



The Theory of No Change

Presentation

IDEA Global Assembly 2013

Bridgetown, Barbados

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Outline

- The Climate-Eval community of practice
- The meta-evaluation on climate mitigation for the Climate-Eval community of practice
- The Theory of No Change
- Outlook



The Climate-Eval Community of Practice

Community of Practice Climate-Eval (I)

MEMBERS

- *Registered Members: 1,500 from National Government Agencies, Project Management Units, Think-Tanks, Development Organizations, Consulting Firms and Academia.*

GEOGRAPHICAL DISTRIBUTION

- *Western Europe/Central Asia: **35%**;*
- *Americas and Caribbean: **32%**;*
- *East/South Asia & Pacific: **16%**;*
- *Sub-Saharan Africa: **14%**; Middle East and North Africa: **3%**;*

PARTNERSHIPS

- *IDEAS – Climate Change Group ITIG*
- *Sea Change – South Asia Community of Practice*
- *IPEN – International Program Evaluation Network – Central Asia and former Soviet Union countries*

Community of Practice Climate-Eval (II)

RESOURCES

- *Electronic library with more than 500 studies on Climate Change, Adaptation and Mitigation.*

PRODUCTS

- *Guidelines for Mitigation Evaluations*
- *Best Practices for Indicators on Adaptation*
- *Meta-Evaluation of Mitigation Evaluations*
- *Study of Frameworks for Adaptation*

PROMOTION AND ENGAGEMENT

- *Monthly Webinars and Newsletters*
- *Weekly Blogs Post*
- *Attendance of meetings and Conferences*

Community of Practice Climate-Eval (III)

PLEASE JOIN!

IT IS EASY:

- *LINKED-IN GROUP CLIMATE-EVAL: EVALUATION OF CLIMATE CHANGE AND DEVELOPMENT*
- *SIGN- UP ON WEBSITE CLIMATE-EVAL.ORG TO RECEIVE EMAILS*
- *SUBMIT STUDIES, REQUESTS AND OTHER CONTRIBUTIONS*



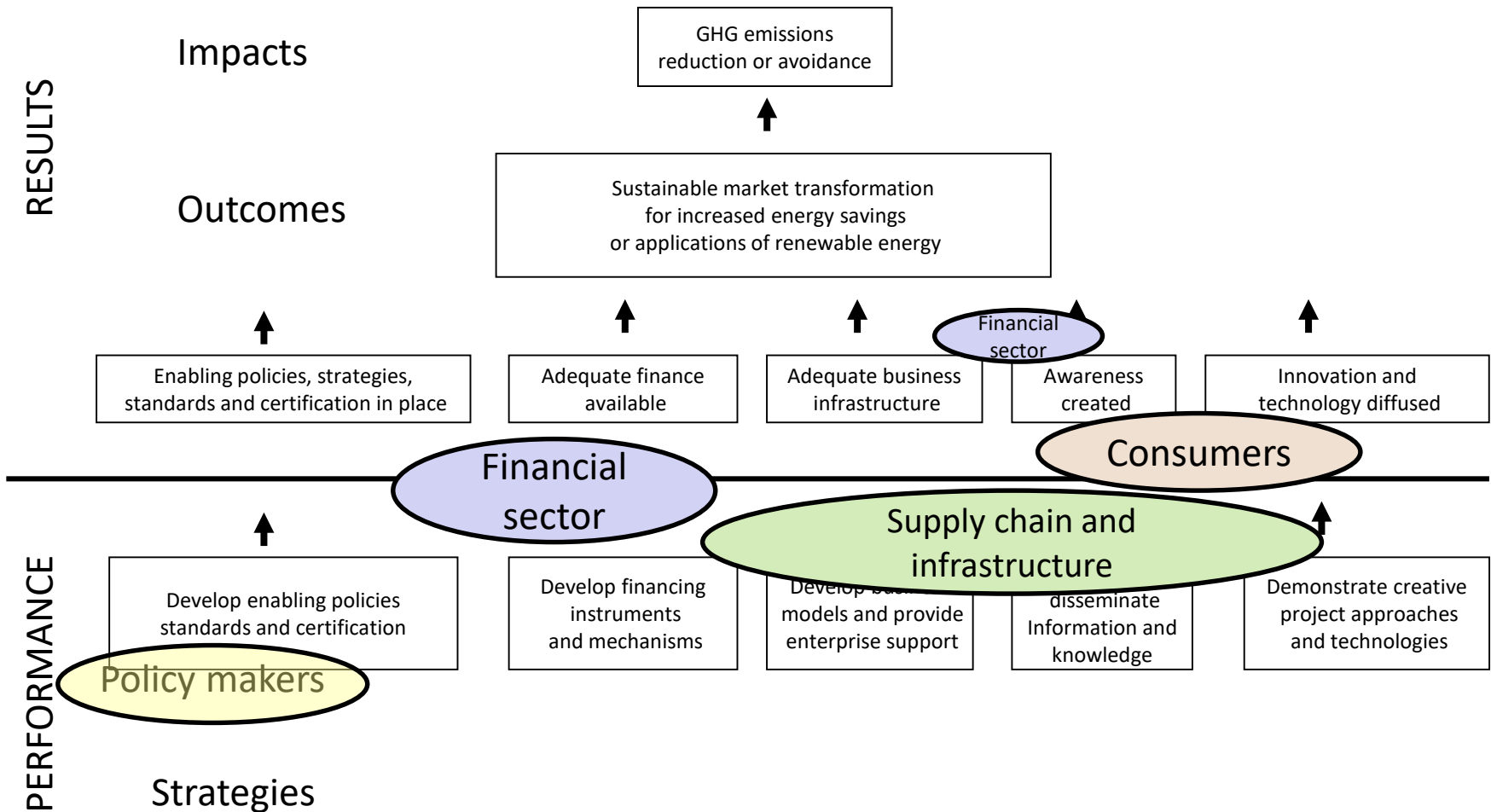
**Analytical work of the
Climate-Eval Community of Practice:
The Mitigation Meta-Evaluation**

Meta-Evaluation for arriving at the Theory of No Change

- Starting point: evaluation framework of Tokle and Uitto (2009)
- Evolution into stakeholder / barrier model
- Analysis of two sectoral transformation processes
 - Energy efficiency products (light bulbs, refrigerators) in Thailand
 - District Heating in Poland
 - each over 2 decades,
 - Based on evaluations
- Leads to definition of barrier framework / Theory of No Change and two visualization tools

Evaluation Framework (Tokle and Uitto (2009))

Evaluation framework



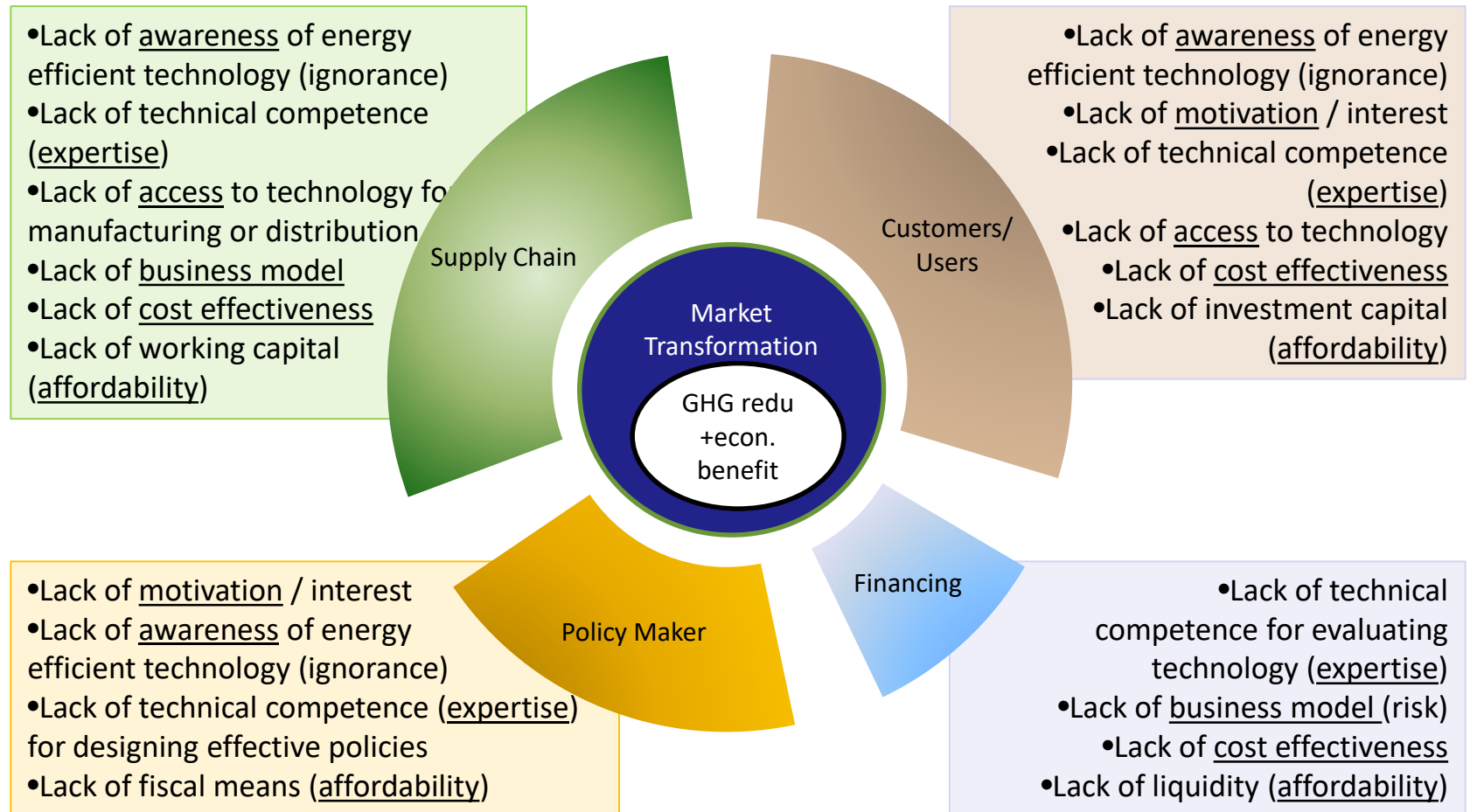
Strategies respond to barriers

Strategy from Tokle / Uitto	Barrier
Develop business models and provide enterprise support	Lack of business model
Disseminate information and knowledge	Lack of knowledge, lack of awareness
Develop financing instruments and mechanics	Lack of cost effectiveness, lack of affordability
Demonstrate creative project approaches and technologies	Access to technology, lack of awareness for mitigation option
Developing enabling policies, standards and certification	Lack of cost effectiveness, lack of affordability, lack of access to technology or mitigation option

Full set of barriers (from „Guidelines“)

Potential Barrier	Explanation of the barrier
ignorance	not knowing what causes and does not cause GHG emissions, not aware of how to reduce them
lack of motivation / interest	not minding, not interested in reducing emissions or providing the supporting service even if other benefits would accrue (e.g. saving money, leveraging growth opportunities)
lack of expertise	not being knowledgeable enough for implementing the reduction
lack of access to the mitigation option	the technology is not physically available, e.g. because the next sales point is too far away, no maintenance service is provided ...
lack of affordability	the funds for the investment are not available even if the implementation would save money and be overall cost effective
lack of cost effectiveness	the mitigation option is not cost effective, i.e. would be more expensive than the status quo

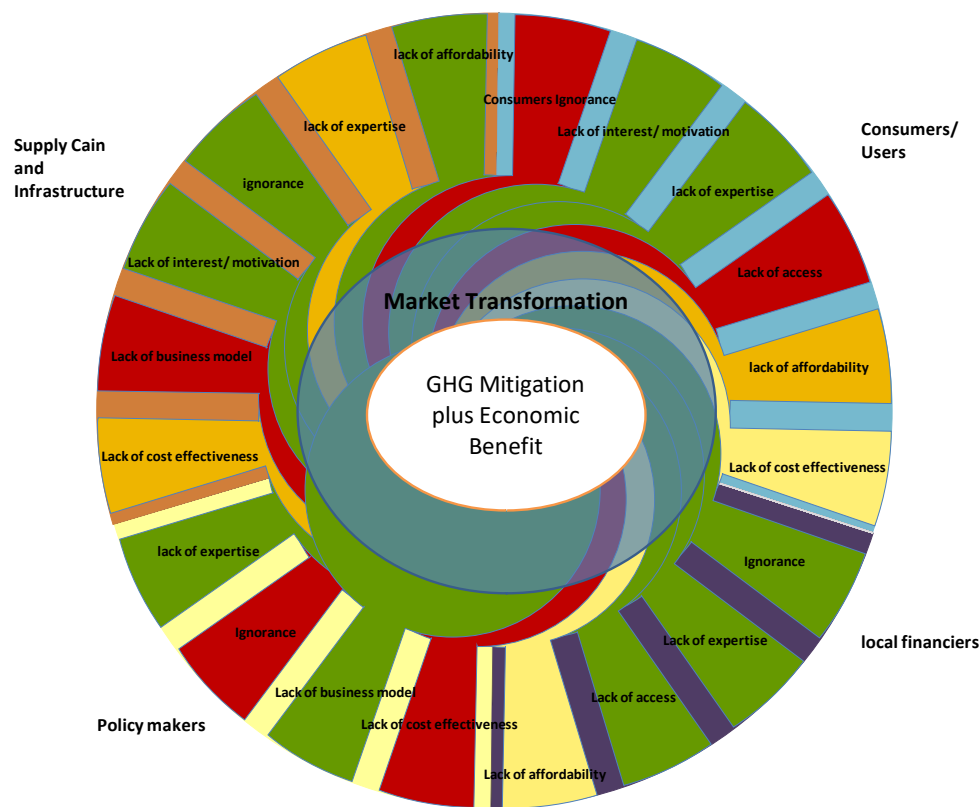
Stakeholder and potential barriers to market transformation – why are things NOT changing?



Potential Barrier	Users / Consumers	Supply chain	policy makers	local financiers
ignorance	users might not know what causes and does not cause GHG emissions, might not be aware of how to reduce them	suppliers might not know if their products cause GHG emissions, and might not be aware of how to reduce them	policy makers might not know which options cause more GHG emissions, and how they can be reduced	financiers might not know which options cause more GHG emissions, and if they can trust the technical solutions
lack of motivation / interest	users might not be aware or not interested in reducing emissions even if they could save money	Not applicable (if all the other aspects are given, the supply chain will be interested in additional business)	not interested in reducing emissions even if other benefits would accrue (e.g. saving money, leveraging growth opportunities)	Not applicable (if all the other aspects are given, banks will be interested in additional business)
lack of expertise	users might not know how to implement the GHG-reducing measures	users might not know how to install or maintain the GHG-reducing measures	not being knowledgeable enough for making smart policy / lack of policy capacity	not applicable (banks should have sufficient banking knowledge)
lack of access to the mitigation option	the technology is not physically available, e.g. because the next sales point is too far away, no maintenance service is provided or the like	the technology is not physically available, e.g. because no local production or importation exists	Not applicable	Not applicable (banks do not need to access the technology)
lack of affordability	the funds for the investment are not available even if the implementation would save money and be overall cost effective	the funds for the expansion of the business are not available even if the change would provide growth opportunities	the funds for political support are not available	even if liquidity is available, banks might not be able to lend more as they might be overexposed
lack of cost effectiveness	the mitigation option is not cost effective, i.e. would be more expensive than the status quo, even if the savings are fully factored in	no business can be established, e.g. because of a lack of demand	the mitigation option is not cost effective on an economy-wide level as measured in an economy-wide costs benefit analysis	no business model can be established, e.g. because of small market size

“Barrier Circle” – or “why things are NOT changing”

Households: Lighting and Refrigeration, 1992



Red: “This barrier is a show-stopper for the market.”

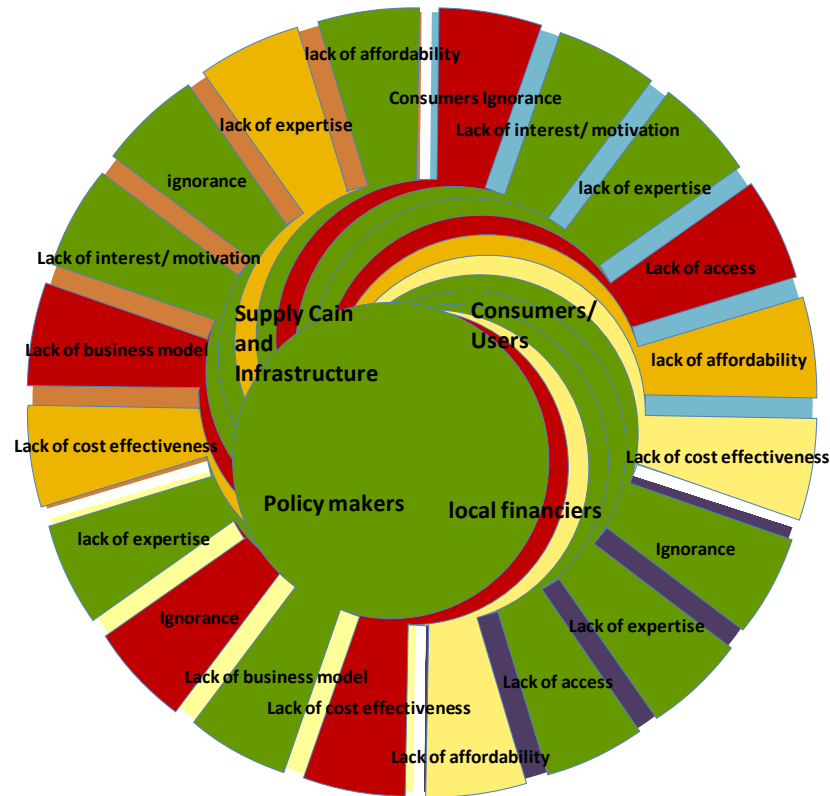
Orange: “This is a significant barrier.”

Yellow: “Not a good situation, but no significant challenge.”

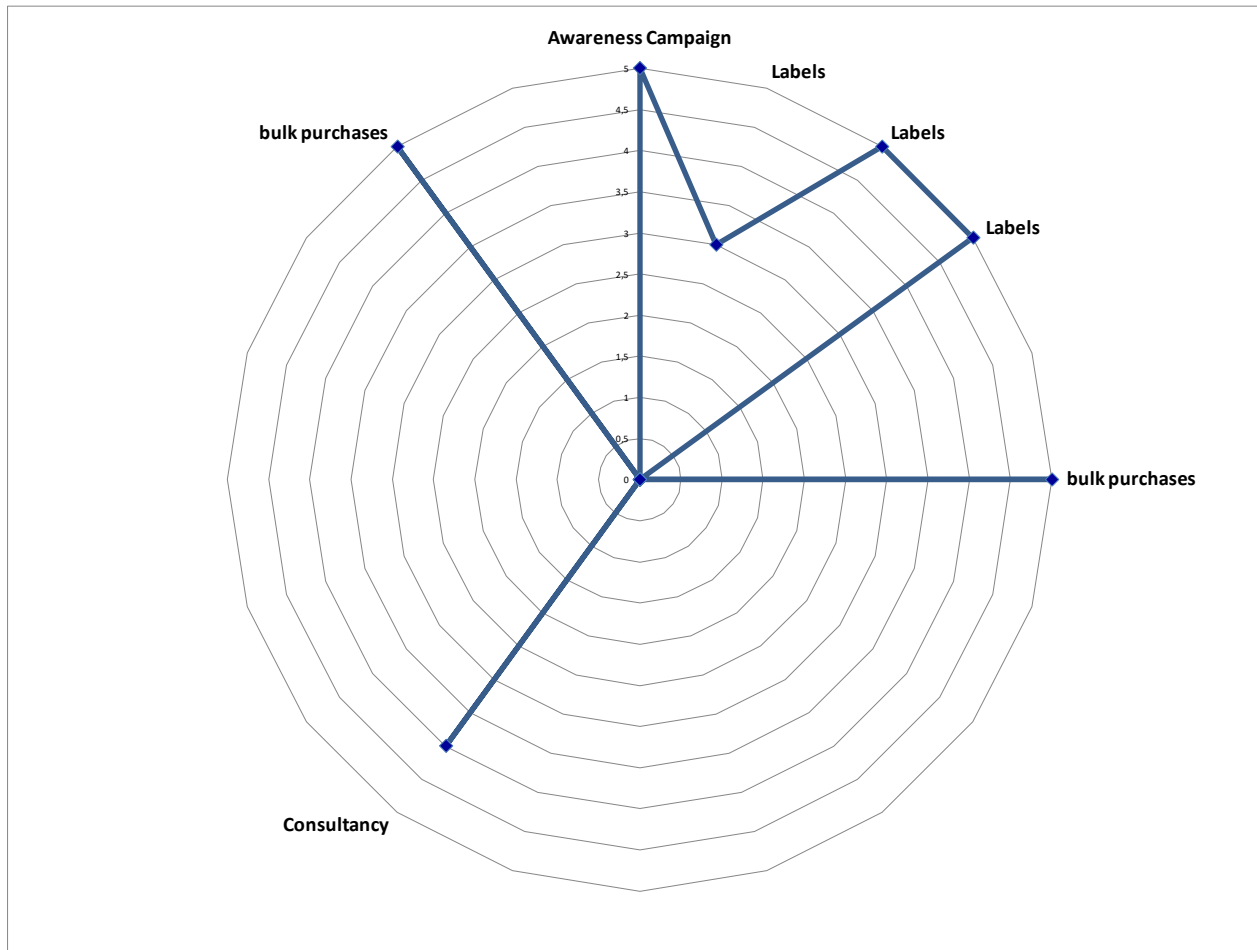
Green: “This potential barrier is not impeding market development.”

Then: Overlay with project

Households: Lighting and Refrigeration, 1992



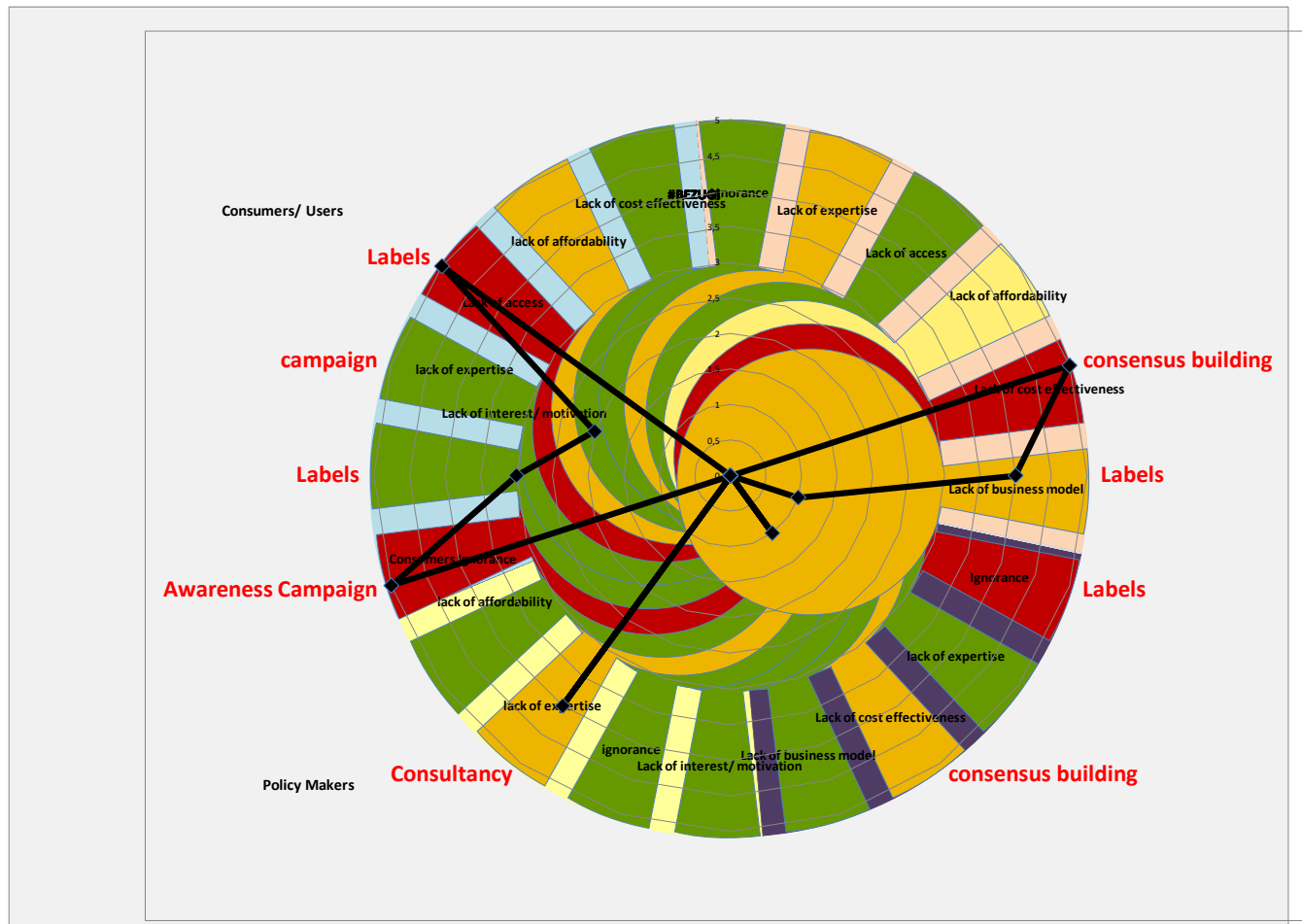
Project strategies can be aligned with the respective barriers.



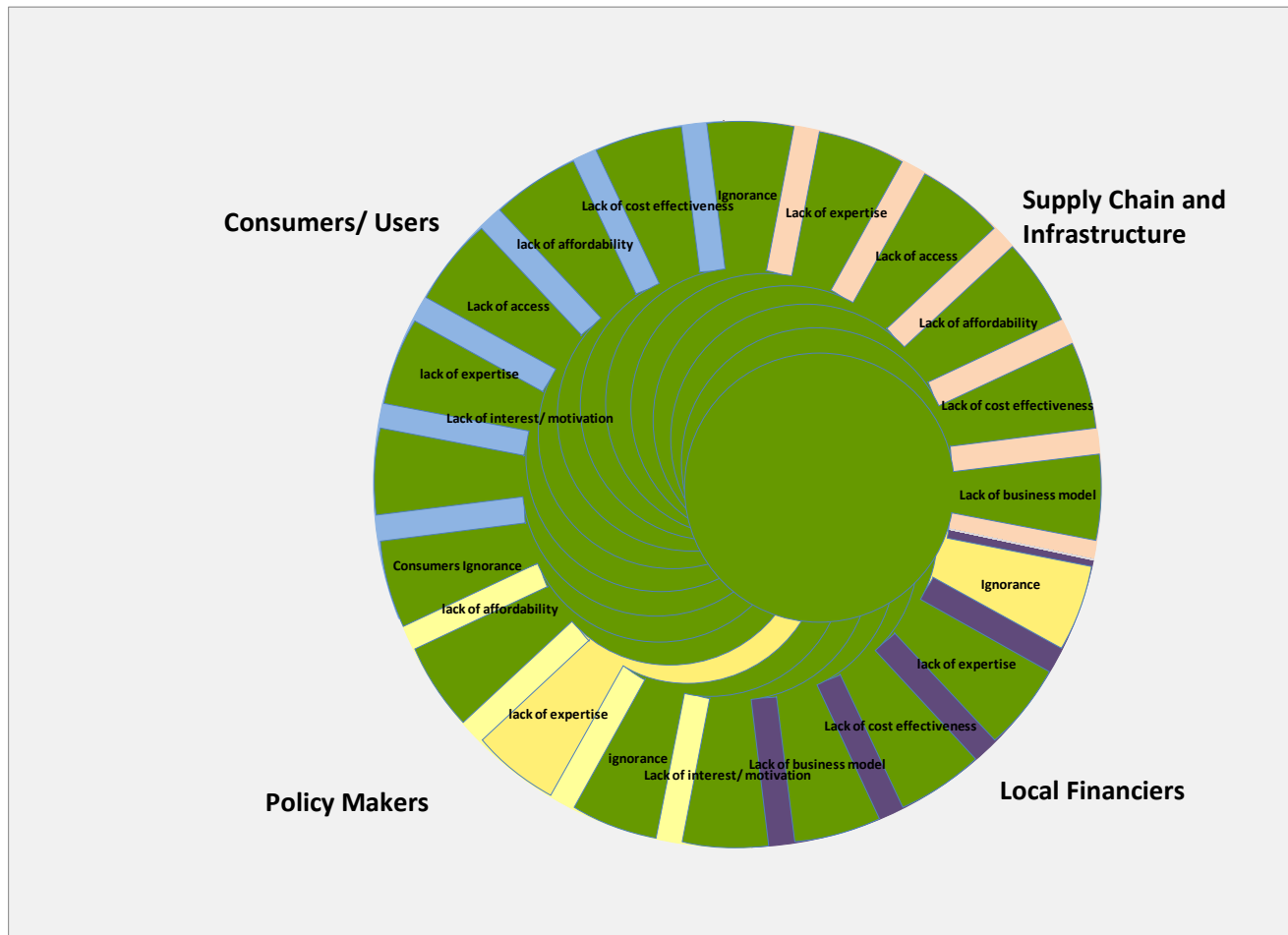
An Example for Thailand

- **Replacing T12 tubes by T8 tubes**
- Replacing light bulbs with energy savings bulbs (compact fluorescent lamps, CFLs)
- Replacing inefficient building chillers (large AC units) in commercial and industrial buildings with efficient building chillers.

WB DSM + GTZ project activities for T8 light tubes (Na Phuket, Sulyma, WB)



T8 market after DSM Project in 2000 (WB evaluations)



Framework Theory of No Change for climate mitigation –What is it good for?

Enhanced explanatory power by:

1. Compiling evidence from a large sample or cases
2. Starting point: „What was missing?“

Leads to:

- Better understanding of the evaluandum and its context
- More clarity on what works and what does not and why
- Solve attributability question for „partial“ interventions („logical gap“)
- Solve context questions
- Help identify lessons for better projects

Can be helpful in evaluation as well as project/programm planning.

Conclusions / Observations

- TONC can serve for formulation of hypotheses to understand failure or adjustment potential of interventions and approaches.
- Barriers seem rather robust („they do not know the option, they have no access to the option, they don't want to use the option, the option is too expensive“).
- Small adjustments regarding the stakeholders need to be made when transferring between situations
- Behavior / Barriers for one group of stakeholders might depend on behavior / barriers of other groups of stakeholders. Barriers are not always independent between groups.



Applying the TONC to other fields.

TONC as a methodology for understanding context

Theory of No Change can be abstracted from the field of climate mitigation and applied to other fields. Generally, the following steps are required:

1. Identify the behavior that leads to the desired outcome („get sick less“, „get smart“) – play around with the definition of the outcome, and the definition of the „user/consumer“
2. Identify, why the user/consumer does not exhibit the desired behavior; use the 7 barriers as a start (carefully: not too much detail), identify the stakeholders
3. Analyze whether or not stakeholders face barriers to allow for desired behaviour.

Thank you for your attention.

- Further Questions?
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Backup

Alternative display: comp table

- Color code allows to compare several projects in tables
- Here: case study Poland district heating

	Barrier	District heating		Geothermal		Coal to Gas		Biomass	
		prior to project	2004	prior to project	2004	prior to project	2004	prior to project	2002
Users	Ignorance	↑	↑	↗	↘	↗	↑	↘	↑
	Lack of expertise	↗	↗	↗	↗	↗		↘	↗
	Lack of access to technology	↘	↗	↓	↑	↘	↑	↘	↑
	Lack of cost effectiveness	↘		↑	↘	↗	↗	↘	↘
	Lack of motivation / interest	↘	↑	↘	↘	↘	↑	↘	↑
	Lack of affordability	↓		↗	↗	↓	↘	↘	↗
Supply Chain	Ignorance	↑	↑	↘	↑	↗	↑		↑
	Lack of expertise	↑	↑	↑	↑	↘	↗	↘	↑
	Lack of access to technology	↑	↑	↗	↑	↗	↑		↑
	Lack of cost effectiveness	↑	↑	↑	↓	↗	↑		↑
	Lack of business model	↑	↑	↓	↘	↘		↘	↑
	Lack of affordability	↑	↑	↘	↗	↘		↑	↑
Local Financiers	Ignorance	↗		↗	↗	↘	↑	↘	
	Lack of expertise	↓		↓	↗	↓	↑	↘	
	Lack of cost effectiveness	↓		↘	↓	↘	↓	↓	
	Lack of business model	↓	↓	↘	↓	↘	↘	↓	↓
Policy Makers	Ignorance	↑		↗	↑	↗	↗		
	Lack of expertise	↗		↓	↑	↗	↗	↗	
	Lack of motivation / interest	↗		↑	↑	↑	↑	↘	↑
	Lack of affordability	↘		↑	↓	↓	↗	↑	↑

Examples for climate mitigation „projects“

- Installation of a wind turbine
- Assessment of wind power generation potential
- Policy scheme for solar systems
- Training for technicians for home insulation / weatherization
- Energy audits
- New refrigerator
- Technical standards/laws requiring waste recycling in factories
- A campaign for using bicycles instead of cars
- Capturing and disposing of carbon dioxide emissions (CCS)
-

Testing the TONC: Market Transformation through Demand Side Management in Thailand since 1992

- Thai economy: 10.6% annual growth between 1986 and 1995
- Energy demand increased in step
- In 1992: Energy Conservation Law with obligatory energy reporting for large consumers and other (softer) measures.
- The national energy utility EGAT started
- We look at 2 cases:
 - **energy efficient lighting in households and**
 - **energy efficiency in industrial and commercial facilities**
- Crises:
 - **Thai / Asian Financial Crisis in 1997**
 - **Privatization of EGAT in 2000-2002**
- Test Question: can the model reflect market transformation successes and failures?

Interim test result

- Tool can reflect changes in market barriers and barrier removal strategies
- Easy to handle
- It becomes clear that every “market” (in the sense of a GHG emission reducing activity) needs its own set of analyses as the barriers are not of the same strength
- Currently only qualitative analysis possible – more standardization needed for it to have more predictive power

Tool

- Facilitates a more holistic analysis – often the project itself was successfully implemented (outputs, outcomes) but not able to lead to impacts, maybe due to other barriers
- **Can illustrate what was missing**
- Can help guide future project design
- And ex-ante evaluation (is the project designed to match the barrier structure)
- Can illustrate if program components are superfluous
- Can help compare programs, approaches and even areas for intervention

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- Here: case study Poland district heating

	Barrier	District heating		Geothermal		Coal to Gas		Biomass	
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	Lack of access to technology	↘	↗	↓	↑	↘	↑	↘	↑
	Lack of cost effectiveness	↘		↑	↘	↗	↗	↘	↘
	Lack of motivation / interest	↘	↑	↘	↘	↘	↑	↘	↑
	Lack of affordability	↓		↗	↗	↓	↘	↘	↗
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	Lack of business model	↑	↑	↓	↘	↘		↘	↑
	Lack of affordability	↑	↑	↘	↗	↘		↑	↑
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	Lack of expertise	↓		↓	↗	↓	↑	↘	
	Lack of cost effectiveness	↓		↘	↓	↘	↓	↓	
	Lack of business model	↓	↓	↘	↓	↘	↘	↓	↓
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	Lack of expertise	↗		↓	↑	↗	↗	↗	
	Lack of motivation / interest	↗		↑	↑	↑	↑	↘	↑
	Lack of affordability	↘		↑	↓	↓	↗	↑	↑

Keep developing this Framework Theory of Change so that it will be able to :

- Reproduce „complete“ theory of change – not just the groups / capacities / factors / aspects that are the subject of the project**
- Reflect sectoral context in a complete but „lean“ manner**
- Reflect relative importance of impeding / supportive factors for intervention results**
- Allow for the development of (outcome) indicators across stakeholders and interventions and GHG savings potentials**
- Be flexible and rigorous at the same time**



Using the TONC for project design

Use of TONC in project design

- **Theory of No Change:** Analyzing barriers helps find out where the next project can push the envelope, cost-effectively (Climate Works evaluation, GEF EO impact study); it looks across different stakeholder groups
- Use of **Tool** for comparing different projects can help transfer lessons learned / useful project approaches / best practices from one project to another.
- Use of **Comparison Table** allows for choice of most appropriate alternative behavior to be implemented in next project.

Overall, this analysis tells you what to do next.