TRANSITIONING[1]

A low carbon economy is dependent on radical changes in the present systems of mobility, energy supplies, building and housing, spatial planning etcetera. What is at stake is a system change, which we refer to as a system innovation or a transition. System innovation is socio-technical innovation. That is, it will take more than new technology and for example new financial arrangements, the involvement of new actors or new procedures and/or infrastructure.
Many innovation projects for a low carbon economy, for example those that are being performed within the Climate-KIC network, are not designed and directed from the perspective of system innovation. They are 'classical' innovation projects rather than transition projects (see also Table 1).

Table 1: Differences between a 'classical' innovation project and a 'transition' project aimed to contribute to a transition or system innovation.

	Classical innovation project	**Transition project**[2] **('transition experiment' in jargon)**
Objective	Possible solution for a not particularly complex and often practical problem; innovation with a view to new markets	Contribution to a wider societal challenge (such as a problem associated with sustainable development)
Nature of innovation	More incremental than radical; no significant change in the regime	The innovation is by nature radical and represents a break with the existing regime
Time horizon for the innovation	2-5 years	Beyond the experiment itself: medium- and long-term
Stakeholder	Specialised staff: researchers, engineers and other professionals in an	Multi-actor coalitions, including specialised staff and stakeholders from

[1] The methodology was published in S. Van den Bosch (2010, see below) and (in Dutch) by M.V. Van de Lindt, Emmert, S and Van Sandick, E. (2009), De transitioneringsmethode. Managementraamwerk voor maatschappelijke innovatie experimenten. Publication 03, Kenniscentrum voor duurzame systeeminnovaties en transities, TNO Strategie en Beleid en Drift, Erasmus Universiteit.
Table 2 is based on M.C. Van de Lindt and Van den Bosch, S. (2007). Raamwerk Strategische Interventietechniek Transitieprojecten. TNO, Drift, Delft, Rotterdam (internal paper) and on S. Van den Bosch. (2010). Transition experiments. Exploring societal changes towards sustainability. PhD Thesis, Erasmus University, Rotterdam.
[2] In transition literature such a transition project is called a transition 'experiment'. The reason behind this is that due to the radical character of transition or system innovation projects, it is expected that not every project will be successful in terms of traditional measures. The radical character however is whished for. Failures are accepted and especially useful for learning about the transition process and context.

	organisation	different organisations and/or domains
Learning	Often implicit and confined to a single domain/company or several key persons. It seldom encompasses a reassessment of fundamental assumptions and values	Learning about the innovation and structural obstacles is an essential element of the experiment. Findings are translated to the experiment and the environment
Management context	Classical project management	Project management is aimed at: - preserving the radical character of the actual innovation - creating change-oriented coalitions - learning and creating new structural conditions (such as rules, culture, legal preconditions)

Below is a framework that can be used for the 'transitioning' of projects. *'Transitioning' is an approach of analysing and adapting existing innovation projects (or a set of actions) based on a transition perspective, leading to a higher potential to contribute to a transition or system innovation.* The methodology is based on practice-oriented research and has been used several times in special project *transitioning* sessions. Starting point of the methodology are the ideal process and content of a transition or system innovation project.

Table 2 shows issues related to the *management* of the project (process issues); in table3 you find issues related to the content of the project.

How to use the tool and tables?

Here is a suggestion how to work with the tables:

1. Read (quickly) through the tables.
2. Ask individual people involved in the project to score all items, in terms of a -, 0 or +. Collect the scores in an overview. And alternative is to do the initial assessment collectively. Then, use colours to score the items: green for a positive score, orange for reasonable and red for something that is missing.
3. Nominate what already scored positively: well done!
4. You could then have a discussion on those items that score negatively, or red: which do you think are most important and why? Which items can be adapted/enhanced?
5. Develop interventions for the improvements.

Table 2 Management framework for transition projects: process

Steering/guiding dimensions Project characteristics	Deepening Activities aimed at learning as much as possible from the transition project in the specific context	Broadening Activities aimed at repeating the transition project in other contexts and/or connecting them to other functions or domains	Scaling up Activities aimed at anchoring or embedding the project in dominant ways of thinking, doing, organising and/or infrastructure
Process			
Room in process	The project's process design allows for reflection and for adapting the vision and the learning goals	In the project's process design is enough room for joint reflection with potential partners on the connection of the project to the broader context	The project's process design includes strategic reflection on hindrances and opportunities in dominant ways of doing, thinking, organisation and infrastructure (the regime)
Budget and planning	The project's budget and planning account for money, time and expertise for a learning processes of consortium partners	The project's budget and planning account for interaction with relevant other projects and partners in other domains	Resources are allocated for the transfer of results to actors who operate on strategic level (actors who have the power, influence and willingness for longer-term regime change)
Quality of learning process	The project design includes a *broad* and *reflexive* social learning process (reflexive on starting points, regime, project goals etcetera)	The learning process includes the identification of other related, relevant projects and how they could reinforce each other	The learning also focuses on the way in which experiences could be anchored into dominant ways of doing, thinking, organisation and infrastructure (the regime)
Mechanisms of justification and accounting	Accounting mechanisms have been developed to enhancing the quality of the learning processes	Justification /accounting mechanisms have been developed, which stimulate learning from and cooperation with other projects	Justification /accounting mechanisms have been developed to encourage the transfer of the project results to a strategic level (see for explanation row one)
Consortium/ competencies	When composing the project consortium not only expertise, but also open mindedness of participants were taken into account	The consortium participants are open to experiences of others, and able to look beyond their own field of expertise	The management has safeguarded the transfer of results to the strategic level and does have the competences to anchor results in key players
Management	The management has guaranteed the connection between project results and the social challenge	Supportive incentives/accounting mechanisms have been defined that stimulate interaction with other with other domains and partners	Supportive incentives/management mechanisms have been developed, which simulate feeding back results to key actors at a strategic level

Table 3 Management framework for transition projects: content

Steering/guiding dimensions Project characteristics	Deepening Activities aimed at learning as much as possible from the transition project in the specific context	Broadening Activities aimed at repeating the transition project in other contexts and/or connecting them to other functions or domains	Scaling up Activities aimed at anchoring or embedding the project in dominant ways of thinking, doing, organising and/or infrastructure
Substance			
Social challenge	The project goals are linked to societal challenges (transition goals) that are made explicit	The system innovation project is tuned to relevant related innovative projects and these are linked to each other by a (common) societal challenge that is made explicit	The project is adapted to and - whenever possible - takes advantage of societal trends and other new developments
System analysis	Project participants have shared their perspective on dominant ways of thinking, doing, organising and infrastructure in the sector (from which the project deviates)	Project participants have identified similar and related innovative projects and potential new partners, application domains and functions	Key persons are identified with the power and willingness to influence dominant ways of thinking, doing, organising and infrastructure and who thus could help establishing new regime(s)
Vision/ 'Leitbild'	Participants in the project are sharing a long-term sustainability vision	An overarching sustainability vision has been developed to align the project with related (system) innovative projects, in order to work in a common direction	The overarching vision is brought to the attention of the strategic level (management and Board level and other external regime players in society who are important for longer-term structural change)
Learning objectives /intended innovation	Explicit learning goals are defined with regard to the desired (interrelated) changes in dominant ways of thinking, doing, organising and infrastructure	It has been explored between concerned participants if and how the system innovation project could be done in another context	Learning about opportunities and barriers in ways of thinking, doing, organising and infrastructure is part of the learning goals
Intended results	A distinction is made between results that are context generic and context specific	Project results, including those of learning results, have been shared with participants of similar projects	Results, including relevant results from the reflection process, have been communicated to the strategic level and are leading to structural support and resources