

**Creating Acceptance for (energy) innovations:
Participation and acceptance**

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**Content of presentation**

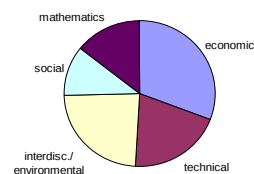
- Introducing ECN and myself
- Definitions (societal acceptance, stakeholders etc.)
- Main dilemma in practice
- Reasons for lack of societal acceptance
- Possibilities to work towards societal acceptance
- The tool ESTEEM

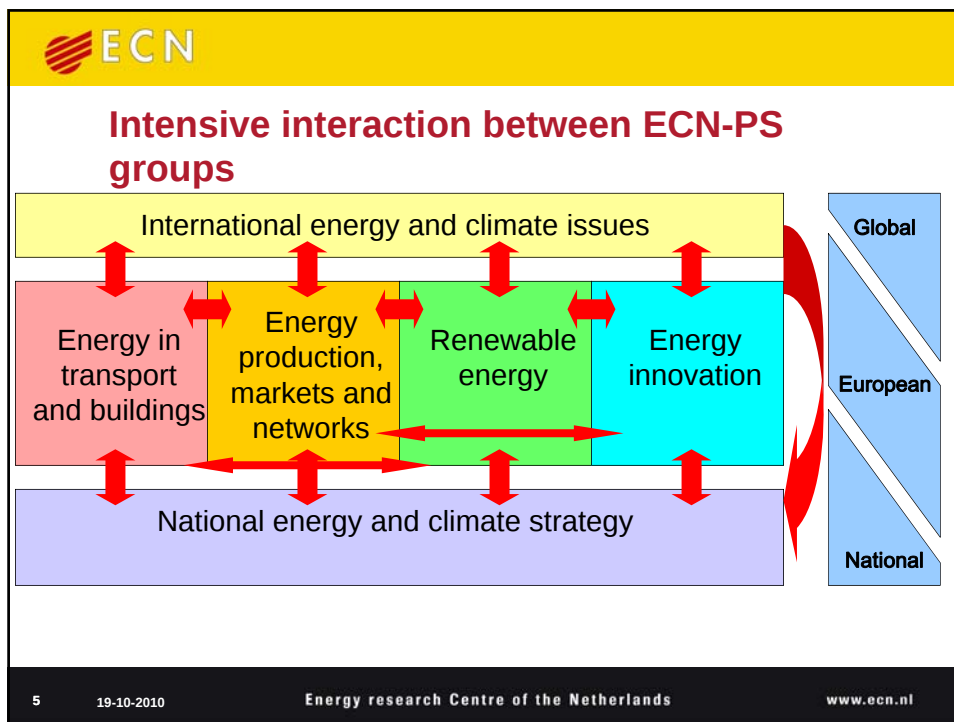
Ruth

- Senior researcher ECN
- Anthropology/sociology/science and technology studies + PhD
- Projectleader European projects Create Acceptance and Changing Behaviour

Mission and position ECN Policy Studies

- Policy studies one of many units, only non-technical
- Adviser Dutch government and EC on energy policy areas
- Growing role at the global level with the UNFCCC, UNEP in field of international climate policy
- 65 excellent and motivated researchers
- Much knowledge about trends, behaviour and technologies





ECN

What is societal acceptance?

Societal acceptance of innovative technologies is in place when:

- support among the expert community and national and local policy makers
- the general public is informed and positive
- No significant obstacles from local policy-makers, residents, the NGO community or other representatives of social interests
- Users willingness to adopt and adapt in contexts.
- But....can you create societal acceptance ?

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Who is performing societal acceptance?

- Many relevant stakeholders
- Everyone matters and can create problems!
- Stakeholders include
 - the local, regional and national government, equipment and service providers,
 - banks, intermediaries,
 - NGOs, scientific experts and ordinary citizens.
- Stakeholder map is different depending on
 - the location,
 - the technology
 - and the project

Starting Points

- The Dilemma
 - A **general** favourable public attitude towards renewables and new energy technologies
 - Strong **local** resistance or even opposition when the projects are planned or implemented
- Understanding the reasons for this potential resistance crucial for success of innovations
- How can project managers of new energy projects pro-actively modulate and improve societal acceptance of a project?

Why are people resisting or accepting?

- Different expectations (process, project and consequences)
- The technology used
- The external context (national and local political, social, cultural and geographic factors)
- Their participation

Key challenges for project managers

1. Identifying critical issues and stakeholders
2. Introducing appropriate projects in appropriate contexts
3. Interacting with the 'right people' in the 'right way' and 'at the right time'
4. Reflecting on action at appropriate stages
5. Combining societal acceptance with techno-economic success

A project manager has to work through these challenges to increase societal acceptance

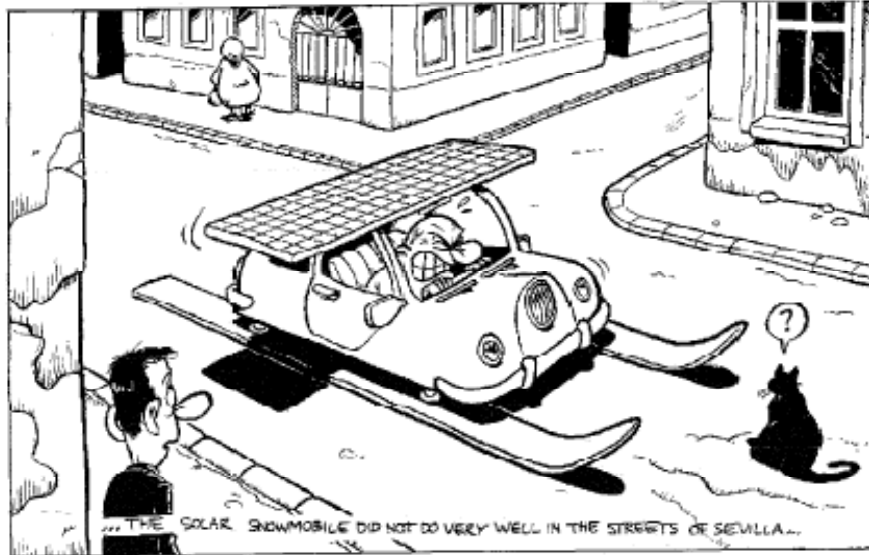
Identifying critical issues and stakeholders for innovative technologies

- Each new energy project is NEW in its context
- Critical issues include:
 - user involvement and the need for user adaptation
 - economic, social and technical integration of the project
 - siting issues and impact on the local economy, social structure and health, safety and the environment
 - broader policy debates, overall public perceptions
- All these issues differ depending on the technologies used
 - Biomass: siting issues, input logistics, limited public awareness
 - Household energy efficiency: high user involvement needed, individual investments, competing technologies
 - Solar: costs, grid connection

Introducing appropriate projects in appropriate contexts

Successful projects are not 'dropped' into a context, but 'reinvented' locally

- Project shapes and is shaped by local context
- Challenge: finding location where project can exploit and reinforce local benefits and identity



Introducing appropriate projects in appropriate contexts

A projectmanager needs to consider:

- Political and policy conditions
 - e.g., planning procedures
- Socio-economic conditions
 - e.g., regional development
- Cultural conditions
 - e.g., historical experience with different technologies, trust in institutions, identity issues
- Geographic conditions
 - e.g., suitable locations
- Timing vis-à-vis conditions
- Finding the right location for the right project

Interacting with the 'right people' in the 'right way' and 'at the right time'

- 'right people':
 - Different partners who bring resources and support the project, enable the project to interact with its external environment
 - and stakeholders who are influenced by or can influence the project
- 'right time':
 - Early enough
 - So that project design can be altered
- 'right way'
 - Continuously
 - articulating concerns, mutual learning, ensuring clarity of purpose and division of power and responsibilities
 - formal structures + face-to-face interaction and 'keeping in touch' >> **project managers need to get involved**

Reflecting on action at appropriate stages

- Acting once resistance is in place is too late
 - Bribery issues

Combining process for societal acceptance with external techno-economic success

- Societal acceptance not always necessary or sufficient
- dividing attention among factors promoting societal acceptance and techno-economic success

•Community relations
•Articulating visions and expectations
•Managing change
•Interaction and learning
•Ongoing dialogue with stakeholders



•Technical & infrastructure issues (e.g. grid access)
•Operational issues (e.g. contractors)
•Market issues (e.g. competition)
•Financial issues (investors, policy instruments)

- Should not be separate activities, but synergistic

Implications for policymakers

- Societal acceptance is a "public good"
 - experiences from earlier projects
 - experiences also spread beyond the local context
 - successful process of development co-creates supportive institutions and cultural practices
 - unsuccessful processes co-create broader institutionalised resistance

Implications for policymakers

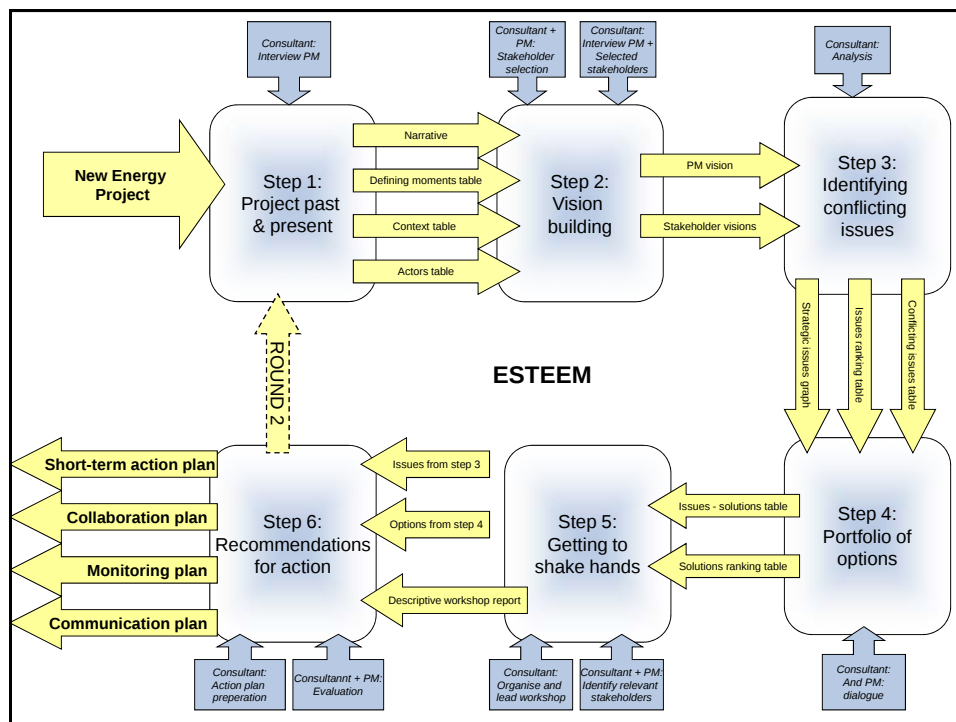
- Policy makers have an important role
 - Facilitating process of joint learning and developing creates a high level of confidence
- Public policy should support project managers:
 - Stakeholder interaction and local reinvention **is not merely a way to solve local problems** of societal acceptance...
 - but **also as a way to find new innovative solutions** that promote the socio-technical implementation and embedding of new, sustainable energy technologies.

Tools to measure and create societal acceptance

- ESTEEM. An open participative planning process
- Esteem analyses the potential acceptance and possibilities to increase it
- The Esteem process increases acceptance implicitly through participation
- Important in any participatory process that focuses on acceptance is that the initiators need to be willing to alter (parts of) their plans.
 - This may even include abandoning the site and looking for a more suitable site.

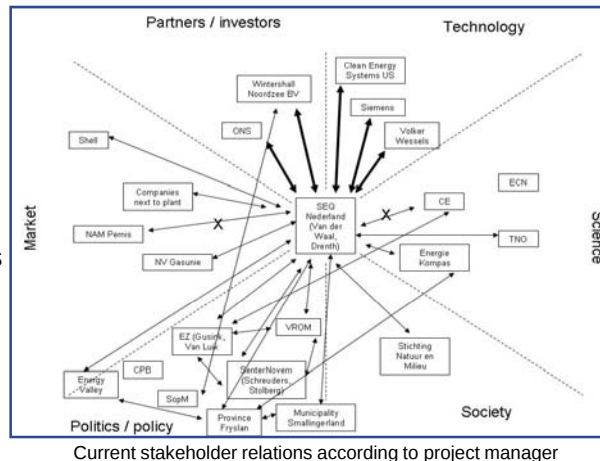
ESTEEM

- Engage **stakeholders** through a systematic toolbox to **manage** new energy projects
- 6 step methodology executed by consultant in cooperation with project manager
- Developed within European research project CreateAcceptance (ECN+9 partners), funded by the EC
- Tested in five demo projects in different contexts:
 - Wind project in Hungary
 - Solar project in Italy
 - Biomass project in Germany
 - Hydrogen project on Iceland
 - Zero Emission Power plant (CCS-project) in the Netherlands



Step 1: project past and present

- Narrative (4 pages on history of project)
- Context: opportunities and barriers tables
- Defining moments table
- Actors table

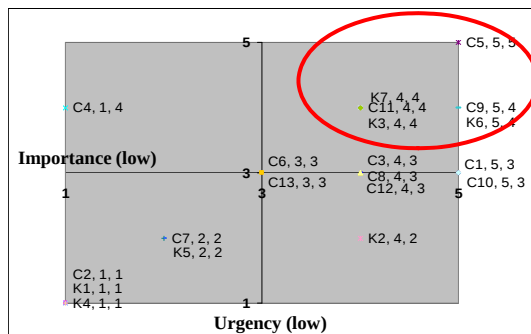


Step 2: vision building

- Interview with PM on **future vision**:
 - Future newspaper article + title
 - Social network map
- Interviews with stakeholders on future vision:
 - Customized newspaper article + title
 - Customized network map
 - Ministry of Economic Affairs
 - Ministry of VROM (environment)
 - Friesche Milieufederatie (Local NGO)
 - Municipality of Smallerland (Drachten)
 - Province of Friesland
 - Siemens
 - Ta Wolfaert (organisation of local entrepreneurs)

Step 3 + 4: vision confrontation

- Step 3: Vision confrontation
 - Identification controversies and opportunities in future visions
 - Ranking based on importance and urgency
- Step 4: Identifying solutions
 - Identify possible solutions for overcoming controversies and using opportunities



Step 5: stakeholder workshop

Workshop with PM and stakeholders:

- Plenary session presenting the original vision of the PM
- Group work to create new strategies
 - Discussion on five issues:
 - Local impact
 - Local benefits
 - Economic issues
 - Technological and juridical issues
 - Relation with renewable energy



Step 6: Planning for action

- Acceptance and feasibility table:
 - Overview of strategies identified in workshop
 - Capacity for action table:
 - 45 strategies for further processing in:
 - Short term action plan
 - Collaboration plan
 - Monitoring plan
- } Communication plan
- With specification on target groups and communication formats

- Create Acceptance
 - EU research project
 - Cooperation between 11 partners
- Approach
 - Analysis of a variety of new energy projects in Europe
 - Developing intervention methodology
 - Applying methodology in five new projects (CCS, biomass, hydrogen, wind, solar)
- More info:
 - www.createacceptance.net



