

# The Cost of Unsustainability



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RESEARCH HANDBOOK ON  
Sustainable  
Project Management

Edited by  
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- Co-founder of enable2change, 20 years of experience as trainer and consultant
- Board member



# Get in touch with The Project Hub at UCL



LinkedIn page **The Project Hub**

Projects consume  
resources and create  
outputs...

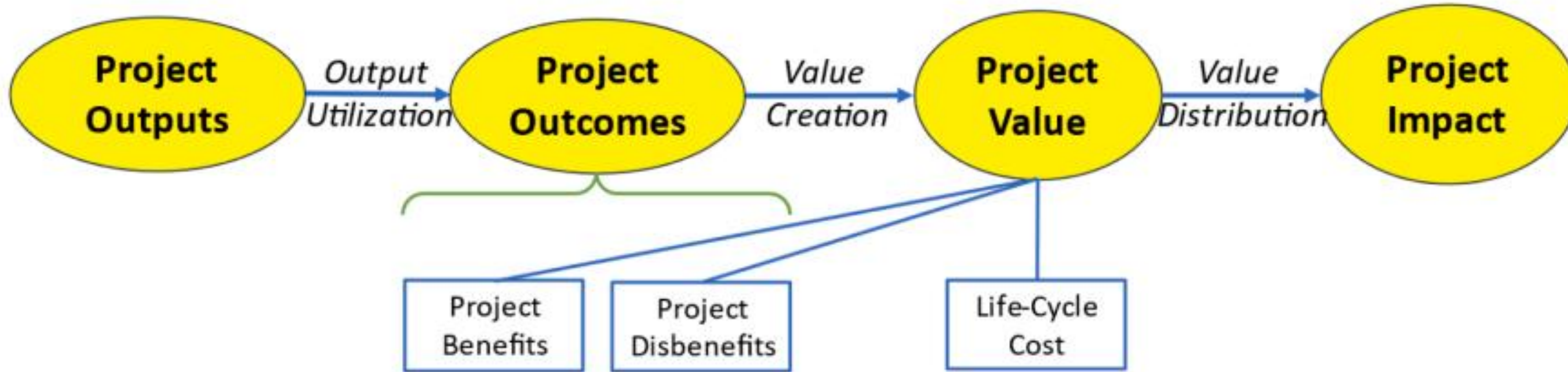


Fig. 1. The Outputs-Outcomes-Value-Impact (OOVI) model.

# Cost of unsustainability

- Unfinished projects
- Never ending projects
- Not utilized outputs
- Benefits only for owner
- Major disbenefits for owner and/or stakeholders
- Value not distributed fairly
- Negative impact on Planet, People, Prosperity



# How to foster unsustainability by a project

- Only focus on shareholder
- No transparency
- Not enough planning or rigid planning
- Foster unfairness
- Only short term orientation
- No engagement with stakeholder
- Only focus on the technical solution
- ....

A turn to  
the bright side



# Sustainable development

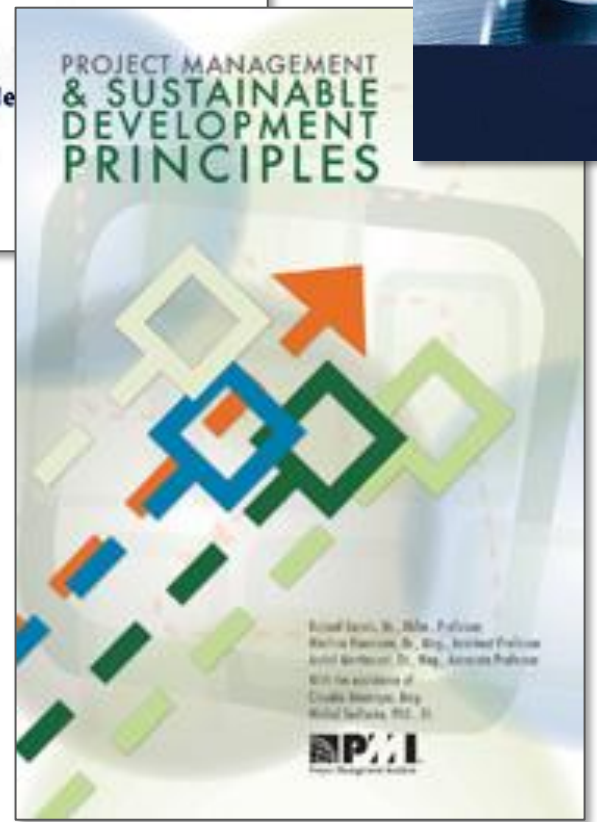
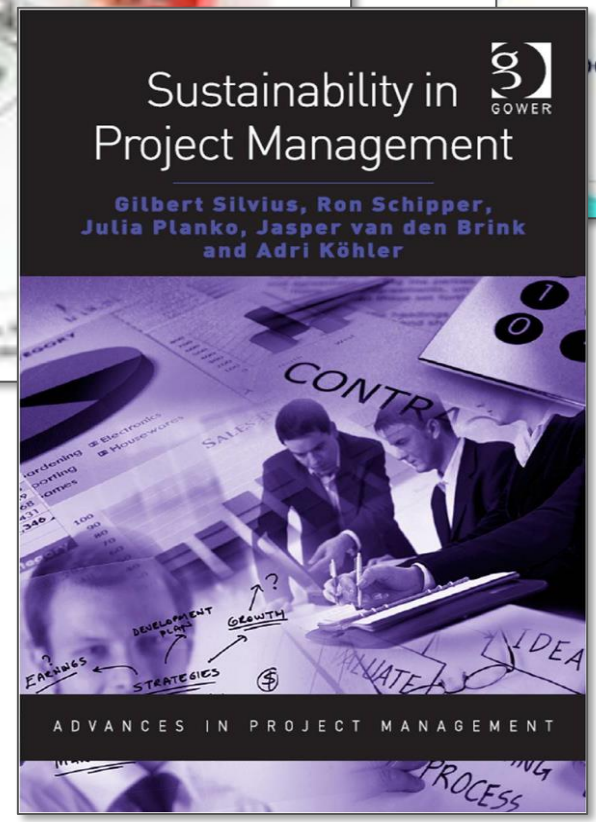
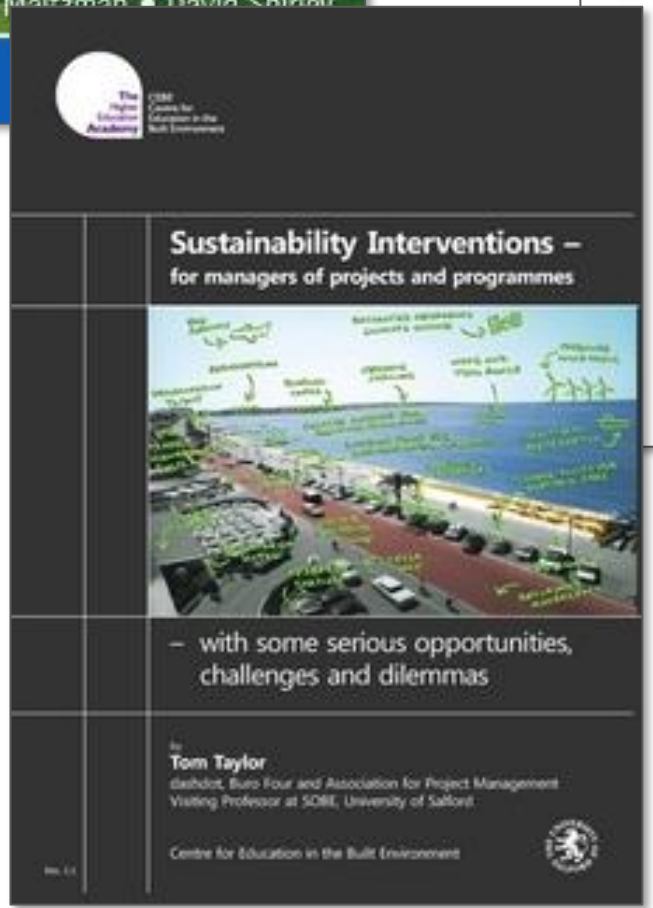
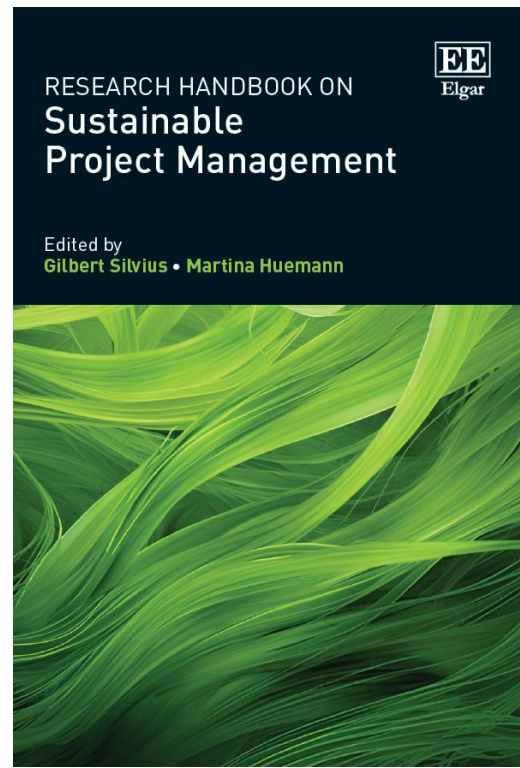
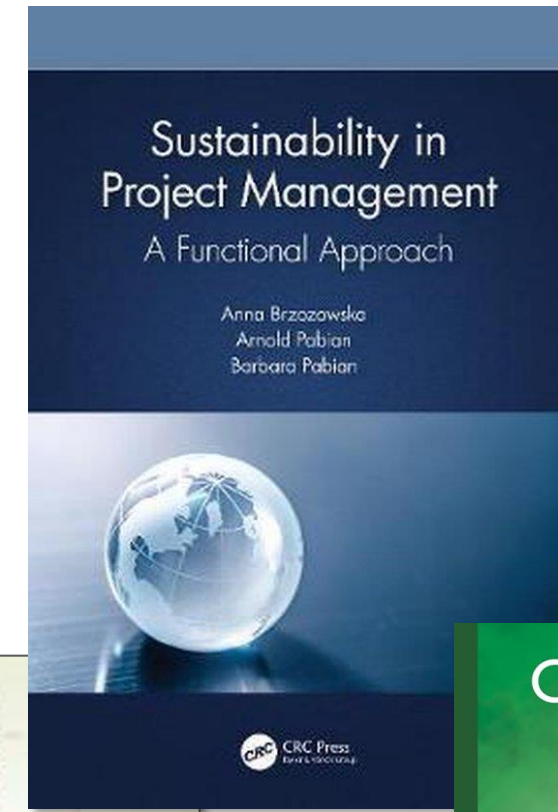
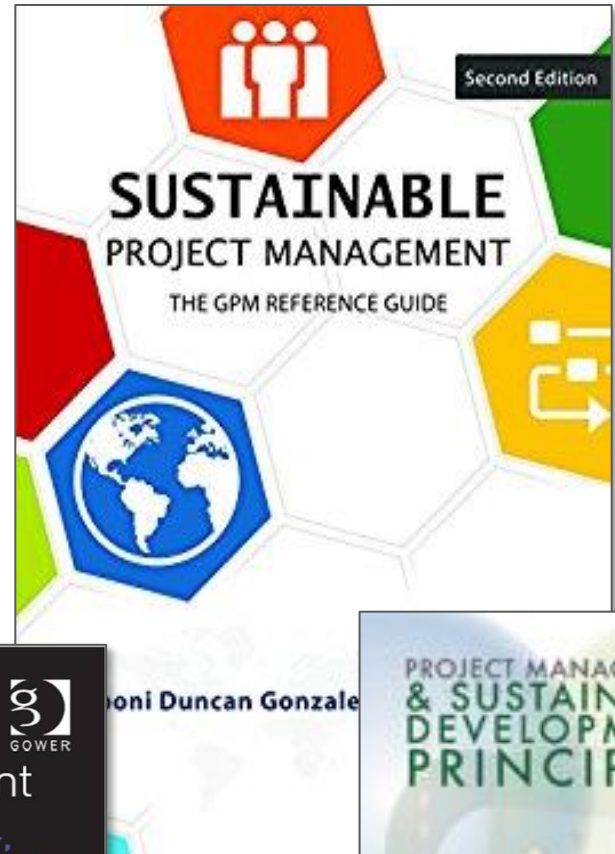
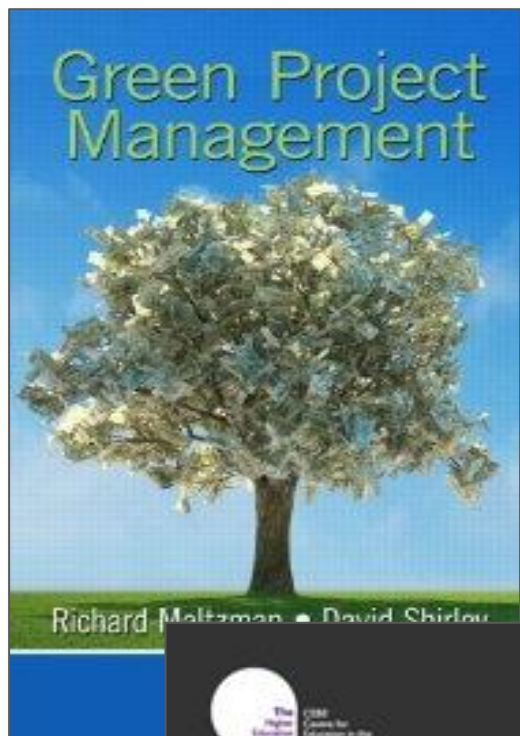
- **Balancing**
  - Economic, ecologic, social-oriented
  - Short, mid, long term-oriented
  - Local, regional, global-oriented
- Values-based



*„... a development that meets the needs of the present without compromising the ability of future generations to meet their own needs..“*

(Our Common Future. The Report of the World Commission on Environment and Development 1987)







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Editorial

## Projects to create the future: Managing projects meets sustainable development



### 1. Why we think projects create the future

Concerns about the depletion of Earth's natural resources may date back as far as the early 18th century, when Saxon Mining Officer Hans Carl von Carlowitz published the first comprehensive treatise about sustainable yield forestry. However, it was the post-World War II economic growth era that sparked new concerns about the consequences of mankind's use of earth's natural resources. The 1972 book "The Limits to Growth" (Meadows et al., 1972) predicts that the exponential growth of world population and world economy will result in overshooting the planet's capacity of natural resources. And although there is not one single way to define or measure mankind's ecological footprint (Toderou, 2010), it is estimated that we are now every year using up 1.5 to 1.6 times earth's annual biocapacity.

projects is being discussed in academia and practice (Gareis et al., 2013; Maltzman and Shirley, 2011; Silvius et al., 2012; Keeys and Huemann, 2017a). Several studies (for example Aarseth et al., 2017-in this issue; Marcelino-Sádaba et al., 2015; Silvius and Schipper, 2014) report a significant growth in relevant publications in the last 10 years. It may therefore be observed that an academic conversation debate on the relation between project management and sustainability or sustainable development is emerging.

With this special IJPM theme on 'Managing Projects & Sustainability', the editors aim to continue, stimulate and enrich this conversation.

### 2. The thrive for sustainable development as an opportunity in project management

# Sustainable Project Leadership

Integrates the guiding principles of sustainable development in **all** projects to support

- sustainability of the project
- sustainability by the project



2014 -2023

Renovation  
350 Mio Euro  
20% buffer

52 Mio Euro  
temporary relocation

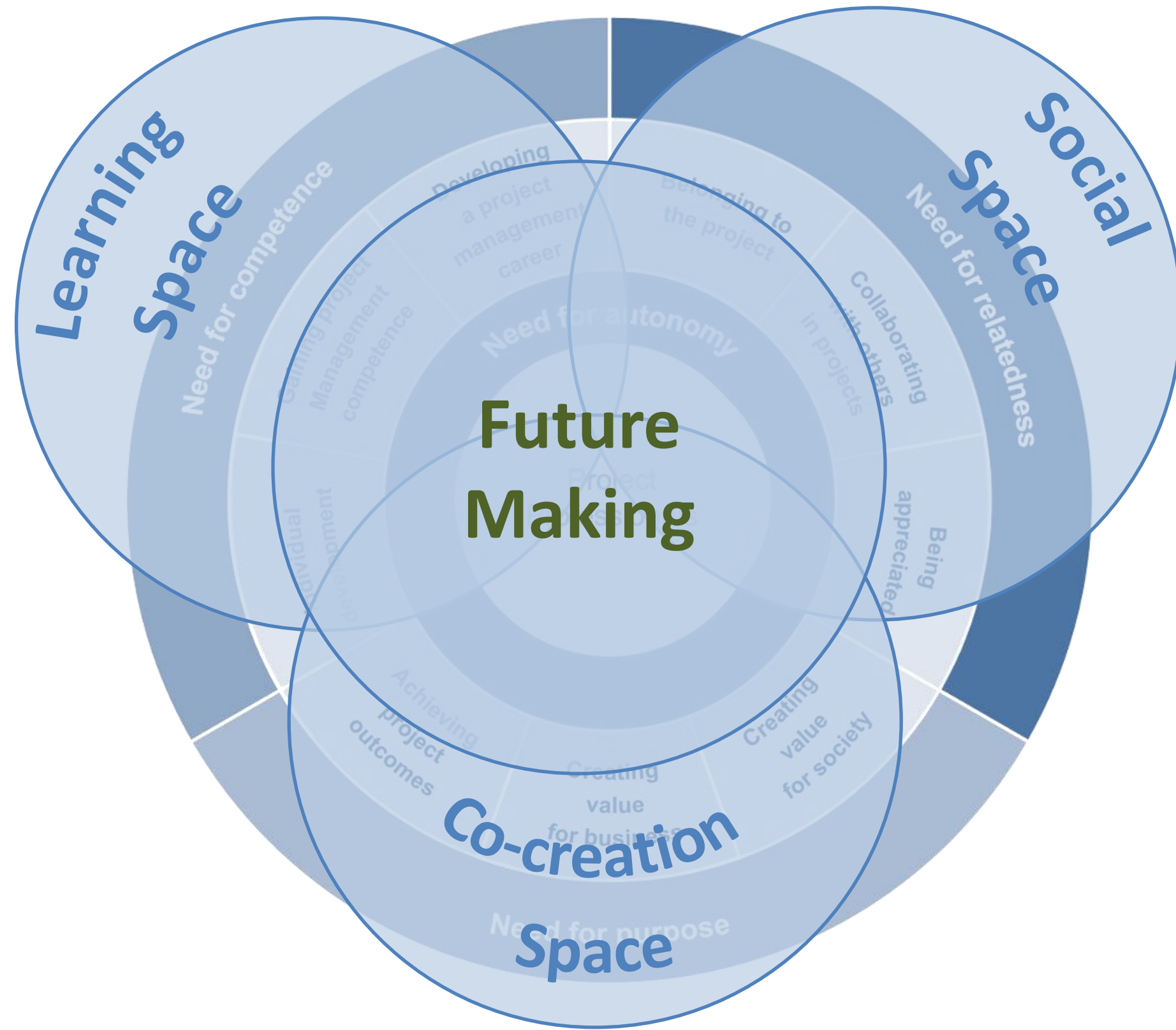
Plus 47 projects in  
parliament

Consensus of all  
political parties

## Holistic Definition



# Project Spaces

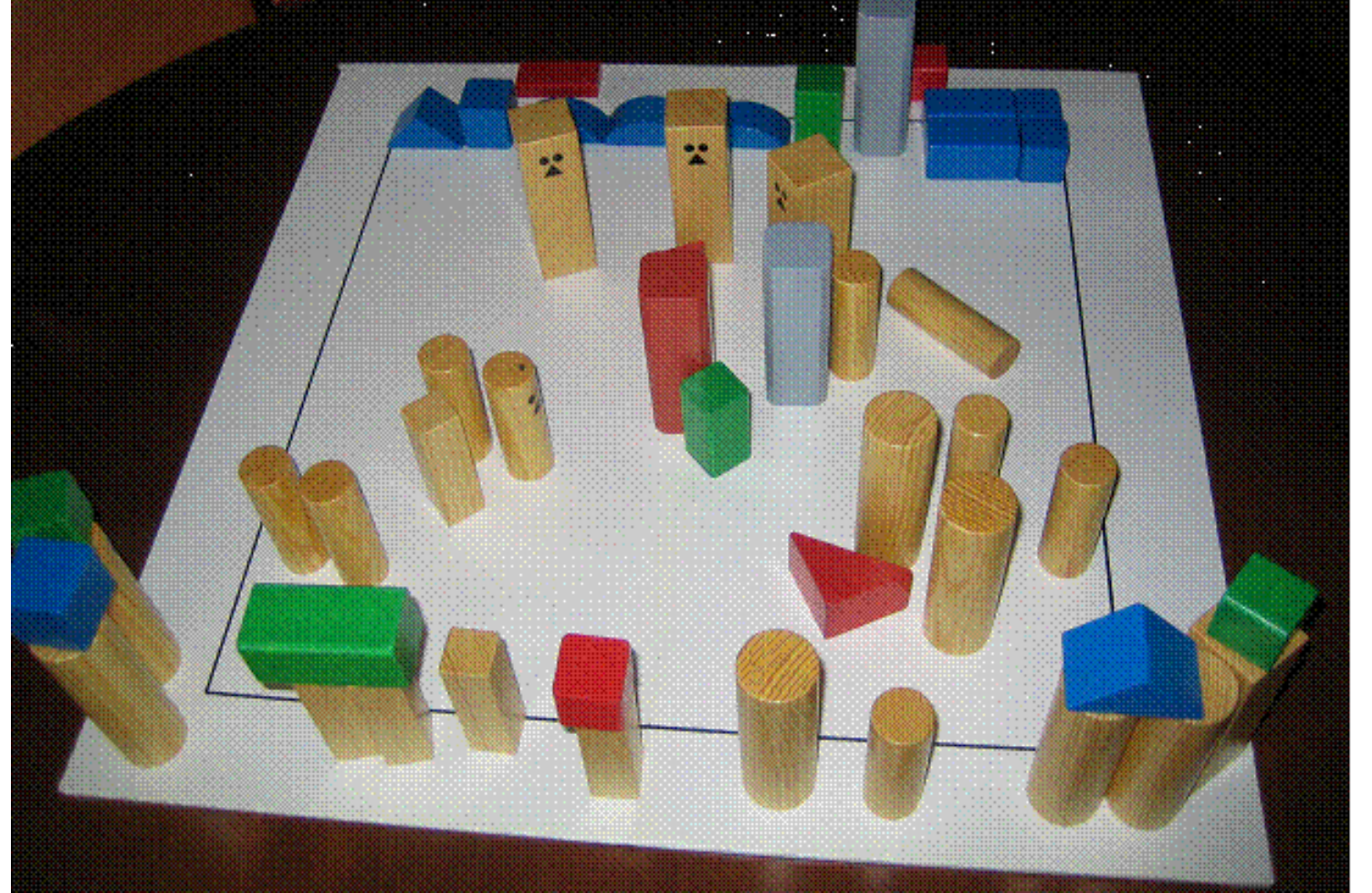


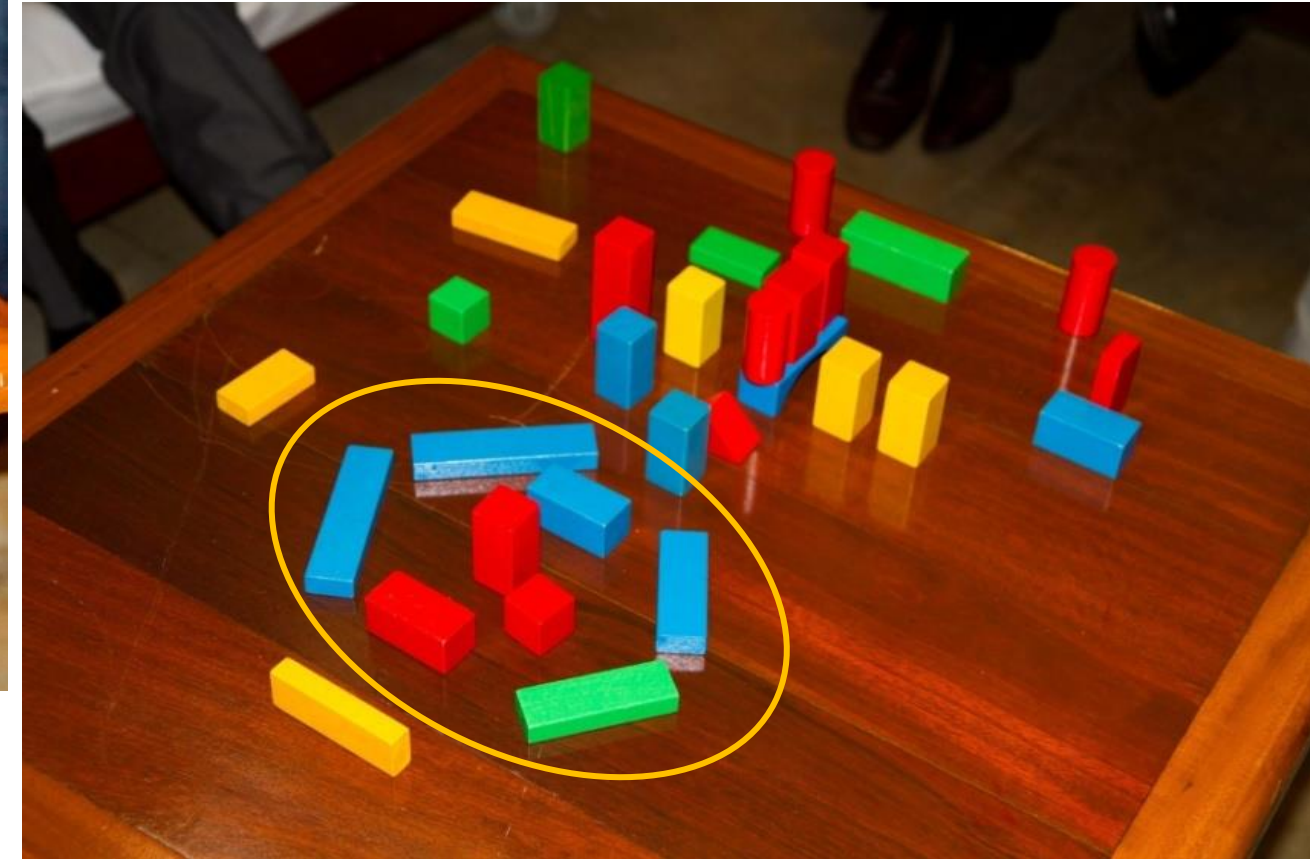
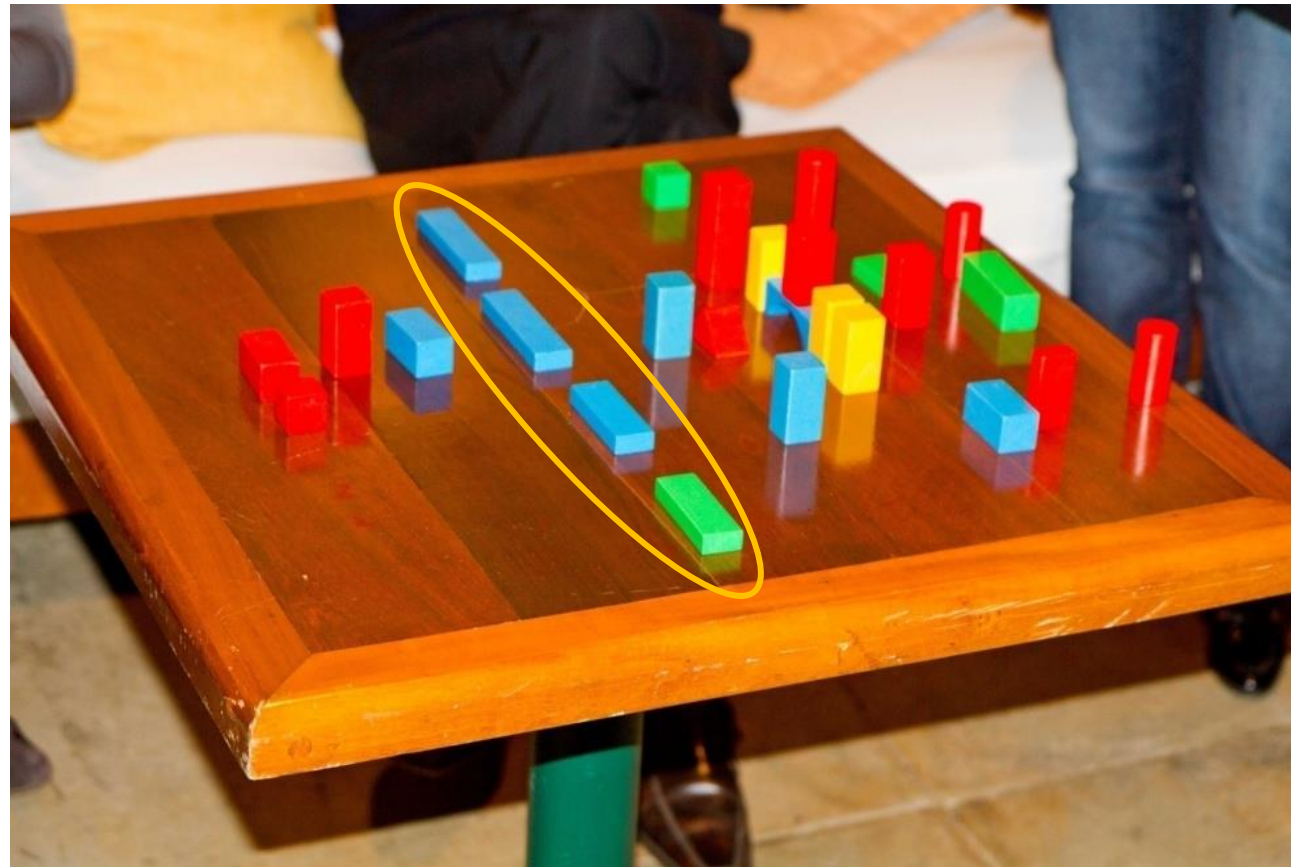
Future making to co-  
create desirable futures

# Next Practices









# Project Stakeholder Analysis: EPC Wind Park Farm

| Project Stakeholder Analysis |  |                      |          |        |       |          |        |   |                          |          |        |       |          |        |
|------------------------------|--|----------------------|----------|--------|-------|----------|--------|---|--------------------------|----------|--------|-------|----------|--------|
| Stakeholder                  | Project Expectations                                   | Project Expectations |          |        |       |          |        | Stakeholder Expectations  | Stakeholder Expectations |          |        |       |          |        |
|                              |  | Economic             | Ecologic | Social | Local | Regional | Global |   | Economic                 | Ecologic | Social | Local | Regional | Global |
| Client                       | Payment on time, fair working conditions               | x                    |          | x      | x     |          |        | Technical excellence  | x                        |          |        | x     |          |        |
|                              | Support with ecologic regulations on site              |                      | x        |        | x     |          |        | Compliance with environmental regulations   |                          |          | x      | x     |          |        |
|                              | Client organizes communication between main suppliers  | x                    |          | x      | x     |          |        | Trustworthiness   | x                        |          |        | x     |          |        |
|                              | Client takes on responsibility for clean water on site | x                    | x        |        | x     |          |        | Find local staff for service and training   |                          |          | x      | x     |          |        |
| Siemens Brazil               | Support of project                                     | x                    |          | x      | x     |          |        | Good pilot for establishment of new product line in Brazil                            |                          |          |        |       | x        |        |
|                              |  |                      |          |        |       |          |        | Compliance with environmental regulations   |                          |          |        |       | x        |        |
|                              |  |                      |          |        |       |          |        | Compliance with HSE regulations, zero harm policy and other relevant Siemens policies |                          | x        | x      |       | x        |        |
| Community X                  | Clean water  |                      | x        | x      |       | x        |        | Water and waste solution during project   | x                        | x        |        | x     |          |        |
|                              | Adequate and healthy food                              |                      |          | x      |       | x        |        | Job opportunities   |                          |          | x      |       | x        |        |
|                              | Acceptance of project by community X                   |                      |          | x      |       | x        |        | Adequate behaviour of onsite staff in community                                       |                          |          | x      |       | x        |        |
| Public finance agency        | Clear standards  | x                    |          |        |       | x        |        | Use at least 50% national content in project  |                          |          | x      | x     |          |        |
|                              | Payment on time  | x                    |          |        | x     |          |        |   |                          |          |        |       |          |        |
| Transportation supplier      | On time delivery of parts to the sites                 | x                    |          |        | x     |          |        | Payment on time   | x                        |          |        | x     |          |        |
|                              | Optimized transport                                    | x                    | x        |        | x     |          |        | Cooperation and clear communication with factories producing the parts                | x                        |          | x      |       | x        |        |
|                              | Clean roads  |                      | x        |        | x     |          |        | Availability of police escorts  | x                        |          |        | x     |          |        |

## Stakeholder-oriented Risk Identification

| Project Risk Identification |              |  |          |          |        |       |          |                  |                     |  |          |          |        |       |                    |        |          |  |   |          |          |        |       |  |   |
|-----------------------------|--------------|--|----------|----------|--------|-------|----------|------------------|---------------------|--|----------|----------|--------|-------|--------------------|--------|----------|--|---|----------|----------|--------|-------|--|---|
| Stakeholder                 | Project Risk |  |          |          |        |       |          | Stakeholder Risk |                     |  |          |          |        |       |                    |        | Measures |  |   |          |          |        |       |  |   |
|                             | +/-          |  | Economic | Ecologic | Social | Local | Regional | Global           | Risk during project |  |          |          |        |       | Risk after project |        |          |  |   |          |          |        |       |  |   |
|                             |              |  |          |          |        |       |          |                  | +/-                 |  | Economic | Ecologic | Social | Local | Regional           | Global |          | +/-  |   | Economic | Ecologic | Social | Local | Regional   | Global  |
| Client                      | -            | Client does not organize adequate communication and integration between main contractors | x        |          | x      | x     |          |                  | -                   | Sub optimization                                       | x        |          | x      | x     |                    |        | -        | Utility does not meet requirements               | x |          |          | x      |       |  | Communicate to client need for integrated communication between client and all main contractors |
|                             | -            | Client does not ensure acceptance of projects with communities                           |          |          | x      | x     |          |                  | -                   | Community does not support project                     | x        |          | x      | x     |                    |        | -        | Community does not accept wind park farm         | x |          |          | x      |       | Raise awareness with client. Insist on code of behavior for all onsite personnel |   |
|                             | -            | Client does not provide information on environmental regulations                         | x        | x        |        | x     | x        |                  | -                   | Project does not comply with environmental regulations | x        | x        |        | x     | x                  |        | -        | Utility does not meet environmental requirements | x | x        |          | x      | x     | Raise awareness with client. Seek relevant information themselves                |   |
| Siemens Ltda                | -            | No adequate support and resources for project  | x        |          | x      |       |          | x                | +                   | Pilot for new product/project type                     | x        |          |        |       | x                  |        | +        | Reputation gain, grow market share               | x |          |          | x      |       | Explicit consideration as pilot project  |   |

# Take aways

# How to foster sustainable development

- Inclusive stakeholder definition and engagement
- Transparency and tracability
- Perceived fairness
- Future orientation and future making
- Co-creation
- Multiple engagement forms
- Holistic and inegrated approaches
- Honest negotiations on desirable futures

Let's create desirable  
futures together!



# Get in touch

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LinkedIn page **The Project Hub**





## Sources

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