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RENEWABLE ENERGY INSTITUTE



京都大学
KYOTO UNIVERSITY

Citizens and Experts in Energy Transition Policy Making: A Comparison of Japan and Germany

Emi Ichiyanagi

PhD Student, Kyoto University

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Outline

1. About my PhD project

- Background
- Puzzle & Research question
- Theoretical framework
- Hypothesis
- Methods & Data analysis
- Case selection

2. Field research in Germany (04-09.2018)

- National Accompanying Committee
- Tentative results

3. Conclusion



1. About my PhD project



Background



Key German “Energiewende” targets

		Status quo	2020	2025	2030	2035	2040	2050
Green-house gas emissions	Reduction of GHG emissions in all sectors compared to 1990 levels	-27% (2016)*	-40 %		-55 %		-70 %	-80 – 95 %
Nuclear phase-out	Gradual shut down of all nuclear power plants by 2022	11 units shut down (2015)	Gradual shut down of remaining 8 reactors					
Renewable energies	Share in final energy consumption	14.9% (2015)	18 %		30 %		45 %	min. 60 %
	Share in gross electricity consumption	32.3% (2016)*		40 – 45 %		55 – 60 %		min. 80 %
Energy efficiency	Reduction of primary energy consumption compared to 2008 levels	-7.6% (2015)*	-20 %					-50 %
	Reduction of gross electricity consumption compared to 2008 levels	-4% (2015)*	-10 %					-25 %

AGEB (2016), BReg (2010), own calculations Source: Renewable Energy Institute & Agora Energiewende * preliminary

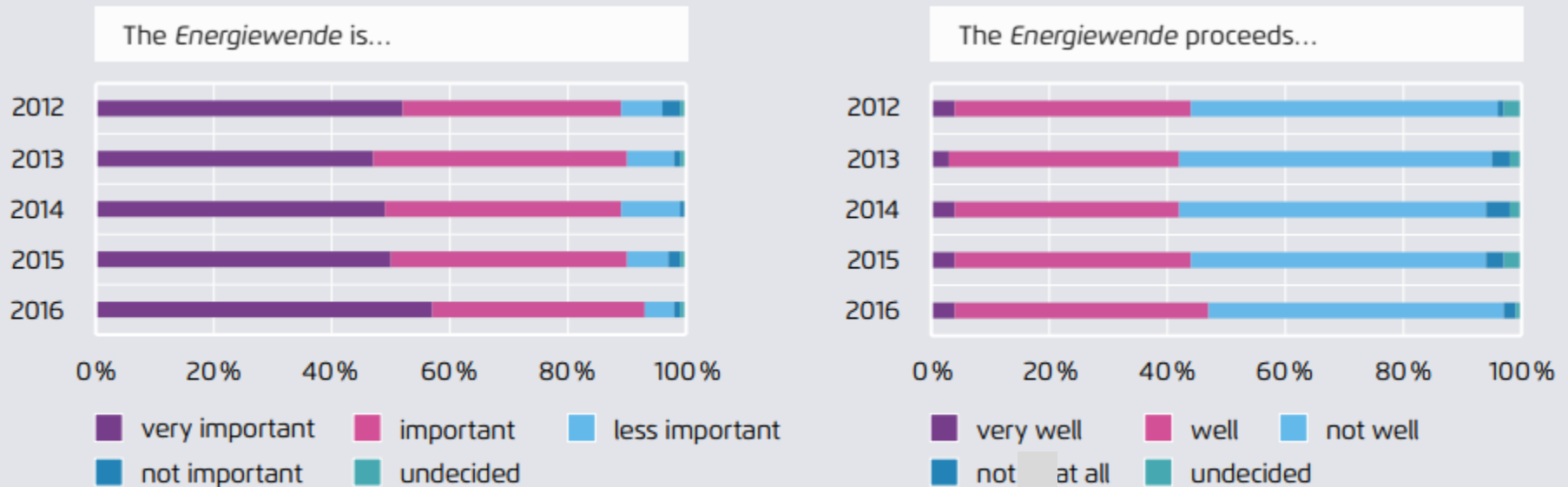
→ nuclear phase out by 2022 & continued promotion of RE



Public opinion



Public opinion about the Energiewende



Forschungsgruppe Wahlen, commissioned by BDEW 2016

Source: Renewable Energy Institute & Agora Energiewende

→ More than 90% of German citizens agree that the energy transition is important

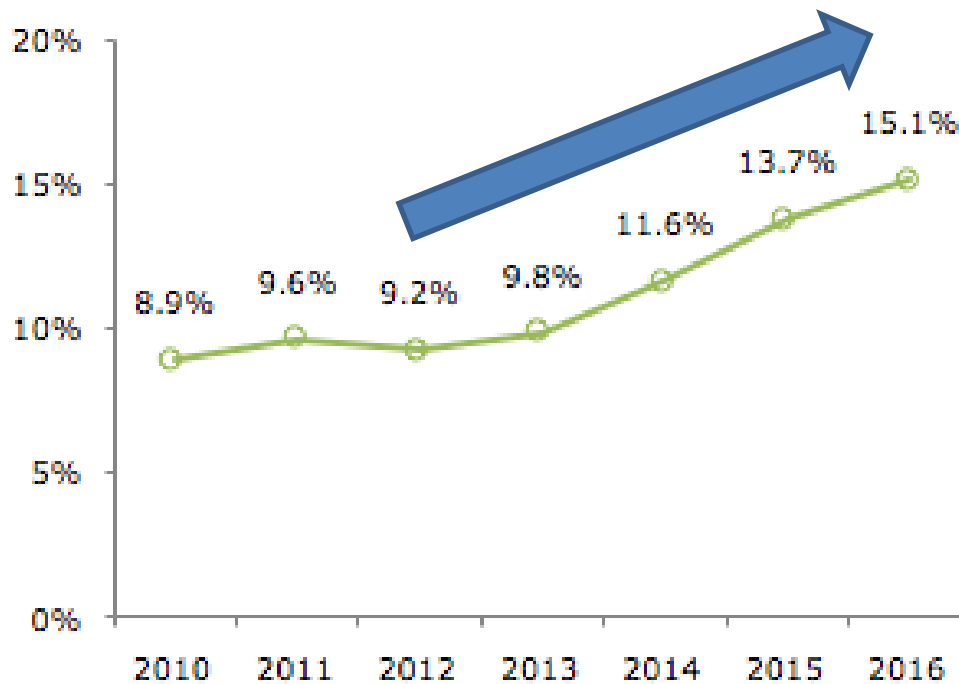


Background



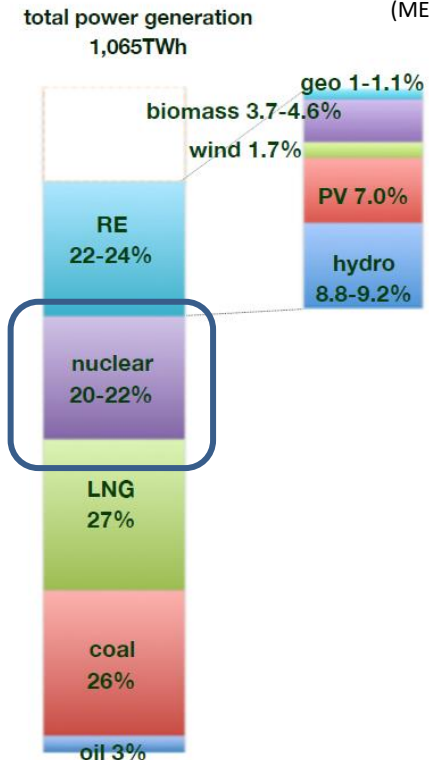
Share of Renewables in Electricity Production (Fiscal year)

Source: METI& Renewable Energy Institute



Power mix target in FY2030

(METI: 2015)



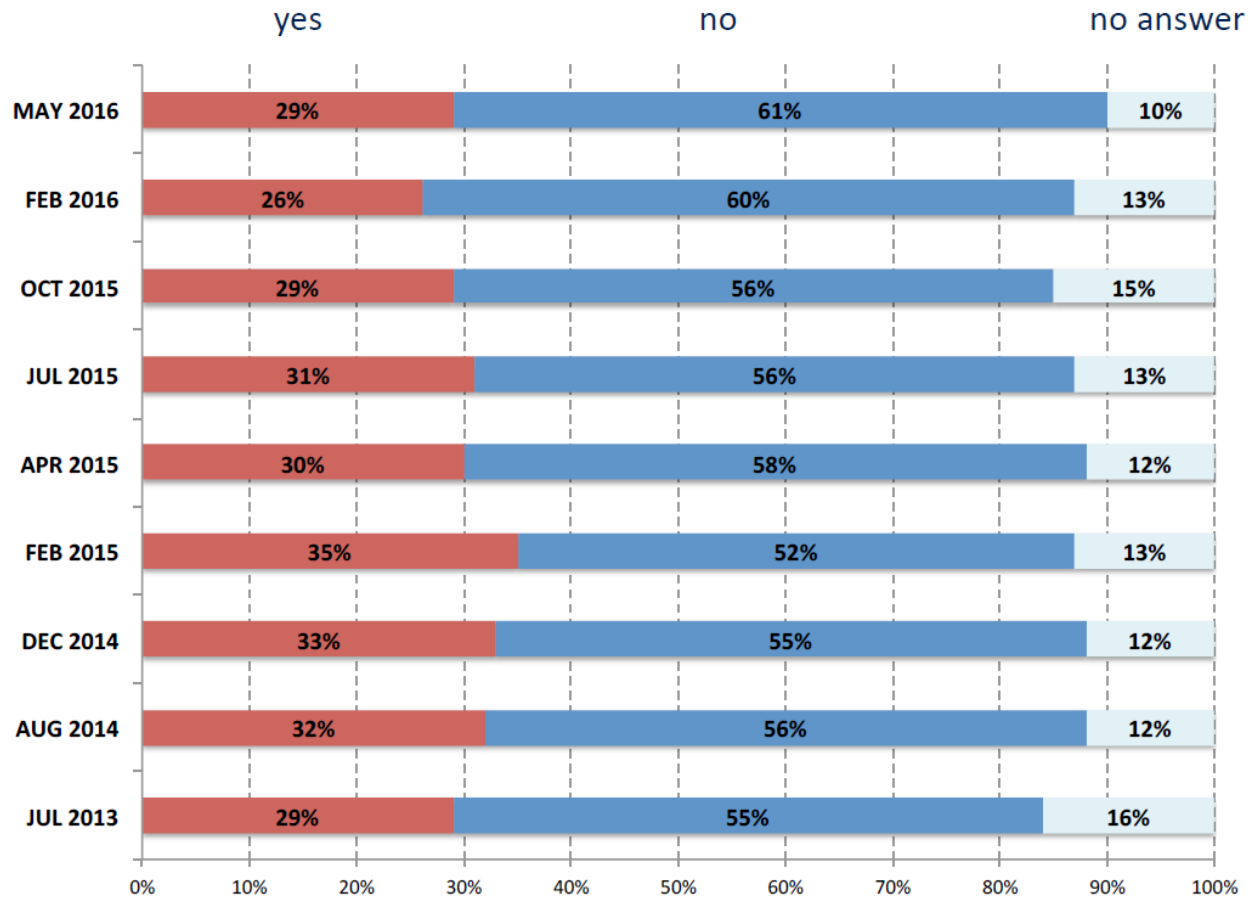
→ Retaining 20-22% of nuclear in its power mix by 2030
& introduction of Feed-In-Tariff to promote renewable energy



Public opinion



Public opinion on re-starting of nuclear reactors



→ More than 50% of Japanese citizens are against re-starting of nuclear reactors



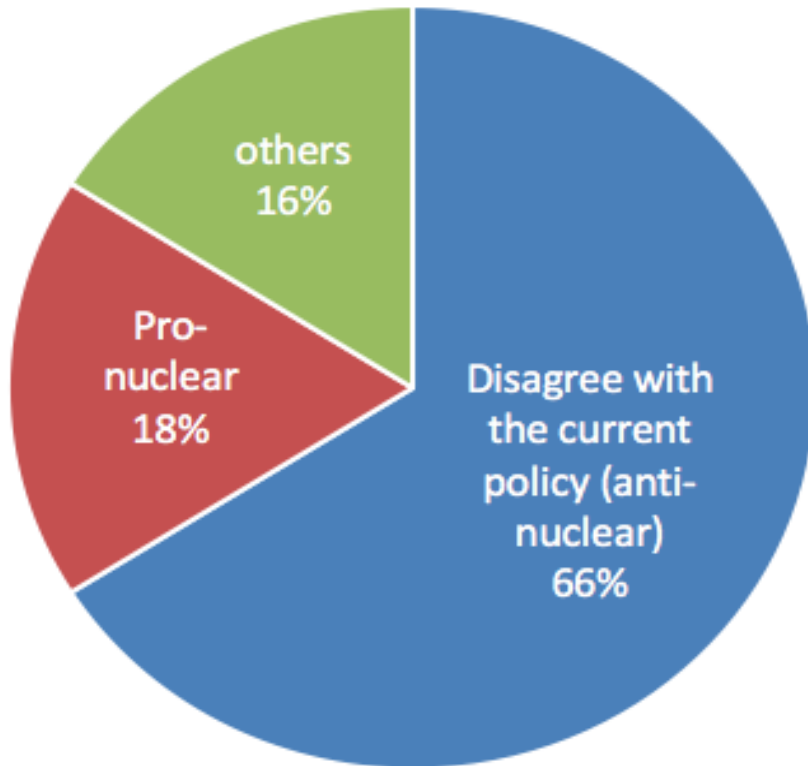
5th Strategic Energy Plan



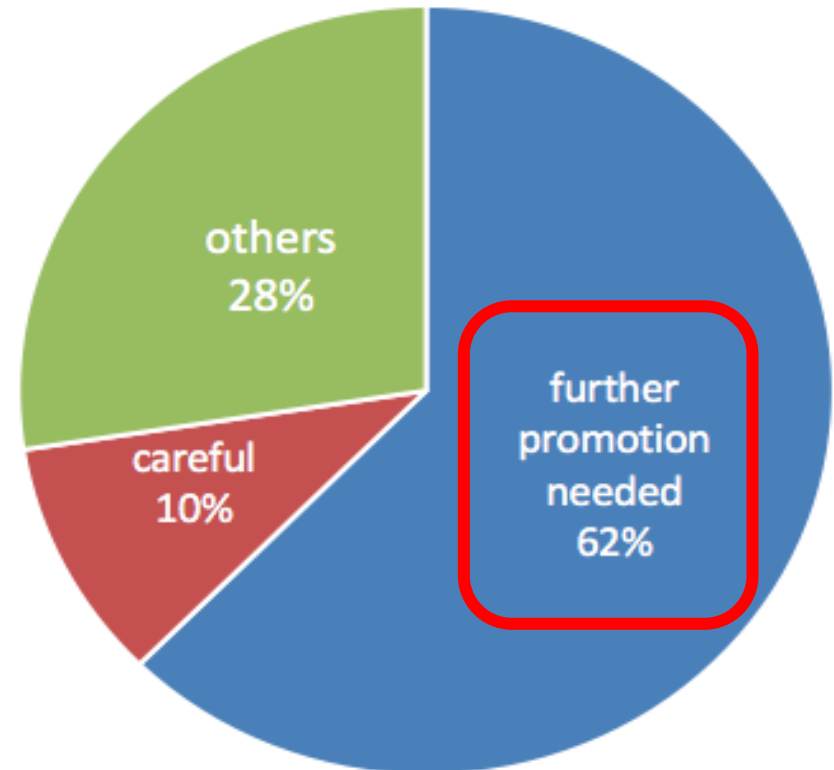
- July 2018: Japanese cabinet approved the new plan towards 2030 & 2050
- Nuclear: important “baseload” power source
- Renewables: “major” power source
→ for the first time!
- Keep power mix target of 2030:
 - 20-22% nuclear
 - 22-24% renewables



About nuclear power plants



About renewable energy



→ Decision to keep targets unchanged:
→ ignore public opinion?!

Puzzle

■ Similarity:

Majority of public opinion supports “energy transition” in both countries

■ Difference:

Policy decision for energy transition after the “Fukushima”:
Germany: made vs Japan: partly made

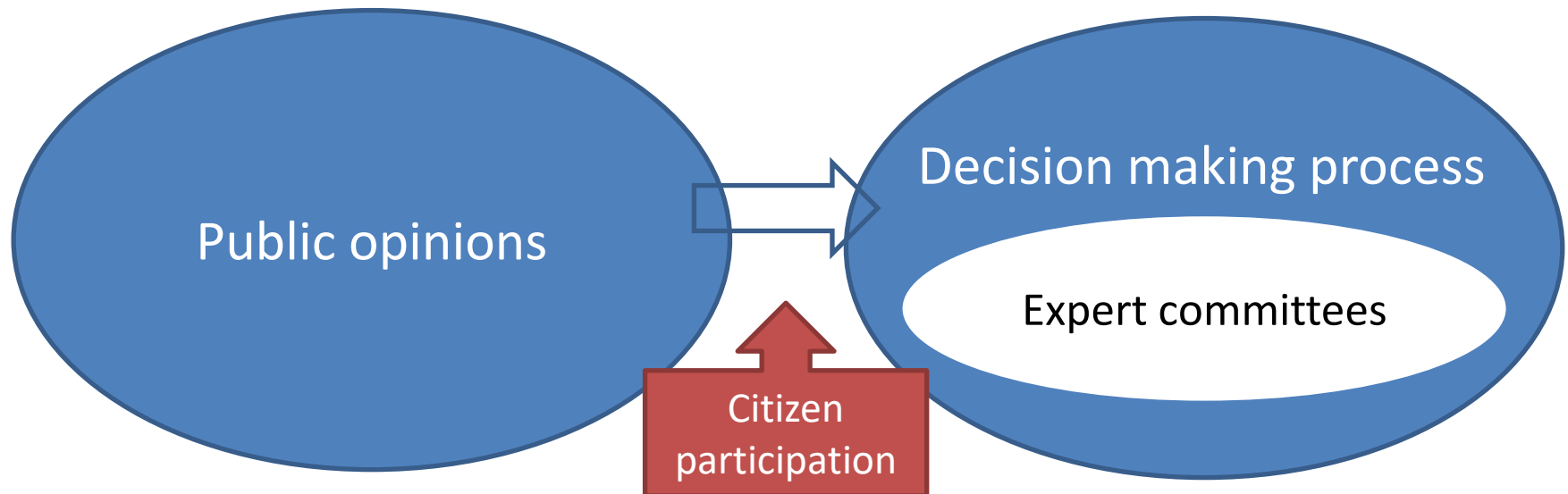


Why?

Citizen participation in decision making process = key aspect?

Research question

How are public opinions reflected in decision making process of energy policy after the Fukushima nuclear disasters?



Research objective

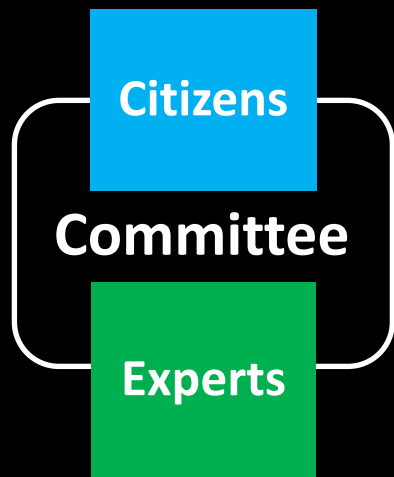
Research objective

To understand how citizen participation contributes to reflect public opinions in energy policy decision

Citizens and experts in the committees negotiation

→ democratic energy transition

Citizens & Experts



	Citizens	Experts
Inside of committees	<ul style="list-style-type: none"> Regular committee members Invited citizens Observers 	<ul style="list-style-type: none"> Regular committee members Invited experts Observers
Outside of committees	<ul style="list-style-type: none"> Members of civil organization Citizens on the streets 	<ul style="list-style-type: none"> Academia Research institutes

Literature review

1. Comparison of environmental- and energy policy between Germany and Japan

Germany VS Japan

- Schreurs (2002): Environmental politics in Japan, Germany and the US
- Yoshida (2015): Comparison of energy transition

2. Actor analysis in decision making process of energy policy

Germany

- Jufuku (2013):
Analysis of the “Ethics commission”
- Krick (2018):
Consensus management, committees on energy transition

Japan

- Funabashi (2016):
Actors’ network on nuclear policy
- Inasawa (2017):
Decision making process of energy mix

1 & 2

- Watanabe (2015):
Climate and energy policy changes from the 1990s focusing on actors’ beliefs
- Hartwig (2014):
Actors’ network analysis of Japanese and German renewable energy promotion policies

Comparative analysis of energy policy change after the “Fukushima” is lacking, especially focusing on the role of actors

Theoretical framework

Key factors for democratic energy transition

Focusing event (Birkland, 1998)

- For policy change triggered by focusing event
- (1) Policy communities (2) Group mobilization

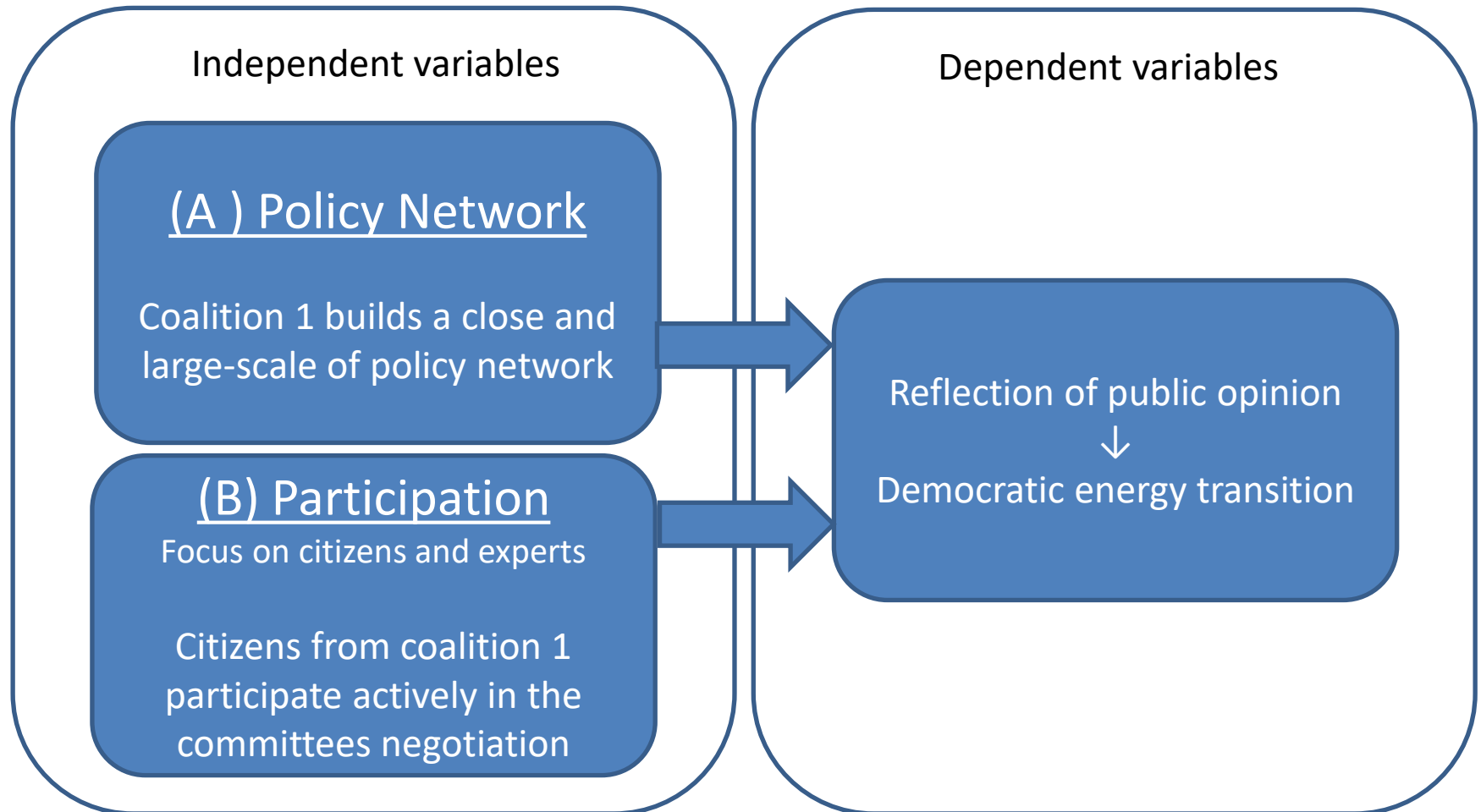
Advocacy Coalition Framework (Sabatier, 1988)

- (1) Minority vs (2) Majority coalitions
- For major policy change:
- mobilization of minority coalitions

Rethinking Expertise (Fischer, 2000)

- For democratic governance:
- top-down experts → specialized citizens

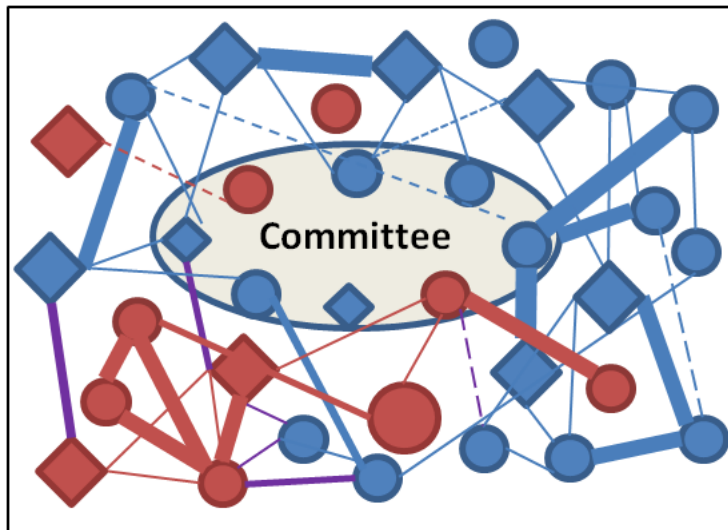
Hypothesis



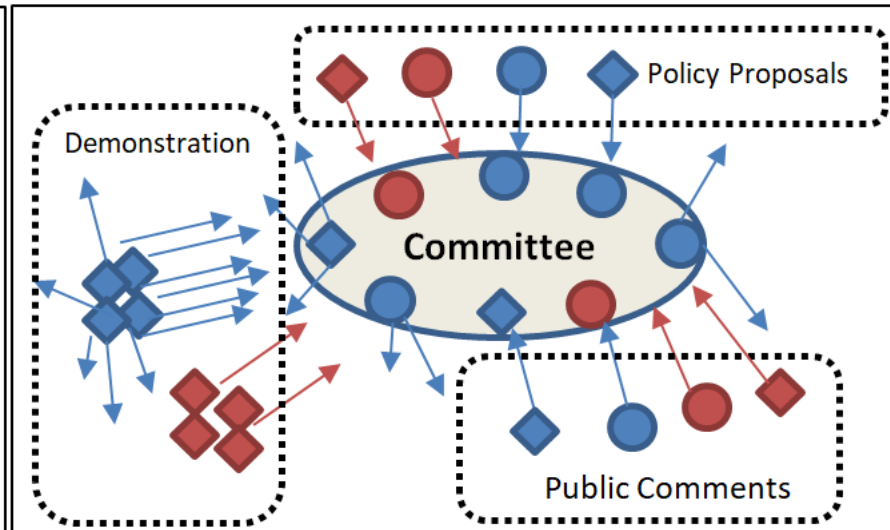
Coalition 1: Advocates of the Energiewende
Coalition 2: Advocates of the status quo

Hypothesis (visualized)

(A) Policy Network



(B) Participation



	Coalition 1: Advocates of the Energiewende	Coalition 2: Advocates of the status quo
Citizens	◆	◆
Experts	●	●

Methods

1. Semi-structured interview

- Citizens (in & around committees)
- Experts (in & around committees)
- Politicians
- Ministries
- NGOs
- Industry

→ Audio recording &
Interview transcription

2. Data collection (Participatory observation & Site visits)

- Committees meeting protocols
- Publications, reports, statements
- Slogans of demonstrations
- Public comments

→ Currently in progress

Data analysis

MAX QDA

- Qualitative content analysis
- Network Analysis

1. Analyze electric text & audio data with keywords in context (Coding), in German & Japanese
2. Schematize policy network

→ Need to be done

Case selection



Category	Germany	Japan
Expert committees for energy future plan Top down	<ul style="list-style-type: none">• Ethics Commission• Coal Commission	<ul style="list-style-type: none">• Strategic Policy Committee• Round Table for Studying Energy Situation• (Advisory Panel of Experts on Climate Change)
Citizens as members Participatory approach	<ul style="list-style-type: none">• National Accompanying Committee	<ul style="list-style-type: none">• Deliberative poll



2. Field research in Germany (04-09.2018)

as a visiting PhD student at the Technical University of Munich



Field research in Germany



	Apr.	May	June	July	Aug.	Sep.
① Data collection	[Bar]				continue if needed	
② Semi-structured interview				[Bar]		
③ Follow ongoing committees	← Focus on NBG →					
PhD Colloquium at the TUM / one-on-one	← 1-2 presentations →					
Presentations at international conferences					← 3 conferences →	
<ul style="list-style-type: none"> • 22nd REFORM group conference (Salzburg, Aug.) • 4th Energy and Society Conference (Exeter, Sep.) • TUM Workshop on Japan (Reitenhaslach, Sep.) 						

- Focus on the German case

Thesis chapter	Chapter 1 Introduction	Chapter 2 Case study: Germany	Chapter 3 Case study: Japan	Chapter 4 Comparative analysis	Chapter 5 Conclusion
April – Sep.	①	①②③			



Since 2016: NBG (Nationales Begleitgremium) accompanies the process of searching for final disposal site of high-level radioactive wastes in Germany

- Citizens are selected as committee members to reflect societal voices into the discussion, one of them from young generation
- Meetings take place almost every month in various regions of Germany in rotation, but mainly in Berlin
- Full text of the minutes and videos are NOT available
→ a reason for field research in Germany



Members of NBG



	National Accompanying Committee
Nr. of members	9 (→ 18)
Selection of members	<ul style="list-style-type: none">• Selected by Bundestag and Bundesrat: 6• Selected as citizens' representatives (by random sampling & discussion among candidates): 3
Members	<ol style="list-style-type: none">1. Prof. Dr. Miranda Schreurs (academia /environmental studies)2. Prof. Dr. Klaus Töpfer (Former environment minister) X3. Klaus Brunsmeier (env. NGO)4. Prof. Dr. Armin Grunwald (academia)5. Dr. habil. Monika C. M. Müller (academia /env. studies)6. Prof. Dr. Kai Niebert (academia / env. organization)7. Bettina Gaebel (Marketing expert) X8. Prof. Dr. Hendrik Lambrecht (academia)9. Jorina Suckow (Student of law) X

Majority of members: experts in environmental field
1/3 of members: citizen representatives



- **Semi structured interviews** (4 → 10-15)
 - NBG members 1 chair & 2 citizen representatives
 - Members of civil organisations 1 representative
 - Politicians The Greens, CDU, SPD
 - Other NBG members, NBG Bureau, NGO, Experts outside of NBG

- **Participatory observations** (5 → 7)
 - NBG meetings 3: Berlin, 1: Greifswald, 1: Hannover
 - NBG workshop for citizens 1: Hannover
 - Nuclear waste conference 1: Göttingen

- **Site visits** (2)
 - Wendland 3 days
Gorleben, Gorleben Archive, Windpark, Biomass plant, Intensive discussions with members of civil organization, participants of „Mahnwache“ etc.
 - Lubmin 1 day
Inside of the interim storage facility „Zwischenlager Nord“, discission with EWN



Opinion differences

- Connection between interim storage & final storage :
Environment minister vs NBG members
- Acceptance for interim storage by regional citizens:
Operator (EWN) vs regional citizens

Others

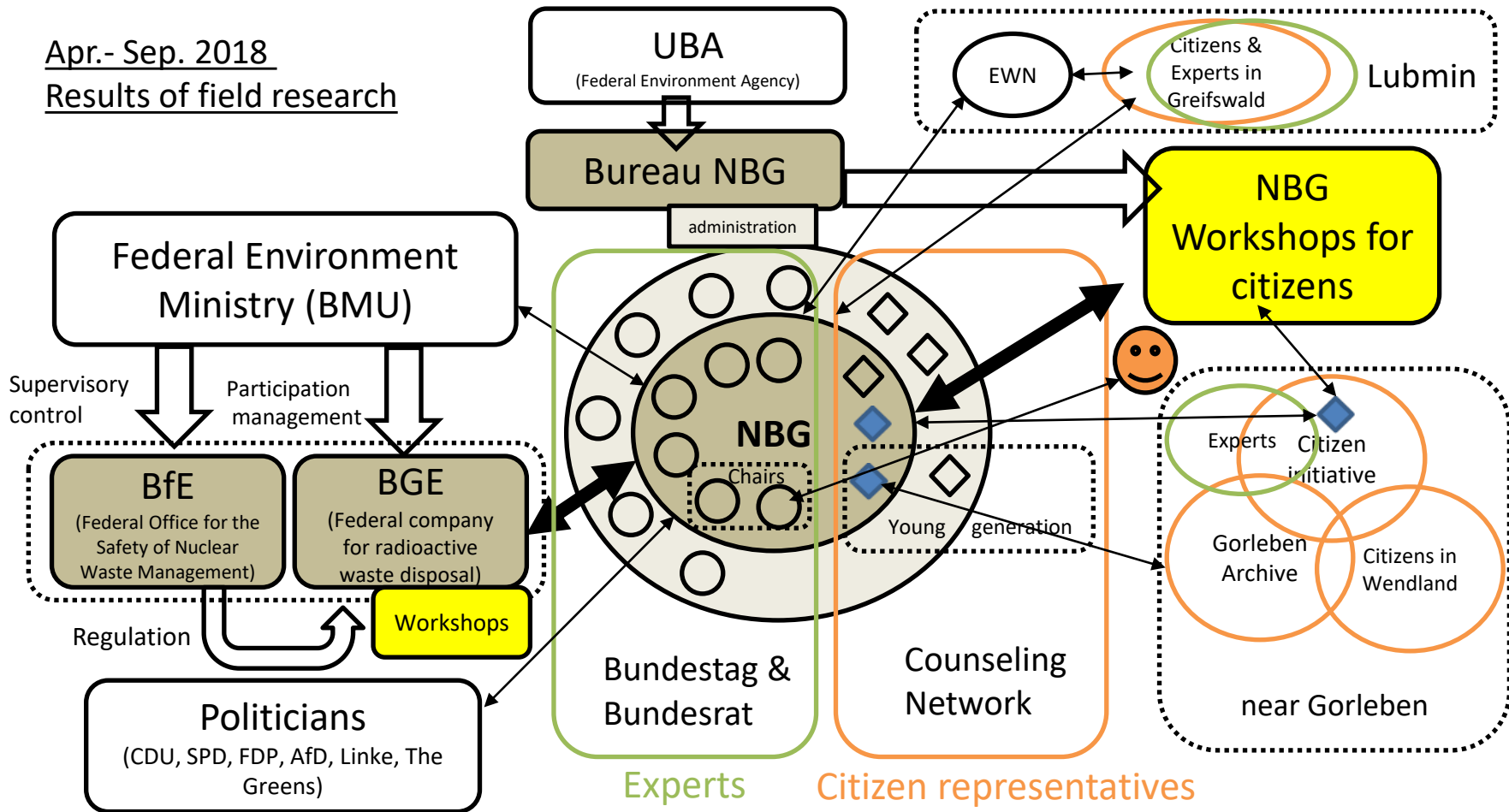
- Delay of occupation in positions of NBG Bureau
- NBG members see expansion of members skeptical
(too early, appropriate size to discuss)
- Observers of NBG meetings with same faces:
challenges how to reach not interested citizens



Tentative results: NBG's network



Apr.- Sep. 2018
Results of field research



	Coalition 1: Advocates of the Energiewende	Coalition 2: Advocates of the status quo
Citizens	◆	◆
Experts	●	●



Citizen participation in NBG

- Early stage citizens participation with regular workshops, citizen representatives involved from the beginning of NBG
- Experts and citizen representatives in NBG discuss on an equal footing.
- Citizen representatives do NOT represent whole public opinion in Germany, just their opinions.
- Not all opinions of citizen representatives reflected (e.g. Workshop for small children)

→ Early stage participation as a key factor. Public opinion reflected but with limitation



Requirements by citizens outside of NBG

- No time pressure for discussion
- Citizens in affected regions should to be included into the discussions
- Meetings on weekend & live streaming

→ How to reach citizens effectively? Decision making with citizen participation requires long time period?

Conclusion

- **Theoretical contributions**
 - Rethink relationship between citizens and experts & Classify forms of citizen participation
 - Application of ACF for a German-Japanese comparison
- **Empirical contributions**
 - Lessons for democratic energy transition
 - Proposals to enhance transparency in decision making process and acceptance for energy transition
- **Next to address & Challenges**
 - How to get answer on energy policy preference & to reach status quo coalitions?
 - Field research in Japan (from Oct.2018)
 - Content analysis with MAX QDA



Thank you very much for your attention!

