Collective System Building
to Launch Technological Sustainability Innovations

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Introduction and background:
• Entrepreneurs who want to launch a sustainability technology (e.g. hydrogen fuel cells) have to overcome many obstacles and ‘fight’ the incumbent regime
• they need to collaborate, to bundle their resources
• together they need to build up a supportive environment to implement their technology
→ ‘collective system building’
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Research question:

What processes are necessary for collective system building by entrepreneurs to launch a technological sustainability innovation?

Literature field: Transition studies

Main theory tested: Technological Innovation Systems framework (Hekkert et al., 2007; Bergek et al. 2006)

Method:

• Case study on the Dutch smart grids sector (an emerging technological innovation system)
• 14 in-depths interviews with key actors in the field
• Analysis: pattern matching technique (Yin, 2006)
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Outcome:

9 key processes important for collective system building by entrepreneurs:

1. Entrepreneurial experimentation
2. Knowledge development
3. Knowledge diffusion through networks
4. Creation of positive expectations
5. Market creation
   5a: Market formation by government
   5b: Market creation by entrepreneurs
6. Resource mobilization
7. Creation of legitimacy (lobbying)
8. Coordination along the value chain
9. Triggering of societal changes

Collaboration opportunity:

→ Would you like to test this framework in your country?
   With an innovative sustainability technology of your choice?

→ Please contact:
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