

Evaluating for a transition?

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Two presentations

1. Evaluating for transitions: the case of research for energy efficiency in buildings in Sweden
2. Aligning evaluation practices for research and policy instruments – the case of energy efficiency in buildings in Sweden

Background:

Grand challenges → Energy efficiency in buildings has large potential
→ Requires large-scale transformations of current energy system →
Transition

Research

+

Policy

Evaluation (ex-post, ex-ante)

Evaluation theory

Sociology of Sc.

Policy analysis

Transition theory

1.

Evaluating for transitions: the case of research for energy efficiency in buildings in Sweden

Sofie Sandin & Mats Benner
Lund University, Sweden

Objective

How is the current Swedish evaluation practices for evaluation of research performed?

Background:

Grand challenges → Energy efficiency in buildings has large potential
→ Requires large-scale transformations of current energy system →
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Research

+

Policy

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Evaluation theory

Sociology of Sc.

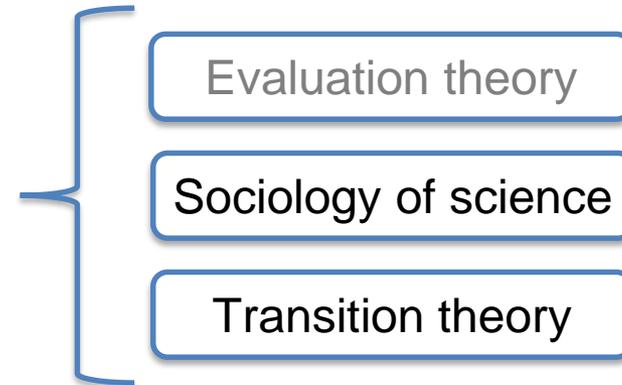
Policy analysis

Transition theory

Framework for analysis

Framework based on insights from sociology of science. Proposed categorization:

1. Operationalization
2. Analysis
3. Assessment



Framework for analysis

Operationalization

1. How has the subject of energy efficiency been defined by the evaluations?
2. Which boundaries are set for the subject?
3. Alignment between different areas, e.g. research, policy, markets etc.
4. Does the operationalization allow capturing of transformative efforts? (E.g. **systems perspective, multi-actor perspective, vision, experimentation, learning**)

Analysis

1. Methods applied for analysis
2. Forms of commissioning
3. Scope and purpose set for the evaluation
4. Does the analysis allow capturing of transformative efforts?

Assessment

1. Processes of utilization
2. How directionality has been operationalized
3. How linkages between research and other elements of meta-governance have been ascertained and assessed
4. How outcomes have been assessed
5. Does the assessment of the evaluand include transformative efforts?

Review of evaluations of research for energy efficiency in buildings

21 evaluations

Conducted in Sweden
2005-2017

Programs
Institutions

		Single research programs	Single research institution/authority	Multiple research institutions	Total
		(15)	(4)	(2)	(21)
Commissioned by	Swedish Energy Agency	13			13
	FORMAS	1	1	1	3
	IQ Samhällsbyggnad	1			1
	Government		1	1	2
	Mistra		2		2
Conducted by	Growth Analysis		1		1
	Academia	5	1	2	8
	External consultants	10	2		12
	Mistra		2		2
	IQ Samhällsbyggnad	1			1

Results - Operationalization

- Lean towards evaluation of single programs (15/21)
- Wide boundaries: focus on interactions between several governance areas (16/21)
 - Focus on knowledge transfer between different actors, governance areas
 - But! Many research programs required collaboration



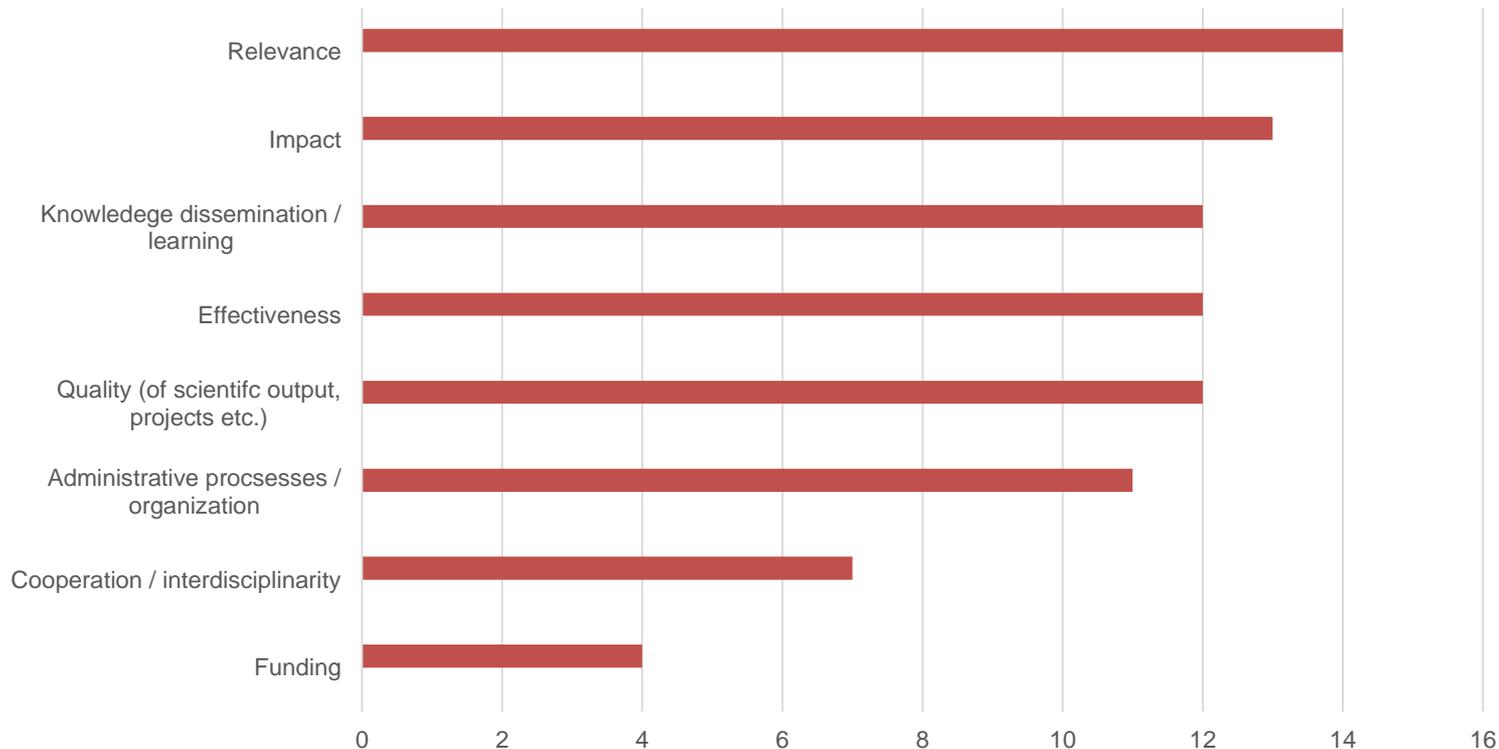
Results - Analysis

- Stated evaluation purposes:
 - Predominantly to assess effects and processes on program/institution level (18/21)
 - Discrepancy compared to wide operationalization
 - One explicitly focusing on assessing transformative effects on the energy system at large
- Predominantly ex-post
- Predominantly qualitative methods
- Few counterfactual assessments



Results – Assessment (1/2)

- Relevance, impact, knowledge dissemination dominating criteria
 - Again widening boundaries



Results – Assessment (2/2)

- Linkages between governance areas:
 - Effects of regulatory issues, boards, interests, funding etc. on research
- Process-related criteria (11/21)
 - Program regulation, communication, facilitation



Results

Capturing of transformative efforts

- **Systems perspective**
 - Interaction between multiple governance areas (16/21)
 - Effects on societal level/actors outside of research program (9/21)
 - But, predominantly focusing on single research programs (15/21)
- **Visioning**
 - Common in framing of the evaluand – its envisioned goals
 - Combination ex-post/ex-ante (5/21)
- **Multi-actor**
 - Criteria: collaboration between multiple actors/interdisciplinarity (7/21)
 - Different scope
- **Experiment**
 - Implicit in the outcome of research
- **Learning**
 - Focus on learning or knowledge dissemination (12/21)

Discussion

- A transition is one of the overarching goals of Swedish energy research
 - More comprehensive evaluations of collected efforts have been made
 - What is the role and potential of program/institution evaluation?
- Practices all ready framing a transition
 - A more deliberate analysis and assessment suggested
 - An ownership of evaluations: to connect evaluations and synthesize results

2.

Aligning evaluation practices for research and policy instruments – the case of energy efficiency in buildings in Sweden

Sofie Sandin, Lena Neij, Mats Benner
Lund University, Sweden

Background:

Grand challenges → Energy efficiency in buildings has large potential
→ Requires large-scale transformations of current energy system →
Transition

Research

+

Policy

Evaluation (ex-post, ex-ante)

Evaluation theory

Sociology of Sc.

Policy analysis

Transition theory

Objective

How may evaluation approaches
of research and policy
support and strengthen each other
in the pursuit of supporting
a transition towards a more
sustainable energy system?

(Ongoing work)

Review sample

Sample of policy evaluations

33 evaluations
Energy efficiency in buildings

Financial
Legislative
Informative
Other

2005-2015

Sample of research evaluations

21 evaluations
Energy efficiency/ building research

Programs
Institutions

2005-2017

Framework for analysis

Operationalization

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3. Alignment between different areas, e.g. research, policy, markets etc.
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Results

Operationalization

- Narrow boundaries: program focus and intended effects

Transformative potential

- **Systems perspective**
 - Policy evaluation: general focus on actors
 - The role of the evaluand in a greater societal system more frequent in research evaluation
- **Vision**
 - In large missing from policy evaluation
 - Often mentioned in research evaluation, often rehtorical
 - Combination of ex-post and ex-ante:
 - Policy evaluation: 1/33
 - Research evaluation: 5/20

Results

Analysis

- Methods: emphasis on qualitative methods (interviews, document studies, surveys)

Transformative potential

- **Multi-actor perspective**
 - Seen in both strands
 - Policy: authorities, businesses, beneficiaries, organizations
 - Research: academia, authorities, markets, industry, society

But! Varying extents: actors involved for data collection

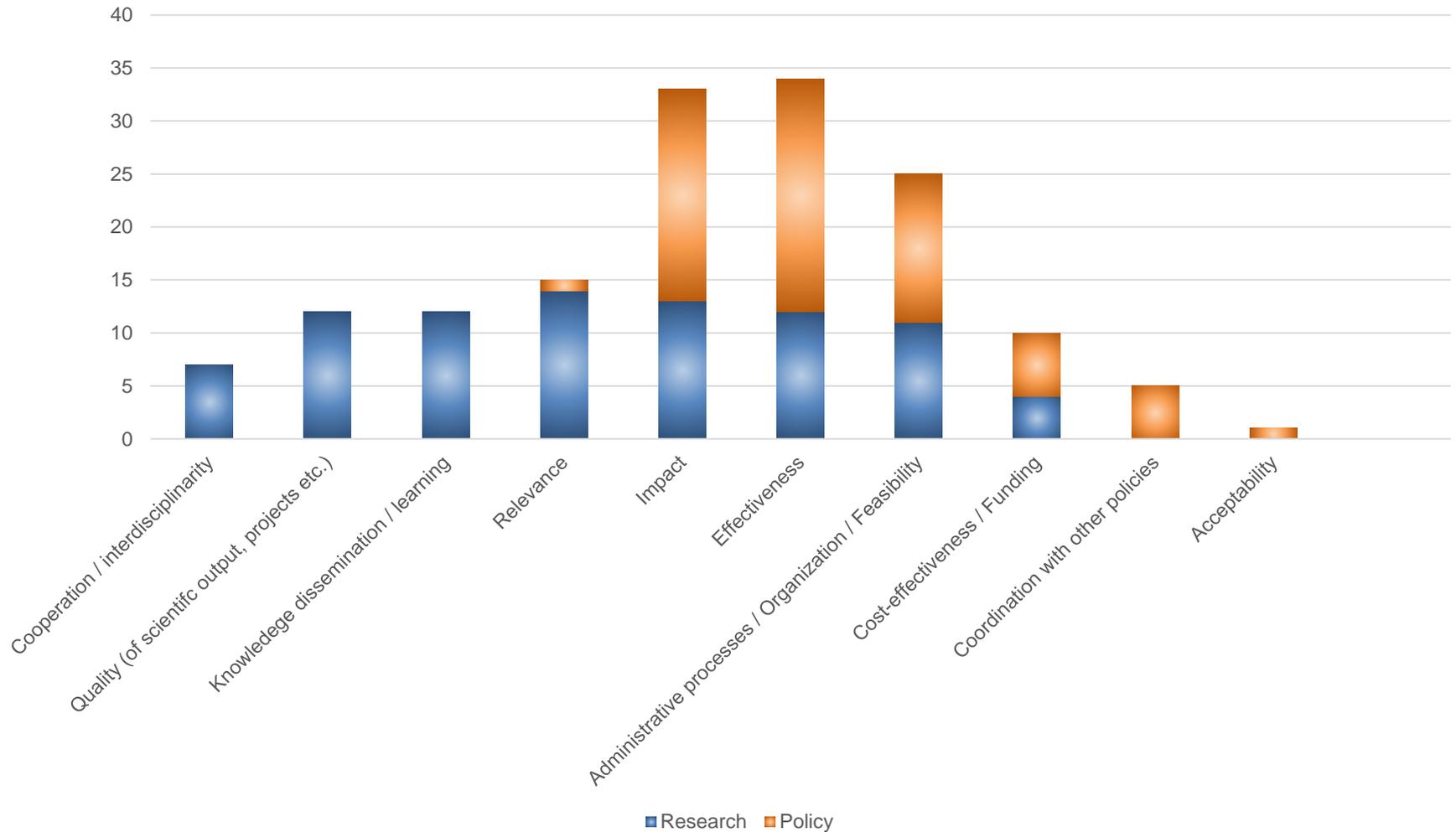
Results

Assessment (1/3)

Evaluations		Commissioned by							Conducted by						
		Swedish Energy Agency	National Board of Housing, Building and Planning	Ministry of Enterprise and Innovation	Government	FORMAS	IQ Samhällsbyggnad	MISTRA	Swedish Energy Agency	National Board of Housing, Building and Planning	Growth Analysis	External consultants	Academia	IQ Samhällsbyggnad	MISTRA
Policy instruments (Total 33)	Financial (5)	2	2	1					1	2		2			
	Legislative (2)		1		1					1		1			
	Informative (18)	10	1	7					4	1		14			
	Other (8)	5		3								8			
Research (Total 21)	Programs (15)	13				1	1					10	5	1	
	Institutions (6)				2	2		2			1	2	3		2
Total		31	4	11	3	3	1	2	5	4	1	36	8	1	2

Results

Assessment (2/3)



Results

Assessment (3/3)

Transformative potential

- **Systems perspective**
 - Intervention theories used in both
 - Boundaries wider in research evaluation
- **Experimentation**
 - Uncommon in policy evaluation
 - Implied within research evaluation
- **Learning**
 - Knowledge creation implied within research evaluation
 - Learning in terms of improvements common in both strands

Discussion

- Need for deliberate focus within evaluations on transformative potentials
 - Components to larger extent applied in research evaluation
- Evaluation synergies: cross-check research and policy evaluation for alignment
- Commissioners and evaluators overlap
 - Potential for cross-fertilization
- Use and communication crucial

Discussion

In practice, how do we combine research and policy evaluation?



Thank you!

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