



# SCIENCE SHOPS / PERARES

## **'Science Shops' & similar Public Engagement with Research And Research Engagement with Society**

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London 29 Sep 2010  
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A Science Shop (is a unit that) provides

**independent  
research  
support  
&  
participatory**

in response  
to

concerns expressed  
by civil society.

# Mediation Tasks



- 1 Receive/solicit partners/clients and (new) questions
- 2 Map the problem (articulation)
- 3 Preliminary research: Refer, Refuse, Advice or Formulate (scientific) research question (Incl. funds if required)
- 4 Find a (co-) supervisor
- 5 Find a student or researcher
- 6 Maintain communication and process
- 7 Facilitate useable presentation/publication of results
- 8 Help partner/client implement results; formulate follow up action
- 9 Make inventory of follow-up research/themes
- 10 Evaluation



# Science Shop Impact

- On Higher Education

- On Scientific Research

- On Civil Society

- Science Shops combine all three university missions



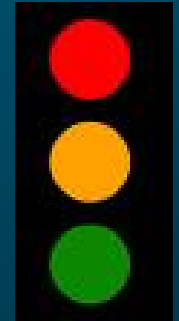
# Groningen Chemistry Example

- Environmental NGO: Support farmers to grow crops for industrial use?
- Chemical Production: Carbon from Oil
- Biological Production: Carbon from Crops
- Life Cycle Analysis
  - Potato Sprout Inhibitors →  
Report + Peer Reviewed Publication
  - Red Dyes →  
Prize Best Thesis Env.Chem.  
Royal Dutch Chemical Society
- Result: green route is LESS green,  
counter-intuitive





# Groningen Case Example



- Own follow-up:
  - Meta-level report: “Science or Fiction? Vision on sustainable development for the North of The Netherlands until 2015”
- Instigated follow-up research on improvement of the “Green” Route:
  - Consortium of University (Chemical Engineering, Environmental Sciences, Technical Business Management), Ministry of Agriculture, Agrochemical Industry

# Examples Groningen

## Science Shop Physics

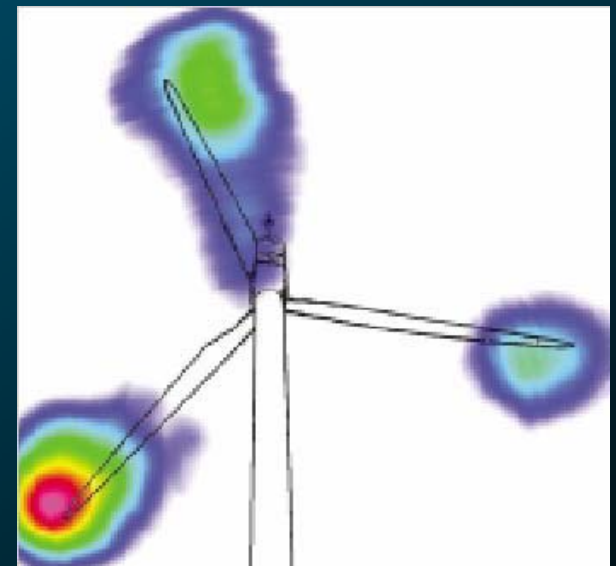
- *Wind Turbines –  
Noise at night  
→ PhD*



$$L_W = L_{eq} - 6 + 10 \cdot \log(4\pi \cdot R^2 / A_0)$$

### The sounds of high winds

The effect of atmospheric stability on wind turbine sound and microphone noise





# Wageningen Case Examples

- Gardeners Association
- Local (Organic) food
- Old Farmstead Cheese
- Fried Cassave
- Probioticum EM
- Natural Law Party...
- Green Spaces







# Science-in-Society Call 2008

- > Structuring Public Engagement in Research
  - > Science Communication: From 'transmission' to 'interaction' ('understanding' → 'engagement')
  - > *...engagement that will make a difference to research strategies...*
  - > *...broadest European coverage...*
- PERARES: 26 partners, 17 countries, 4 years, EC-Grant 2.7 Million Euro



University of Groningen; Wageningen University (WU) and Research Centres (SDLO) (Netherlands),  
Free University Brussels (Belgium),  
Science Shop Bonn; WTT Science Shop Zittau (Germany),  
Queens University Belfast; University of Cambridge; University of Glamorgan (UK),  
University College Cork; Dublin Institute of Technology; Dublin City University (Ireland),  
University Rovira I Virgili Tarragona (Spain),  
Foundation Citizen Science; Foundation for the Development of an Active Citizen Research ADReCA; University of Lyon (France),  
Swedish Research Council (Sweden),  
Technical University Crete (Greece),  
Politehnica University Bucharest (Romania),  
ESSRG Science Shop (Hungary),  
University of Stavanger (Norway),  
University of Sassari (Italy),  
European University (Cyprus),  
Institute for Baltic Studies (Estonia),  
Technical University of Denmark (Denmark),  
Heschel Centre (Israel).



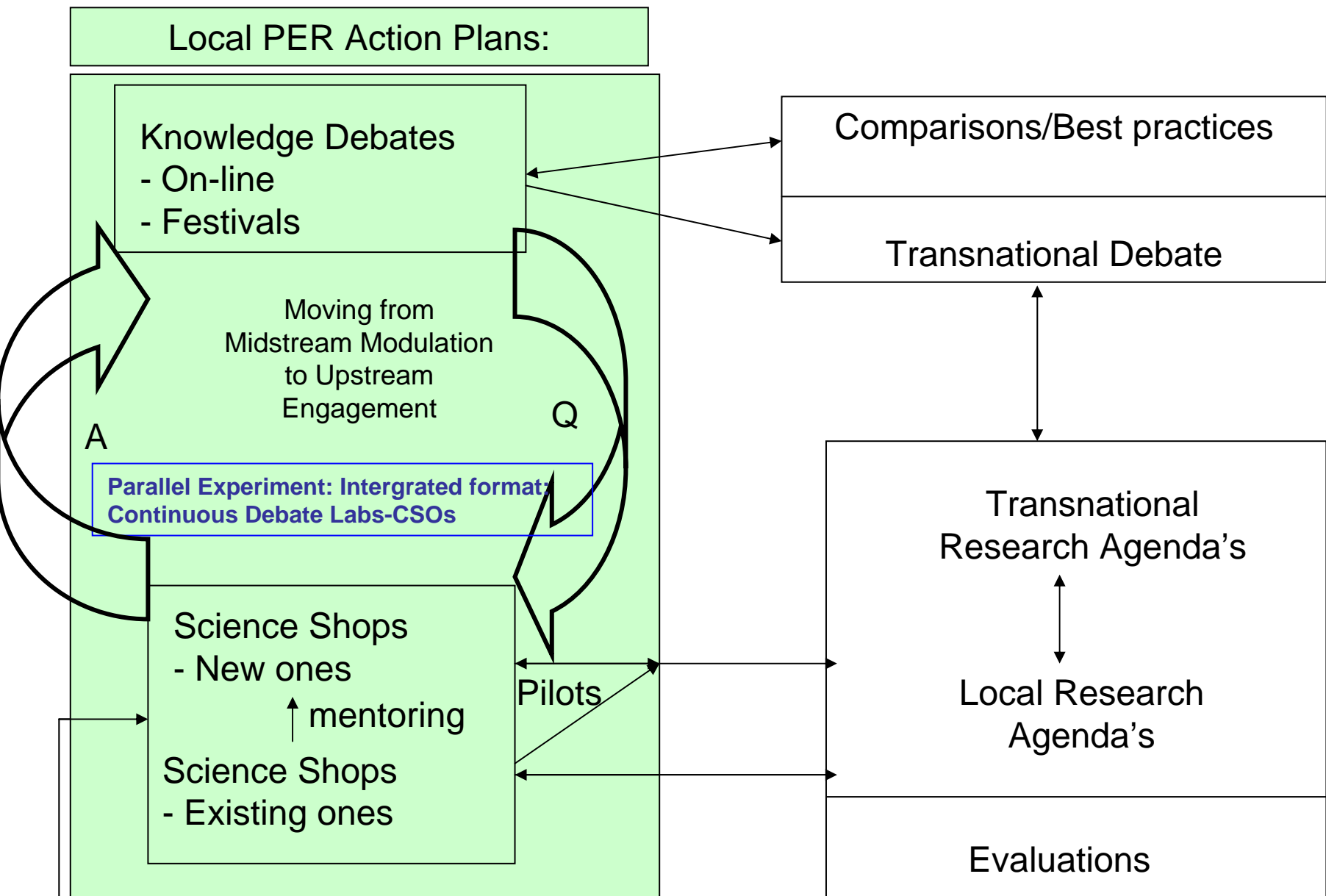
# Objective

- › Strengthen interaction in formulating research agenda's between researchers and CSOs.
- › *Structuring Public Engagement in Research*
- › *...engagement that will make a difference to research strategies...*



# Structuring PER

- › Debates / dialogues on science and research
  - At Science Festivals and Science Centers
  - Science Café's
  - On-line dialogues
- › Research with CSOs
  - Science Shops
  - Projects funded by PICRI, EU, (CURA), etc
  - Expertise platforms, academic programs, ...



**Parallel studies** to advance research co-operations between research bodies and CSOs & to advance international co-operation in this.



# Expected Impact (*Call text*)

1. An improved transnational cooperation between research bodies, in the domain of public engagement in research;
2. An improved mobilisation of researchers to engage with civil society in their practices;
3. An increased participation of civil society actors in research activities and an enhanced incorporation of needs and concerns of civil society in research strategies;
4. The definition of new cooperative research agendas involving researchers and civil society actors and combining their respective knowledge and experiences.

# Thanks



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