

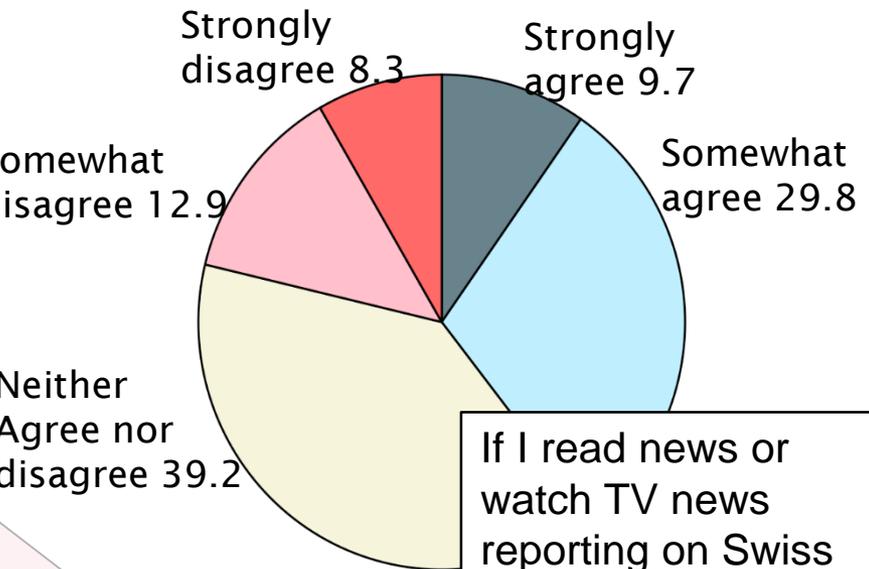
Survey design

- N = 1300 Swiss citizens
- Population sample (DE / FR)
- May 12 - 20, 2017

Nuclear power production is not subsidized, liars!

I know who's behind this survey!

It doesn't make sense that the government makes people vote on this issue. Energy is so complex.



Those leftists!

If I read news or watch TV news reporting on Swiss energy policy I often get tired and/or angry.

Survey by Kachi & Team (2017)

Policy communication induced

- Use of emotions & ideology; Allergic reactions to new info.
- Not motivation for fact-based evaluation.

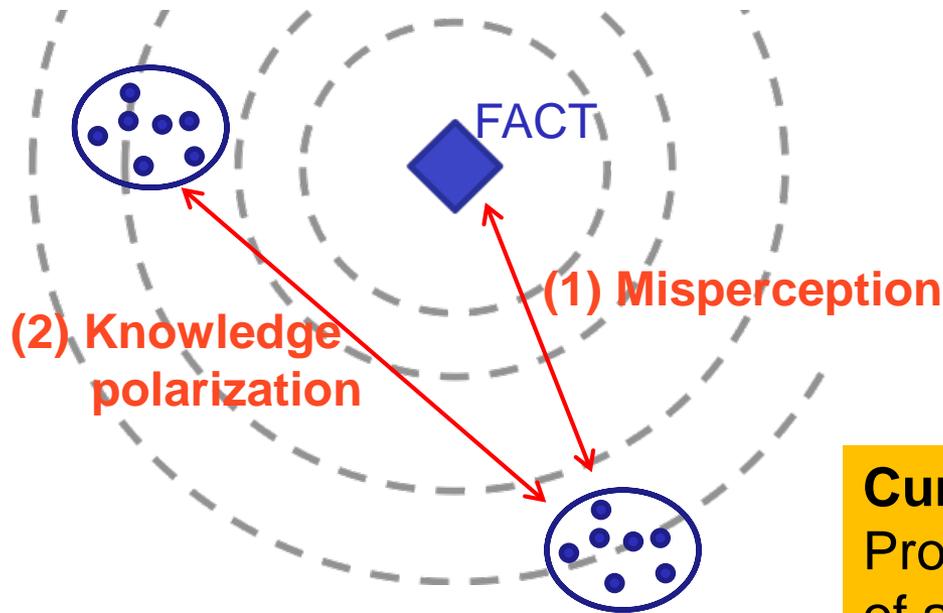
Public debates revealed

- Knowledge polarization over current energy system, subsidies...

New directions in socio-political acceptance studies: Call for policy communication to address “knowledge polarization”

Communication & Decision-science perspectives

Def: Knowledge polarization



Current approach:

Providing pros and cons (e.g. frames) of a policy package to people who stand on different knowledge bases.

Problem:

Circular debates on “seeming facts”

New directions in socio-political acceptance studies: Call for policy communication to address “knowledge polarization”

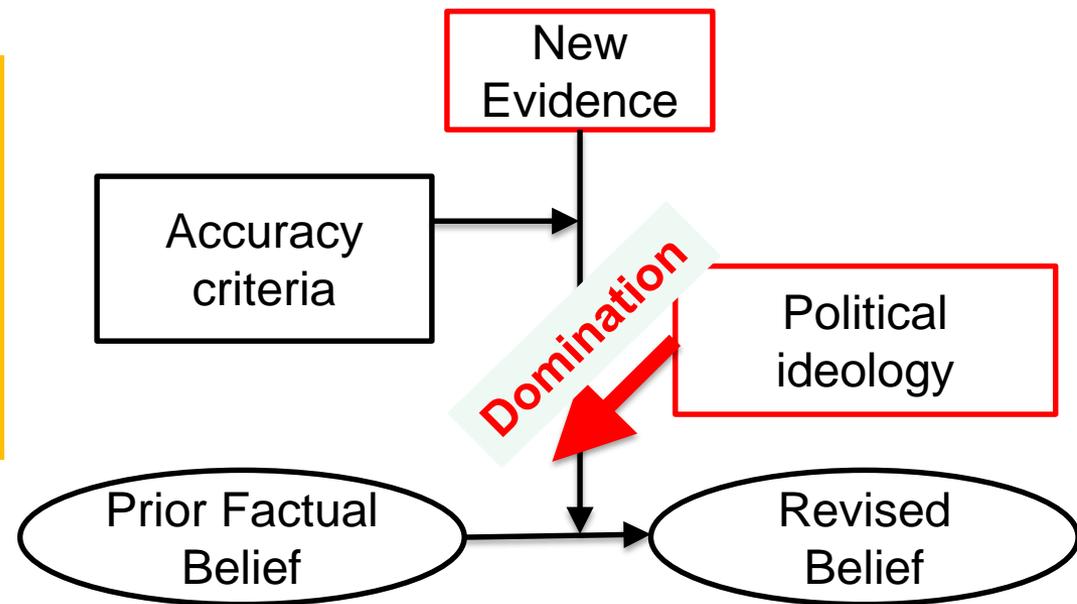
Communication & Decision-science perspectives

Known challenges

→ Ideology & pre-existing opinions dominate the accuracy goal in knowledge updating.
(e.g. “Motivated reasoning”)

Knowledge updating

Kahan (2006) modified



Therefore call for policy communication that

- (1) transmits accurate information, (2) correct misinformation, &
- (3) “turn off” the ideology/emotion criteria as much as possible.

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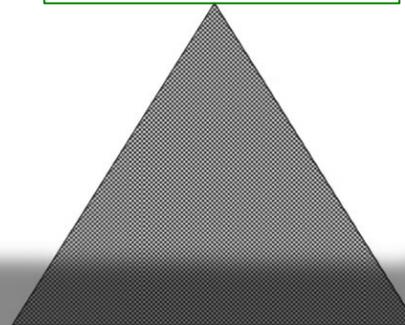
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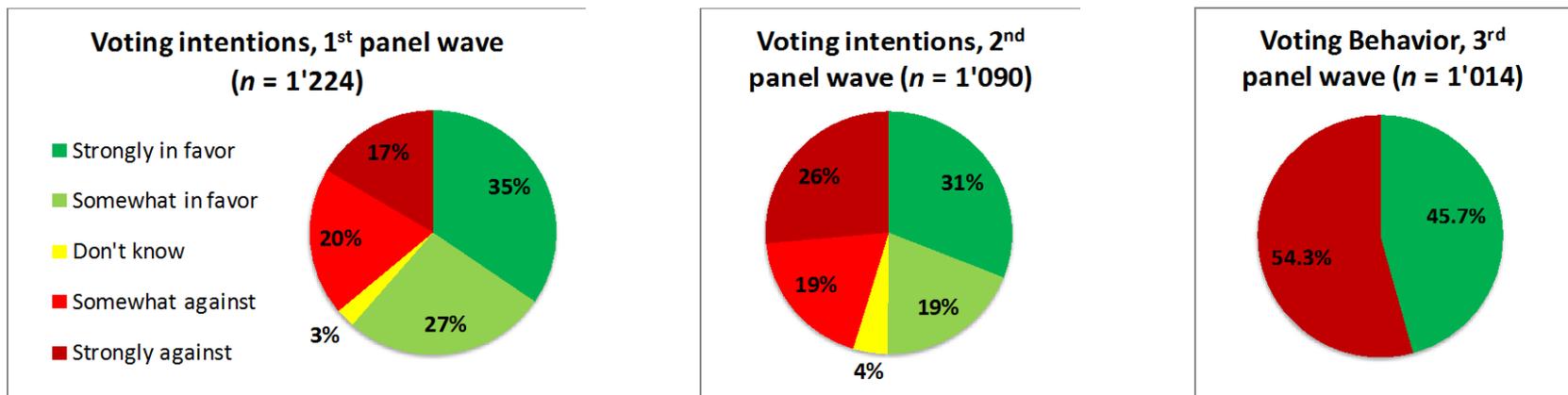
- Consumers
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How political campaigns shape citizens' perceptions and emotions towards energy technologies: a case study of the public acceptance of nuclear power

- **case:** Popular Initiative for a Nuclear Phase-Out (“Atomausstiegsinitiative”)
- **our research:** panel study with $n > 1'000$ Swiss citizens to study evolution of public acceptance of nuclear power in a pol. campaign
- **research questions:** all pre-vote surveys predicted low public acceptance of nuclear power – yet the majority supported the status quo. Why? And what are the learnings for the governance of energy systems?

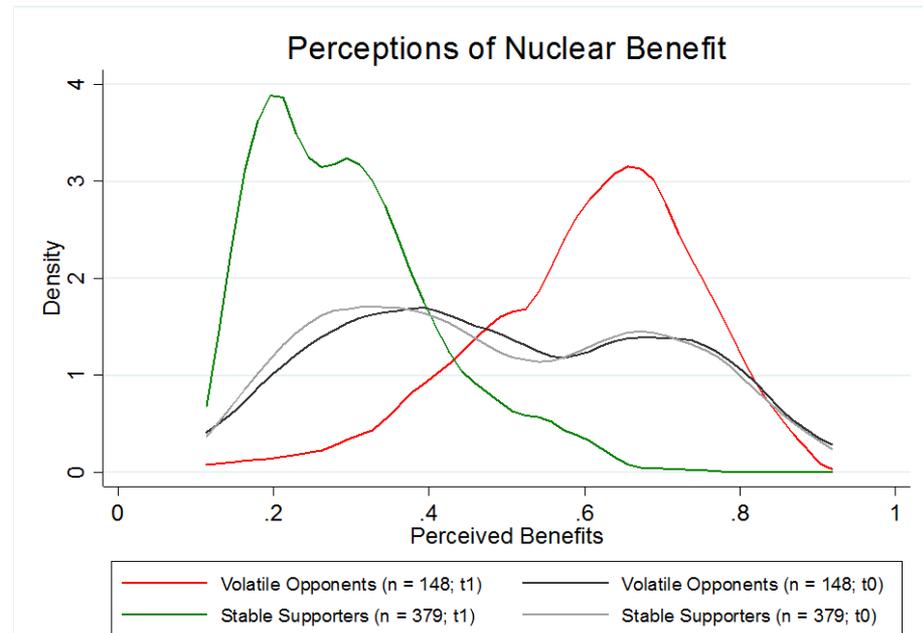
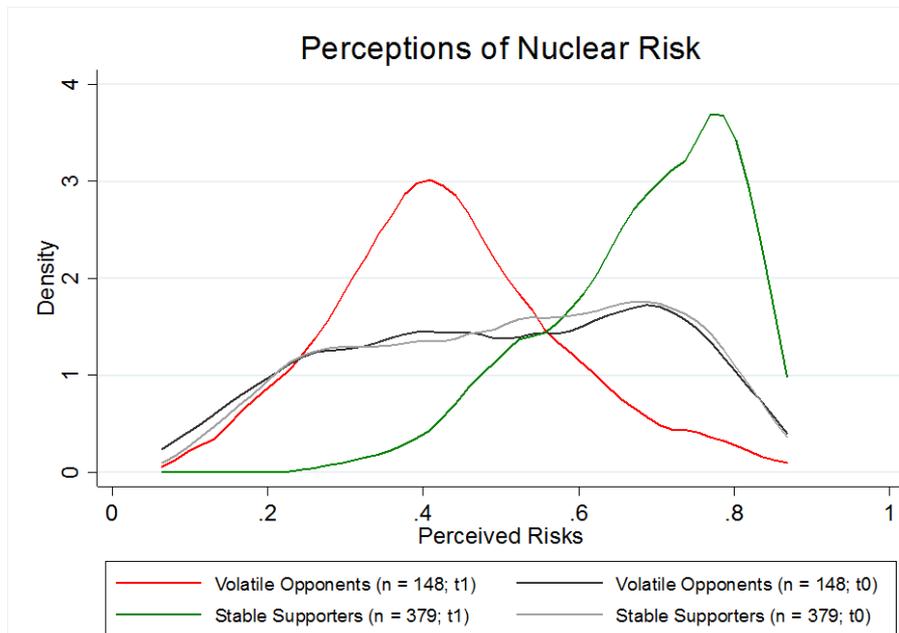


Public acceptance of nuclear power Findings (I)

Pre-vote survey

		Post-vote survey	
		approval	rejection
Pre-vote survey	approval	379	148

How do political campaigns shape citizens' perceptions of energy technologies?



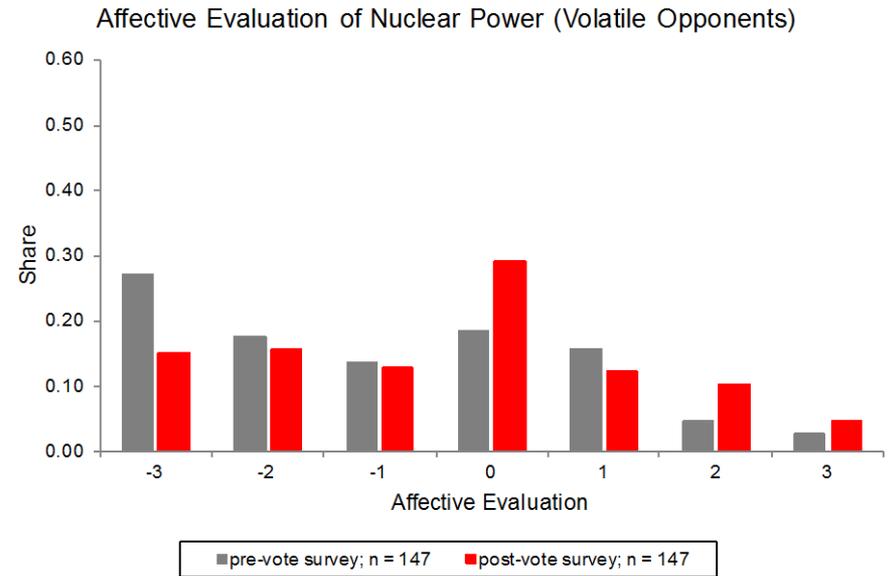
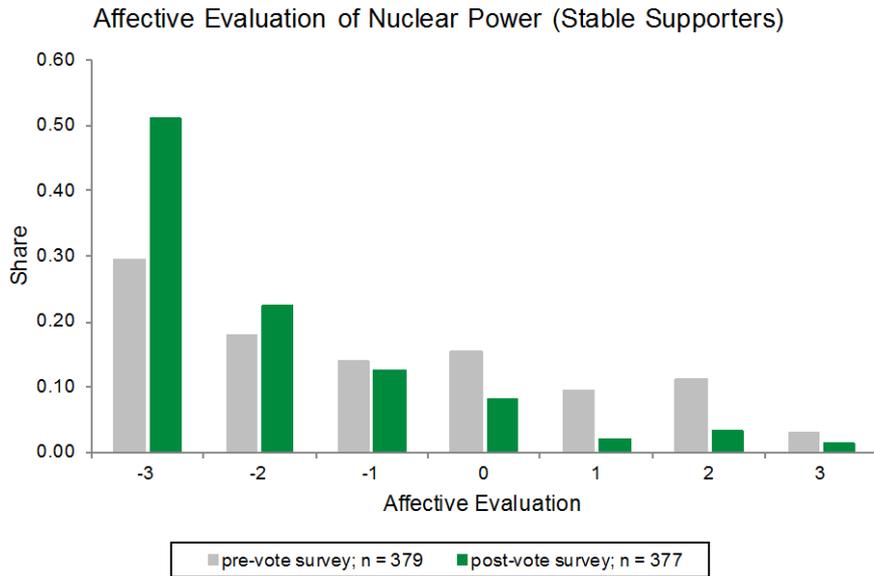
Perceptions of nuclear risks and benefits are highly correlated with the voting decision (in favor of versus against the nuclear phase-out).

Public acceptance of nuclear power Findings (II)

Pre-vote survey

		Post-vote survey	
		approval	rejection
Pre-vote survey	approval	379	148

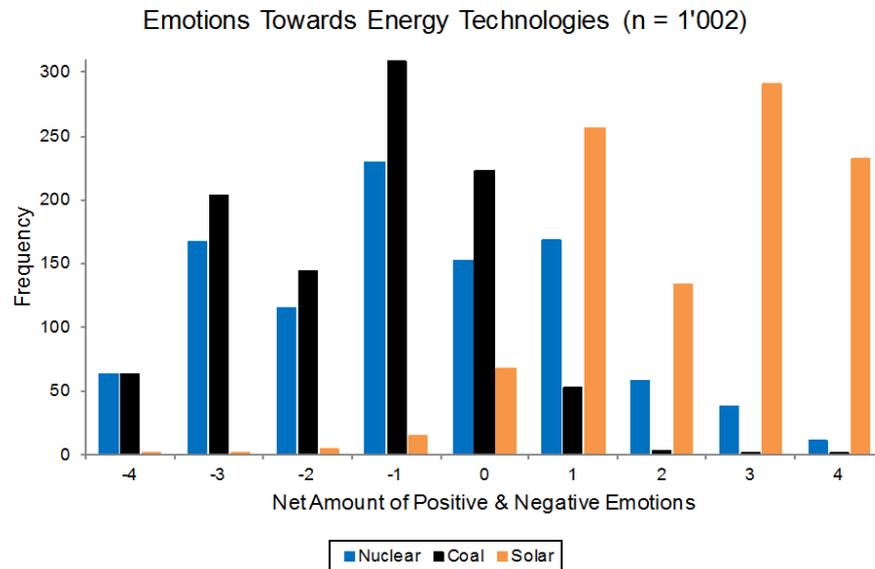
How do political campaigns shape citizens' emotions towards energy technologies?



Visceral reactions towards nuclear power influence citizens' voting decision (in favor of versus against the nuclear phase-out).

Public acceptance of nuclear power Findings (III)

Emotions towards different energy technologies & the asymmetric dominance effect



The opponents of AAI introduced a third option by suggesting that phasing out nuclear would make Switzerland dependent on imports of coal-fired power from Germany. This made gut feelings towards nuclear power more positive, leading many voters to change their voting preference.

Public acceptance of nuclear power

Broader implications for Energy Governance

- Some of citizens' perceptions about energy are highly malleable, even within a few weeks
 - Framing effects matter
- One explanation for volatility of preferences: Emotional reactions precede rational reactions
- opportunities and challenges for supporters / opponents of a successful energy transition:
Activating positive (e.g. independence, sun) or negative (e.g. coal, Germany) emotions can influence perceptions of benefit and risk, and hence political decisions – even beyond the specific issues at hand

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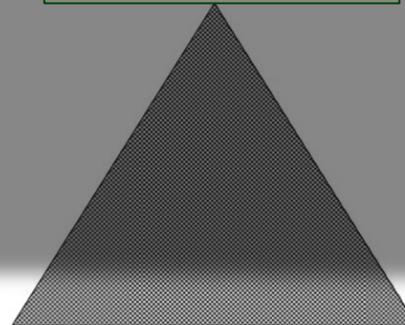
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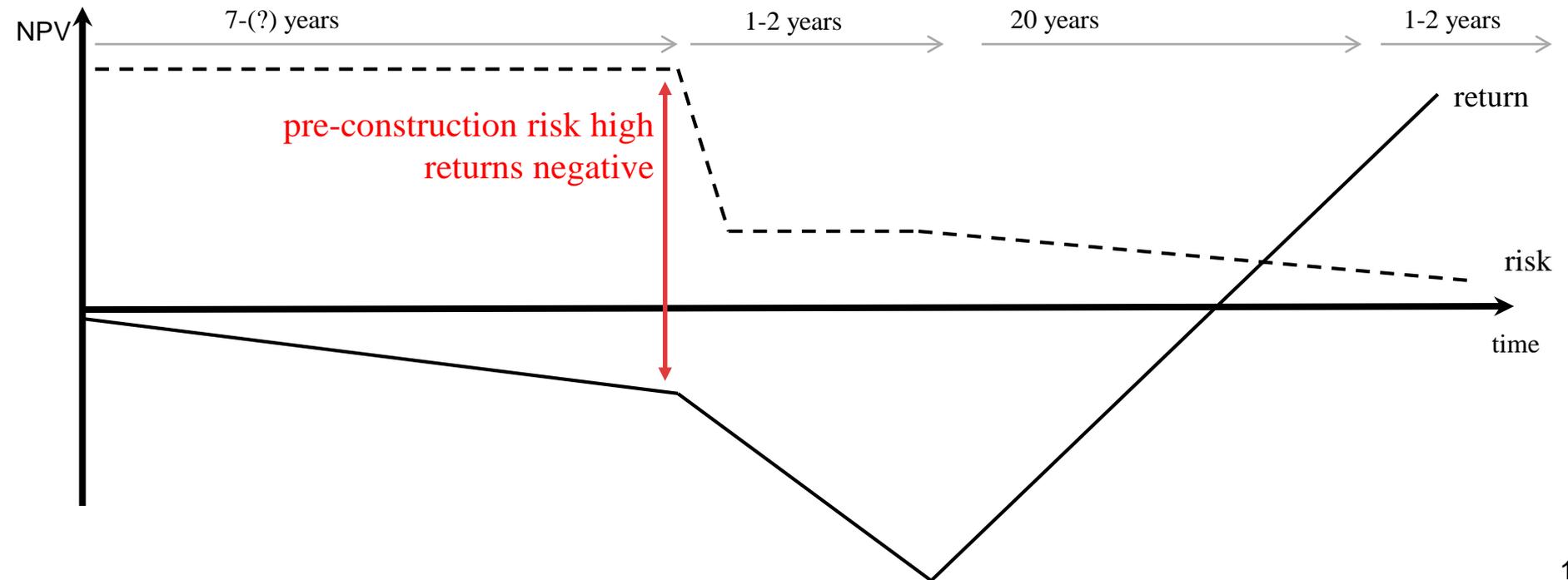
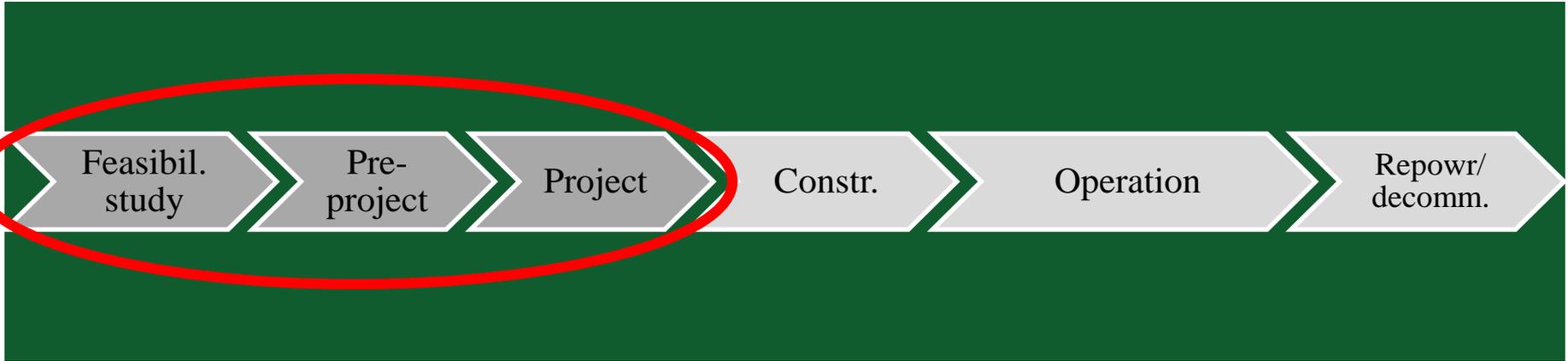
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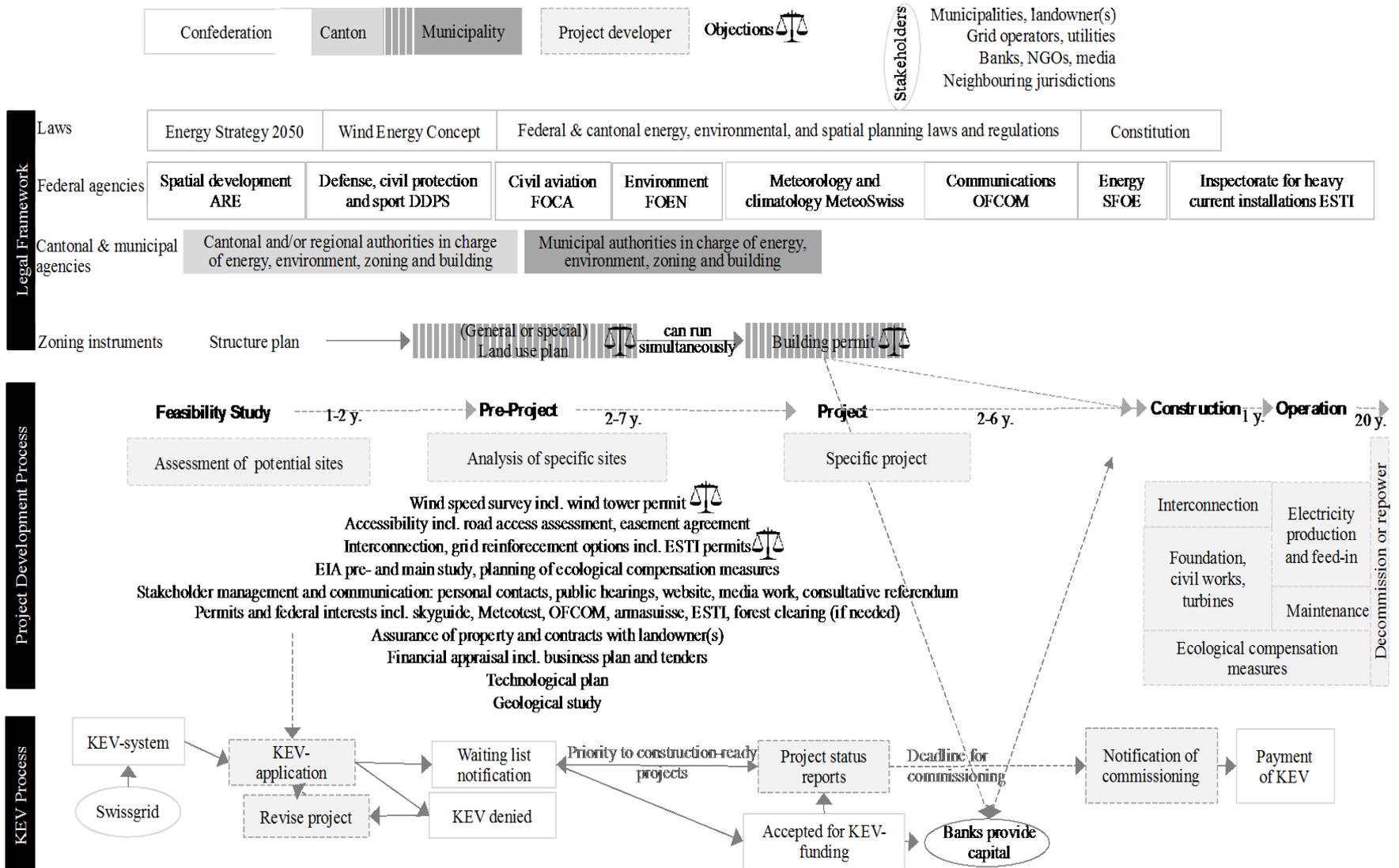


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Wind project development process

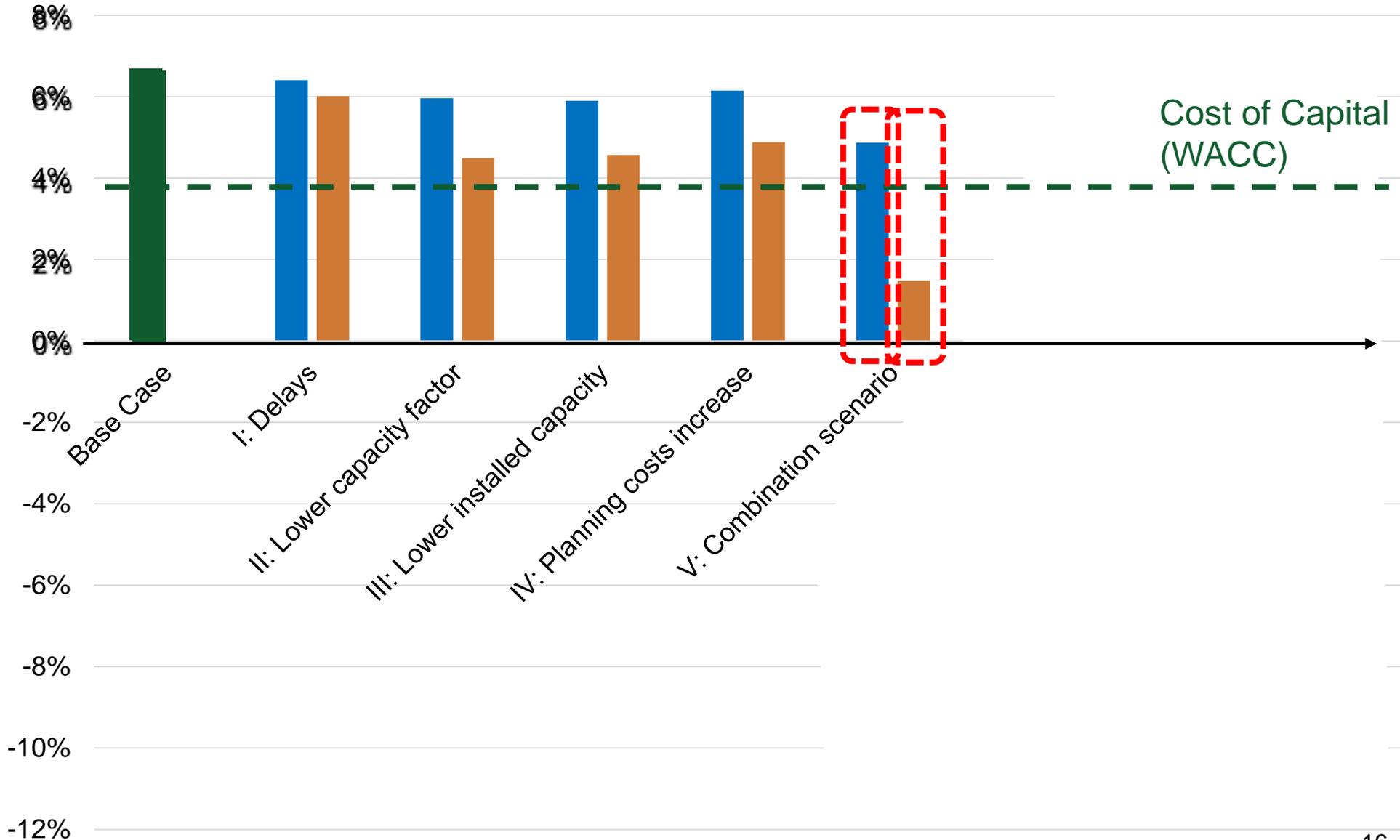


Wind project development process in reality



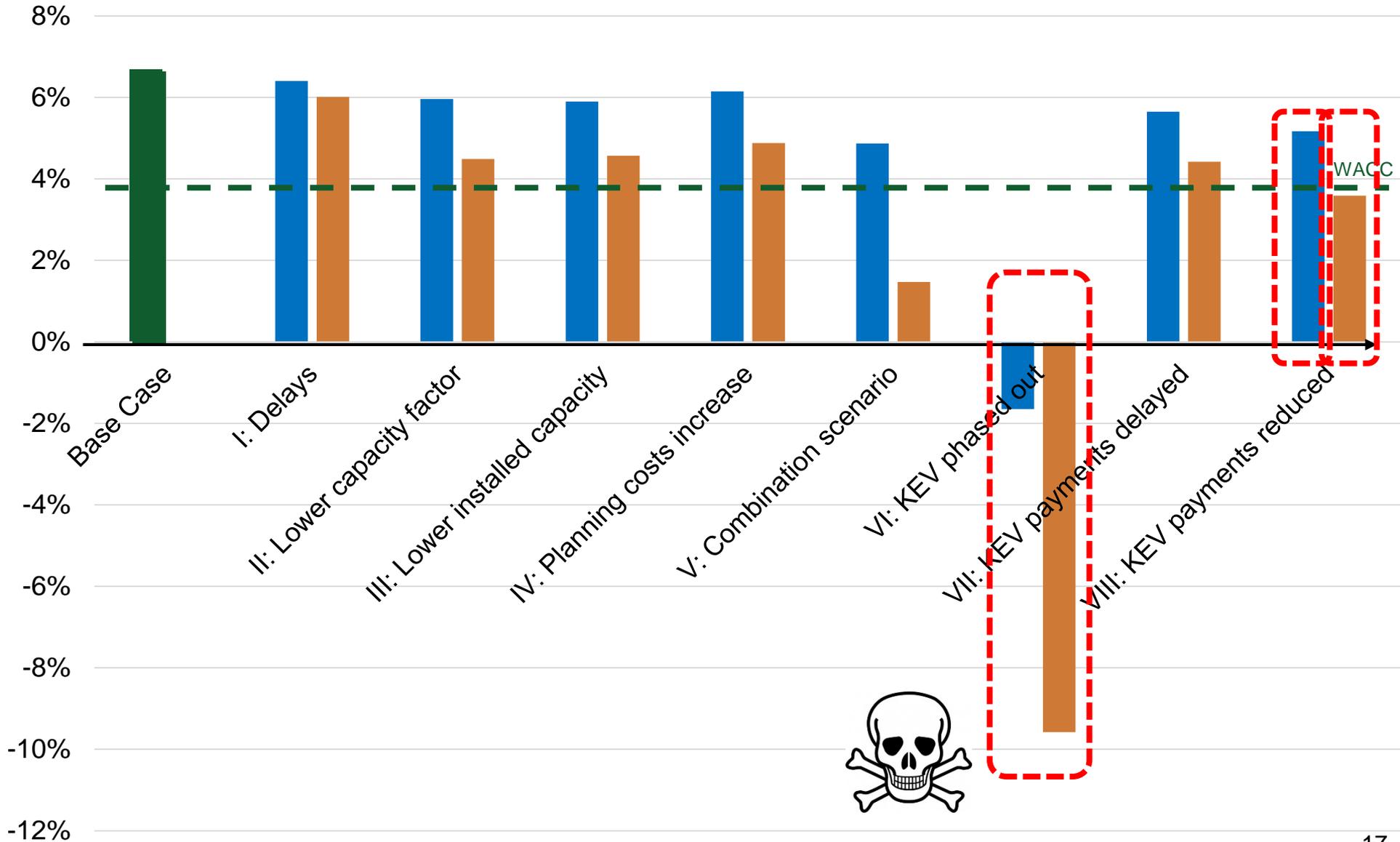
Effect of policy risk on profitability of wind power

Project IRR under low/high risk scenarios

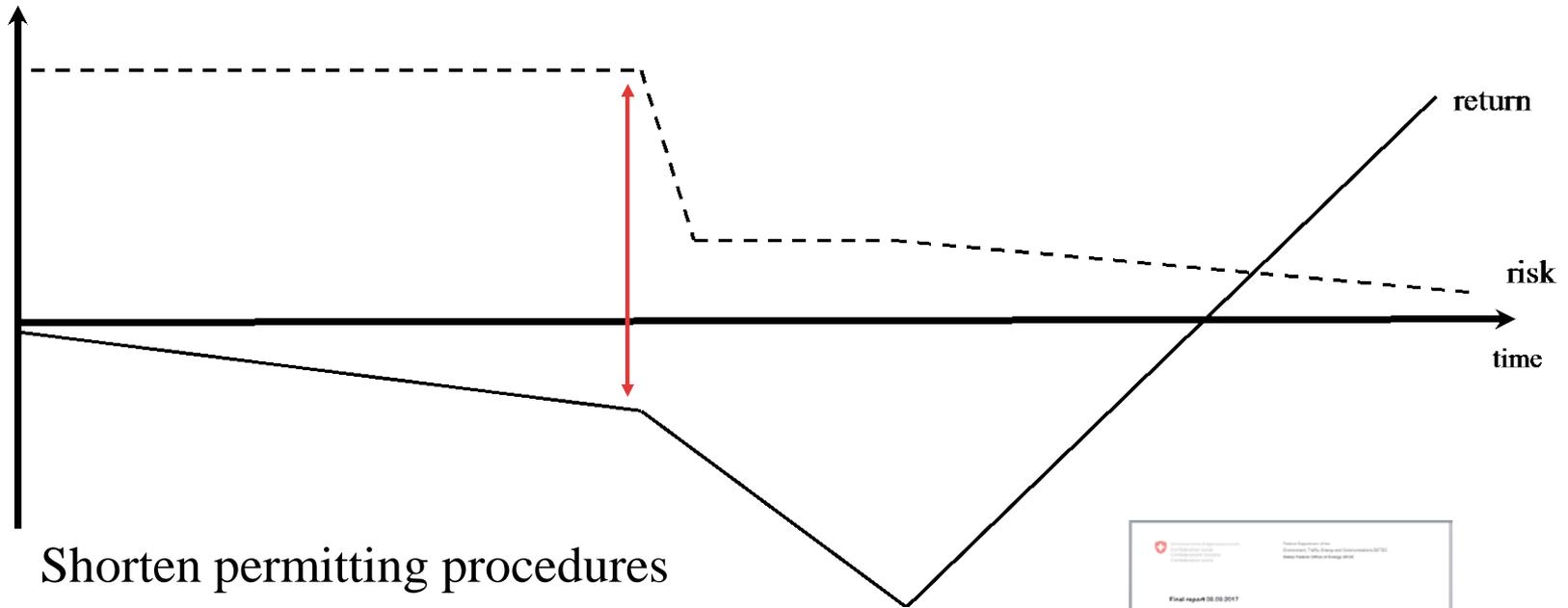


Greatest risk: (Un-)Availability of Feed-In Tariffs

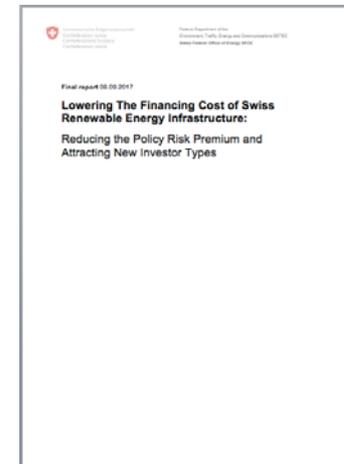
Project IRR under low/high risk scenarios



Recommendations to reduce pre-construction risks



- Shorten permitting procedures
- Simplify permitting procedures
- Increase regulatory & policy certainty
- More efficient objection procedures
- Be mindful of the 'unseen' planning costs
- Increase social acceptance



Bringing it all together



Shed light on:

- Tricky relationships between Opinion, Knowledge, Ideology and emotion.

→ To be integrated in policy communication

Challenge beyond socio-political acceptance:

- Significance of considering indirect costs for investors in pre-construction risks.

- Community acceptance & investor acceptance are intertwined.

Yet to be tested:

- Likely the same “tricky” relations in community acceptance [>> Future]