

# Is Participation a Main Driver for a Transformation towards a Sustainable Energy System?

13th September 2016 | Anna Ernst

Institute of Energy and Climate Research: Systems Analysis and Technology Evaluation (IEK-STE),  
Forschungszentrum Jülich

# Transformation towards a sustainable Energy System

**Sustainable Development:** process that represents a relentless pursuit of society to decide on the course of action

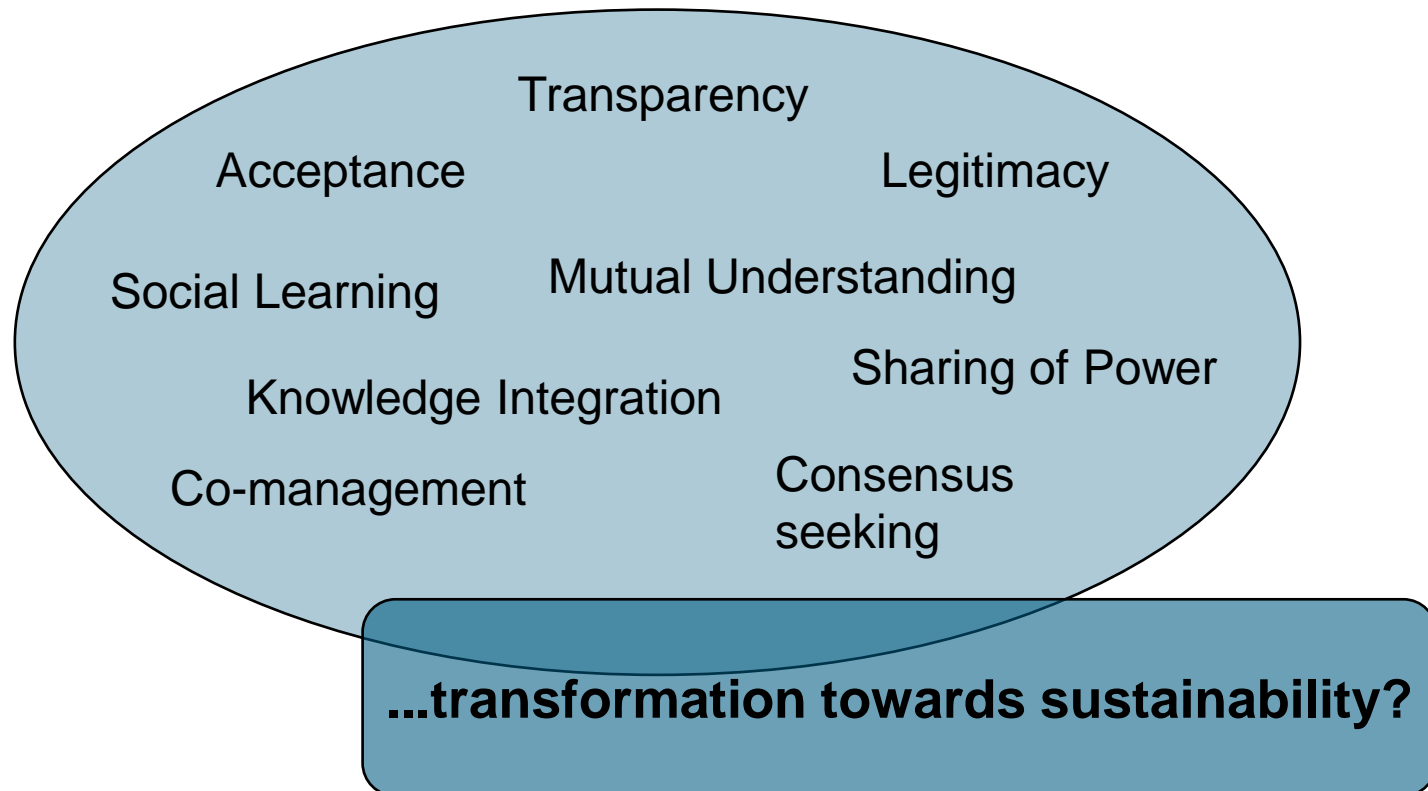
## Social Change

adaptation and change process of values, norms and behaviour

## Technology Innovation

**Transformation towards sustainability:**  
constant learning process

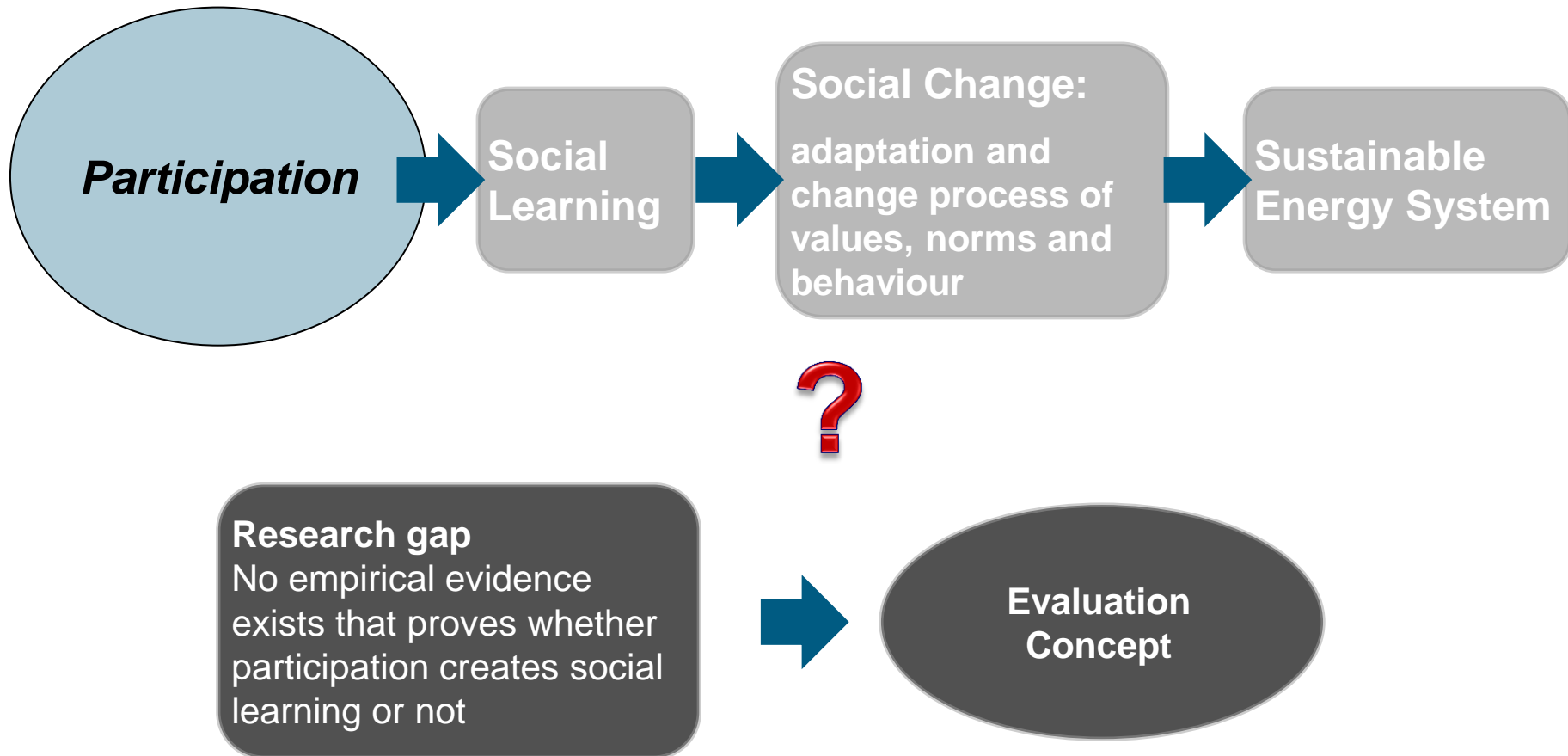
Governance tool to be used in planning and decision making processes with various possible impacts



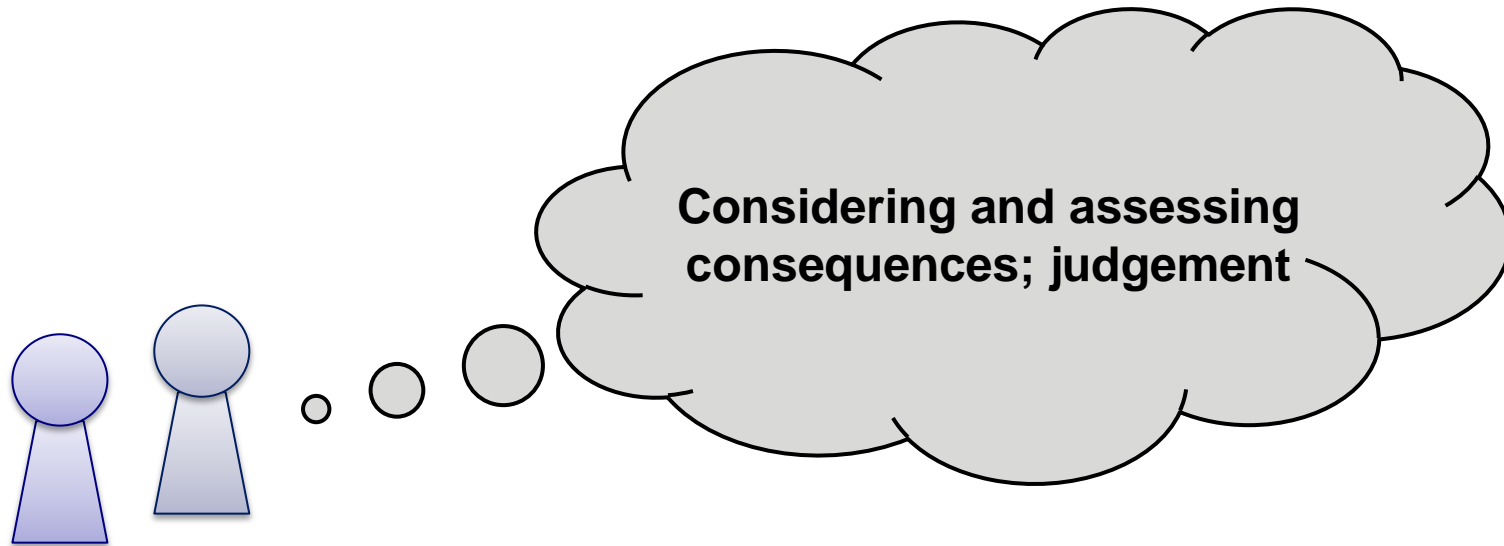
# Evaluation of Participation: State of the Art

Focuses mainly on the procedure and the outputs of participation

Elements of Participation	Evaluation Criteria
Process	Inclusive, open-ended, transparent, face-to-face meetings, commonly agreed rules and task definition, power relations, access to information, timing of involvement, facilitation, institutional constraints, influence
Intermediate outcomes / output	Trust, equality, fairness, representative, respect, legitimacy, justice, competence, extend of agreement, interaction and network development, innovation, shared knowledge and common understanding
Social outcome	Reduction in conflict, improved democratic decision-making, capacity development (new systemic collaborative capacity), perceived effects, solidarity



- Cognitive process that takes place in social contexts
- Due to the acquisition of new information and experiences a cognitive process is prompted, which leads to the assimilation or accommodation of values, belief systems, mental models etc.



<b>Learning sub processes / phases</b>		<b>Mechanisms</b>
<b>Learning Process</b>	Acquire	Experience, intentional search, dialogue, deliberation
	Translate	Analysis, dialogue / deliberation, heuristics, mental frames
	Disseminate	Routines, dialogue / deliberation, framing of information
<b>Learning Products</b>	Cognitive	Learning process
	Behavioural	All off the above

Based on Heikkila and Gerlak (2013)

## Assumption

Whether participation processes create social learning depends on the perception of participation process in question.

*→ What are factors that hinder or foster social learning within participatory processes?*



## Phases Participation: Evaluation Criteria

**Process:** Face-to-face meetings, inclusive, transparent, commonly agreed rules and task definition, open-ended, access to information, timing of involvement, levels of conflict

**Intermediate outcome / output:**  
Perception of the process: fair, trust in facilitators / experts, interaction and network development, power relations, equality, tolerance, Justice of outputs, conflict resolution

## Learning

**Acquisition of information:**  
acquisition of facts, methods, and skills; experience of decision making

**Translation of knowledge:**  
Making sense or abstracting meaning, interpreting and understanding reality

**Dissemination of knowledge:**  
knowledge transfer to organisation

<b>Learning and thus Participation Outcomes</b>	cognitive	Questioning values, common understanding, new or reinforced ideas or beliefs, moral development
	behavioural	May lead to behavioural change

# Literature

- Biddle, J. C. and T. M. Koontz (2014). "Goal Specificity: A Proxy Measure for Improvements in Environmental Outcomes in Collaborative Governance." Journal of Environmental Management **145**: 268-276.
- Carr, G., et al. (2012). "Evaluating participation in water resource management: A review." Water Resources Research **48**(11): n/a-n/a.
- Goldschmidt, R. (2014). Kriterien zur Evaluation von Dialog- und Beteiligungsverfahren. Wiesbaden, Springer VS.
- Heikkila, T. and A. K. Gerlak (2013). "Building a Conceptual Approach to Collective Learning: Lessons for Public Policy Scholars." Policy Studies Journal **41**(3): 484-512.
- Leggewie, C. and D. Messner (2012). "The low-carbon transformation—A social science perspective." Journal of Renewable and Sustainable Energy **4**(4): 041404.
- Muro, M. and P. Jeffrey (2012). "Time to Talk? How the Structure of Dialog Processes Shapes Stakeholder Learning in Participatory Water Resources Management." Ecology and Society **17**(1).
- Siebenhüner, B., et al. (2016). "Social learning research in ecological economics: A survey." Environmental Science & Policy **55**: 116-126.

# Thank you!

**Contact:**

Anna Ernst

[a.ernst@fz-juelich.de](mailto:a.ernst@fz-juelich.de)

Tel.: +49 2461611798

52425 Jülich, Germany