

**Pack-Age 2023 (Tuesday 21.11.):**

# **Communicating sustainability impacts and offerings**

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**Researcher and Senior lecturer in Design for Sustainability**

**Aalto ARTS Design**

# Agenda for today afternoon

## **13:00–13:20 Introduction to session (and recap of DfS action)**

- Case work: What is your main contribution to sustainability impacts? What is your sustainability offering for the future?

## **13:20–14:00 Lecture: Communicating sustainability impacts and offerings with design action**

## **14:00–14:45 Exercise in groups: Communicating for scaling-up**

- Case work: Consider the communication of your main sustainability offering

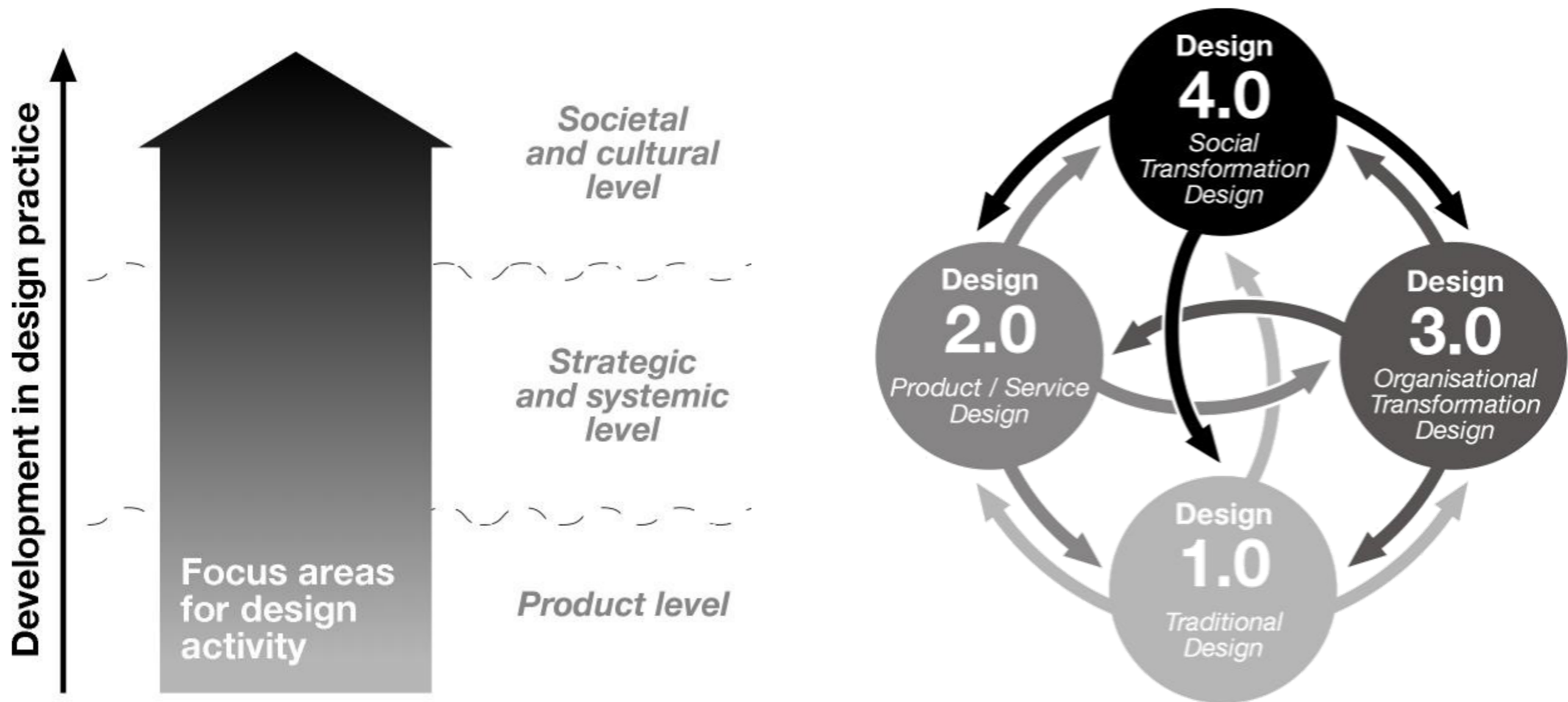
## **14:45–15:30 Reflection & summary**

- Present results of group work; Summary of the session

## **15:30– Continuing work in case groups...**

# Short recap of design for sustainability action

# Emerging areas for design action



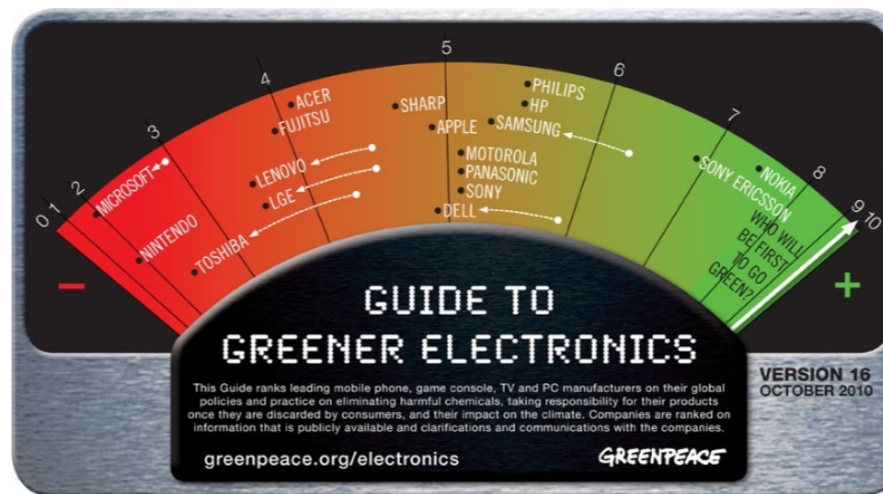
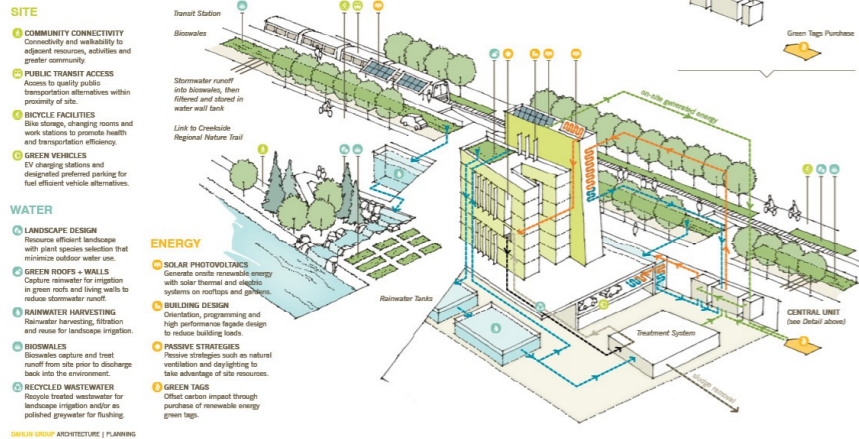
Source: Author

Source: Aminoff, et al. 2011;  
GK VanPatter and Elizabeth Pastor, 2005

# Design action today – from communication, to products, services, and platforms:

## SUSTAINABLE SYSTEMS

Sustainability from a Whole Systems Approach



# Design for sustainability focus levels

Design for sustainability (DfS) approaches divided into four levels of focus (Ceschin & Gaziulusoy, 2019):

## 1. Product innovation level:

- Green design
- Ecodesign
- Emotionally durable design
- Design for sustainable behaviour
- Cradle-to- Cradle design
- Biomimicry design
- Design for the Base of the Pyramid

## 2. Product-Service System innovation level:

- Product-Service System design

## 3. Spatio-Social innovation level:

- Design for Social Innovation
- Systemic Design

## 4. Socio-Technical System Innovation level:

- Design for System Innovations and Transitions

Source: Ceschin, Fabrizio, and Idil Gaziulusoy. 2016. "Evolution of Design for Sustainability: From Product Design to Design for System Innovations and Transitions." *Design Studies* 47 (November): 118–63.

# Design for sustainability focus levels

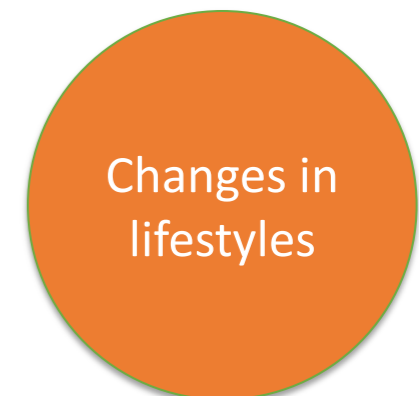
Design for sustainability (DfS) approaches divided in four levels of focus (Ceschin & Gaziulusoy, 2019):

**1. Product innovation level**

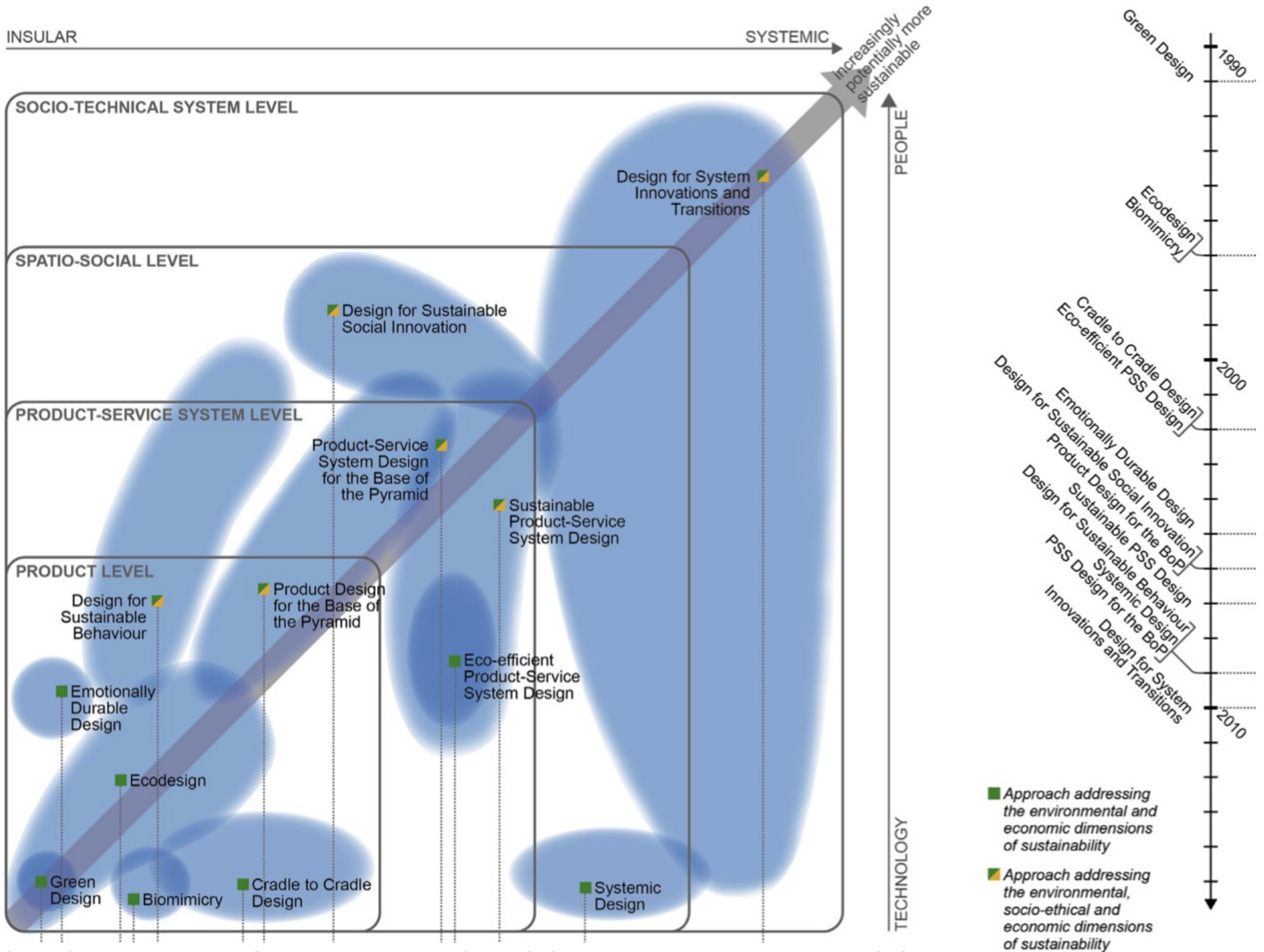
**2. Product-Service System innovation level**

**3. Spatio-Social innovation level**

**4. Socio-Technical System Innovation level**



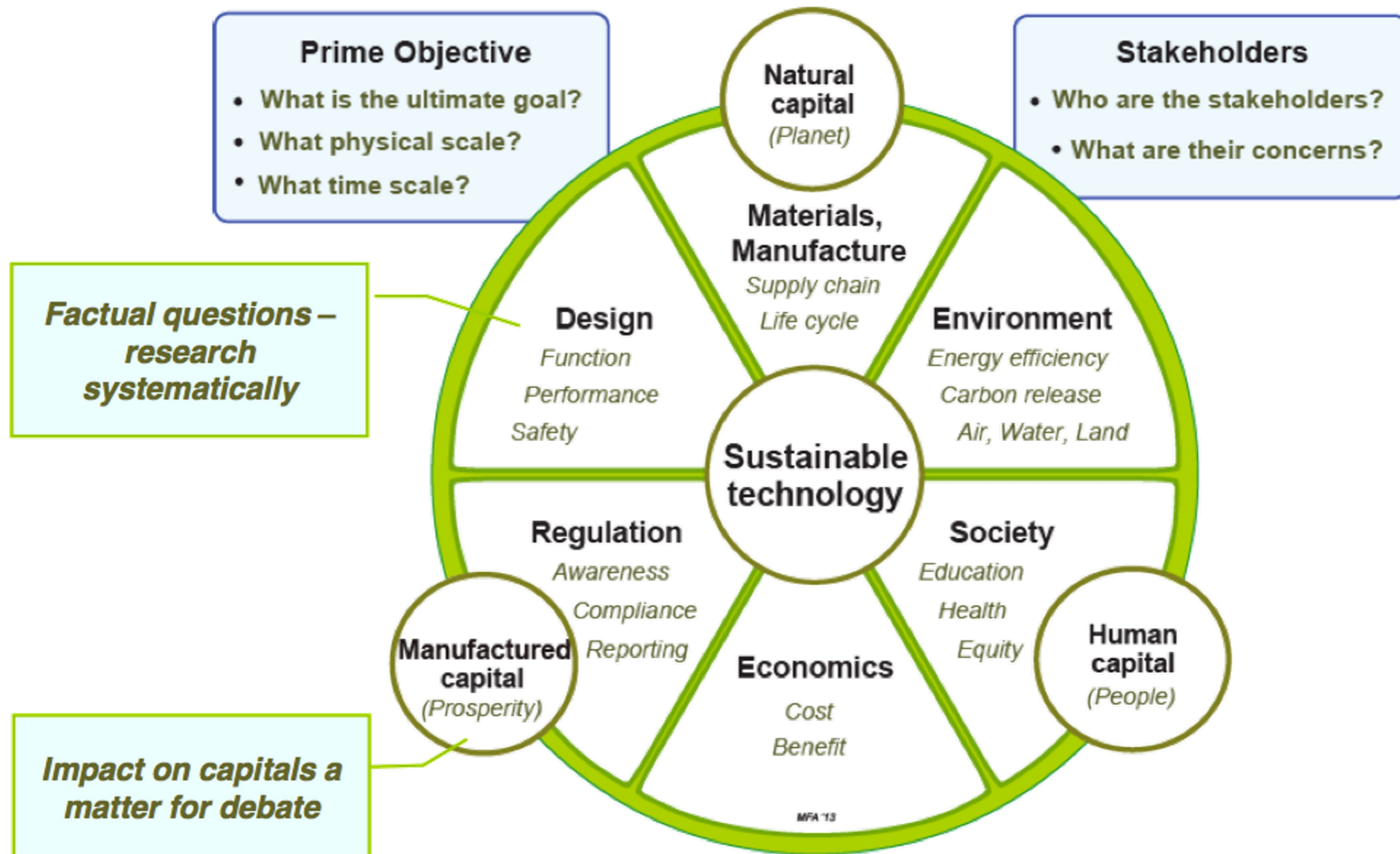
*Designing ... Communicating ... Scaling-up*



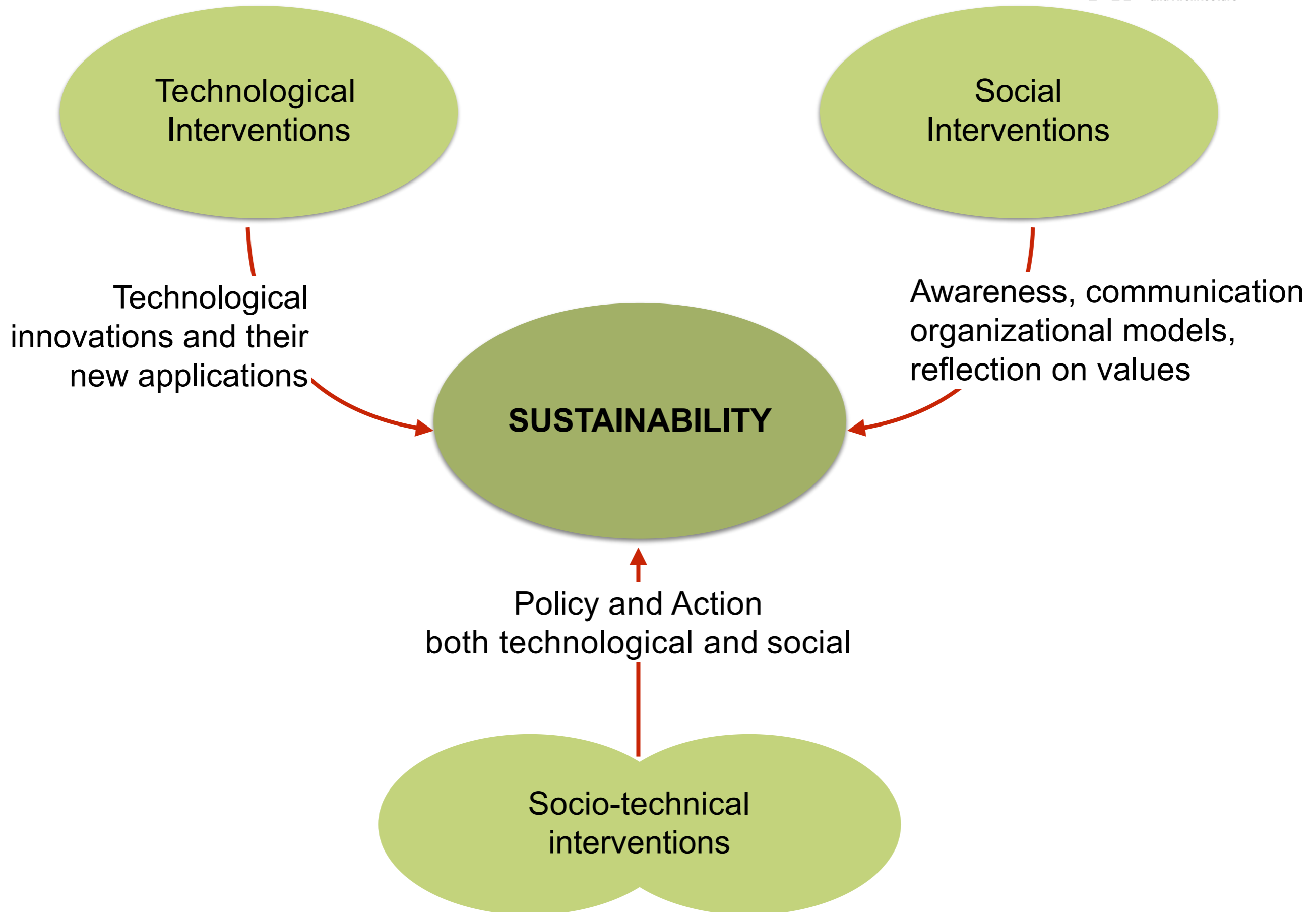
Source: Ceschin, Fabrizio, and Idil Gaziulusoy. 2016. "Evolution of Design for Sustainability: From Product Design to Design for System Innovations and Transitions." *Design Studies* 47 (November): 118–63.



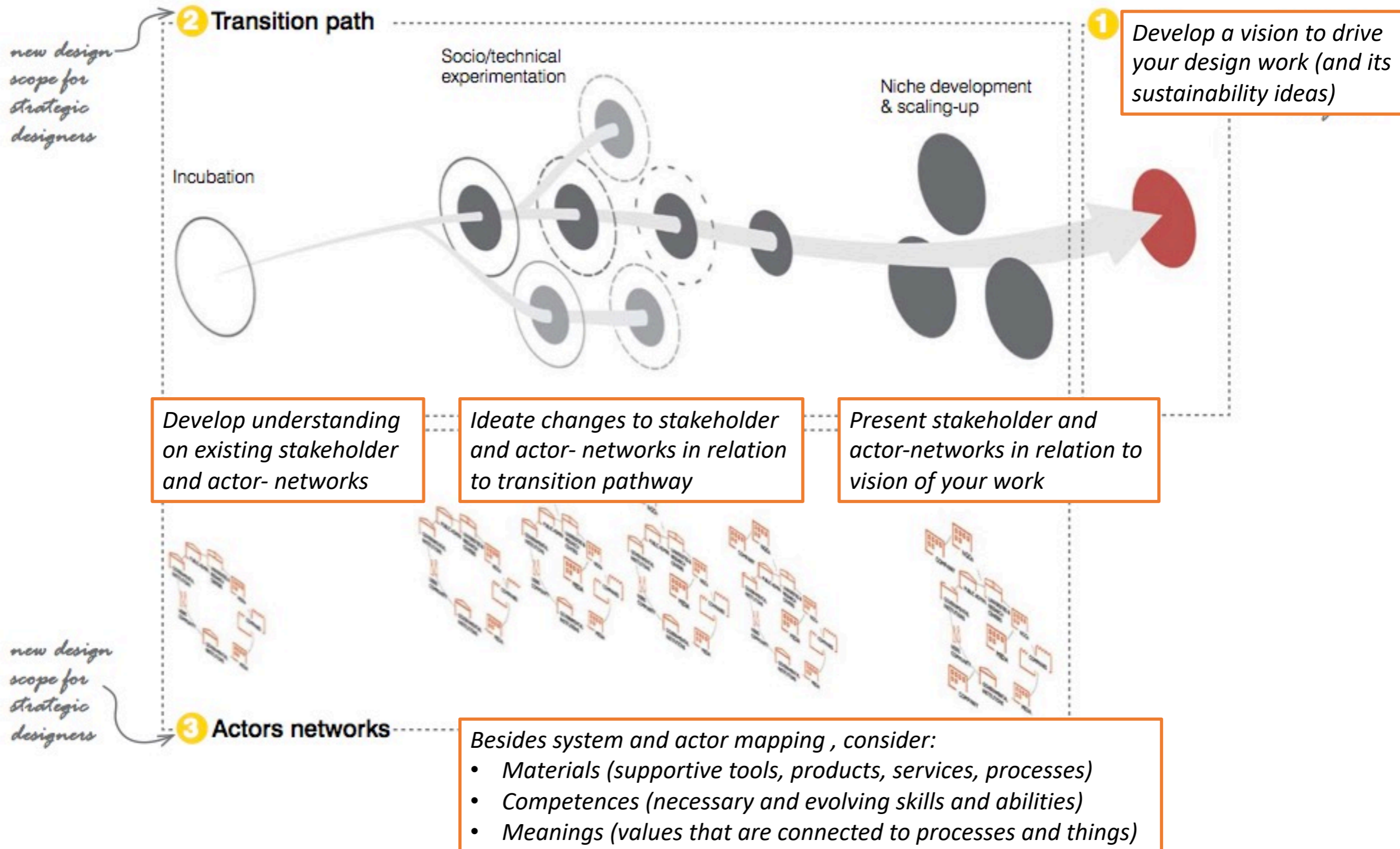
# Systemic sustainability:



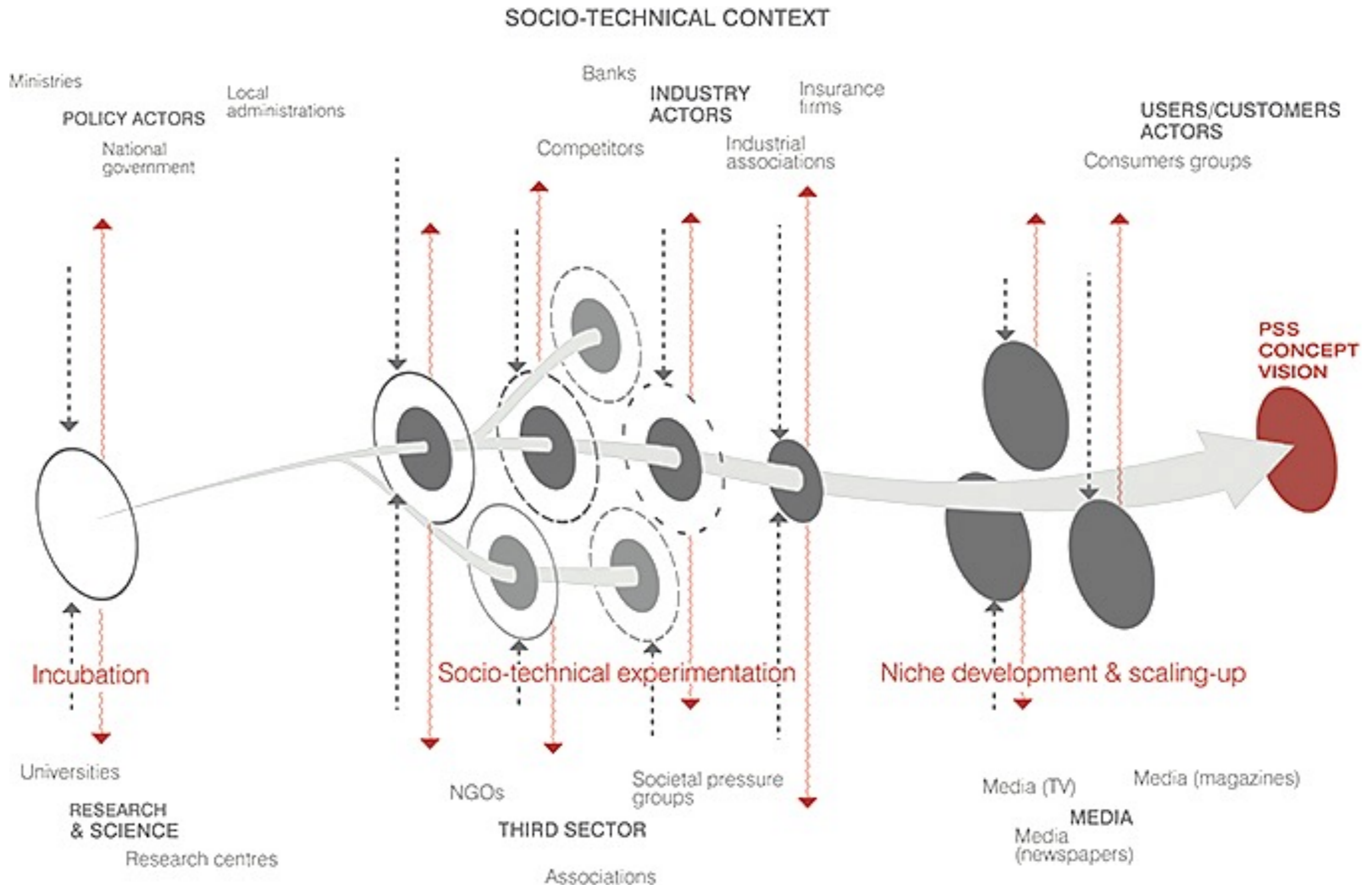
Source: Ashby et al. (2013) Materials & SD



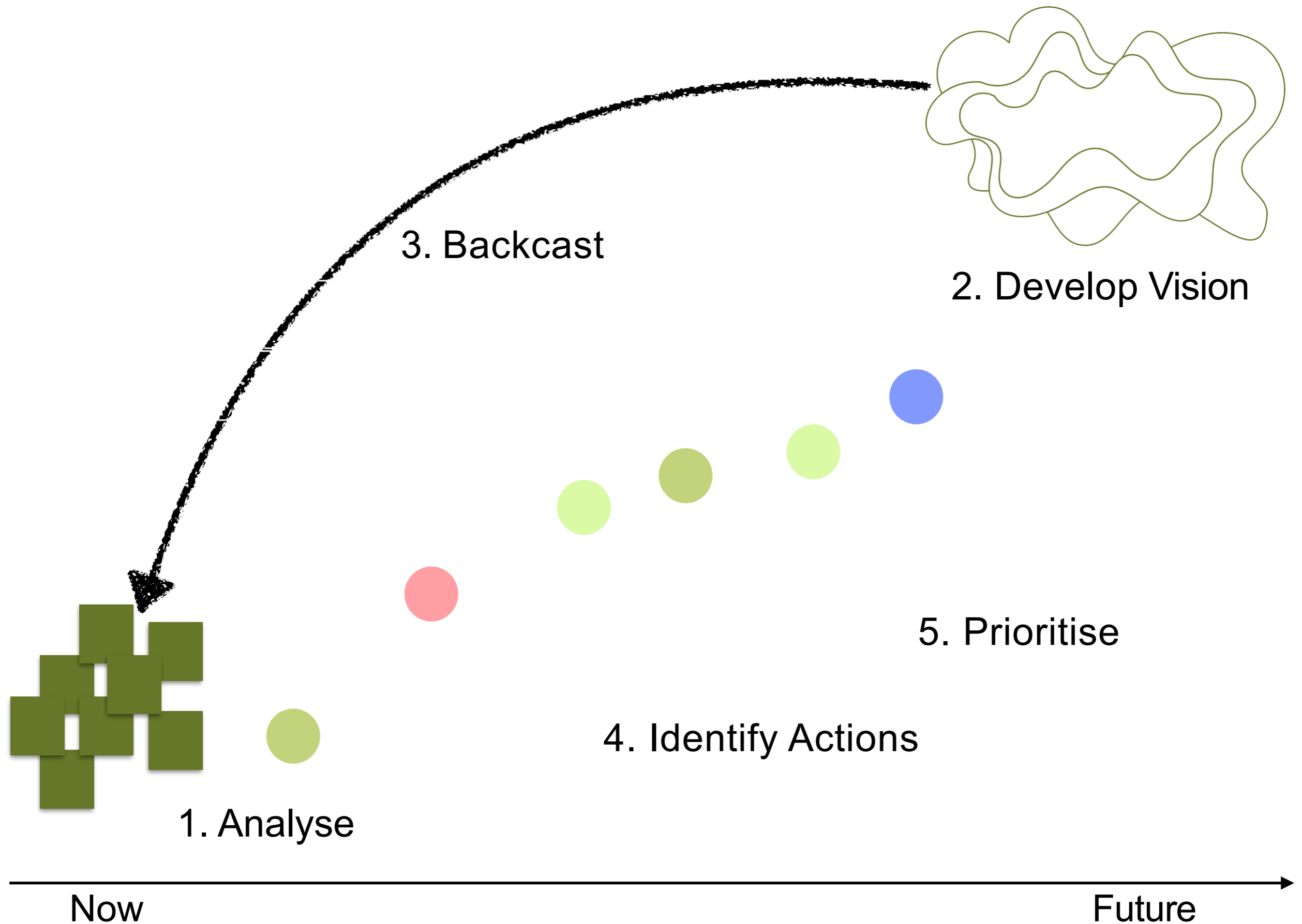
# Scaling-up your design ideas, and designing transitions:



# Managing the process on a timeline and through interaction:

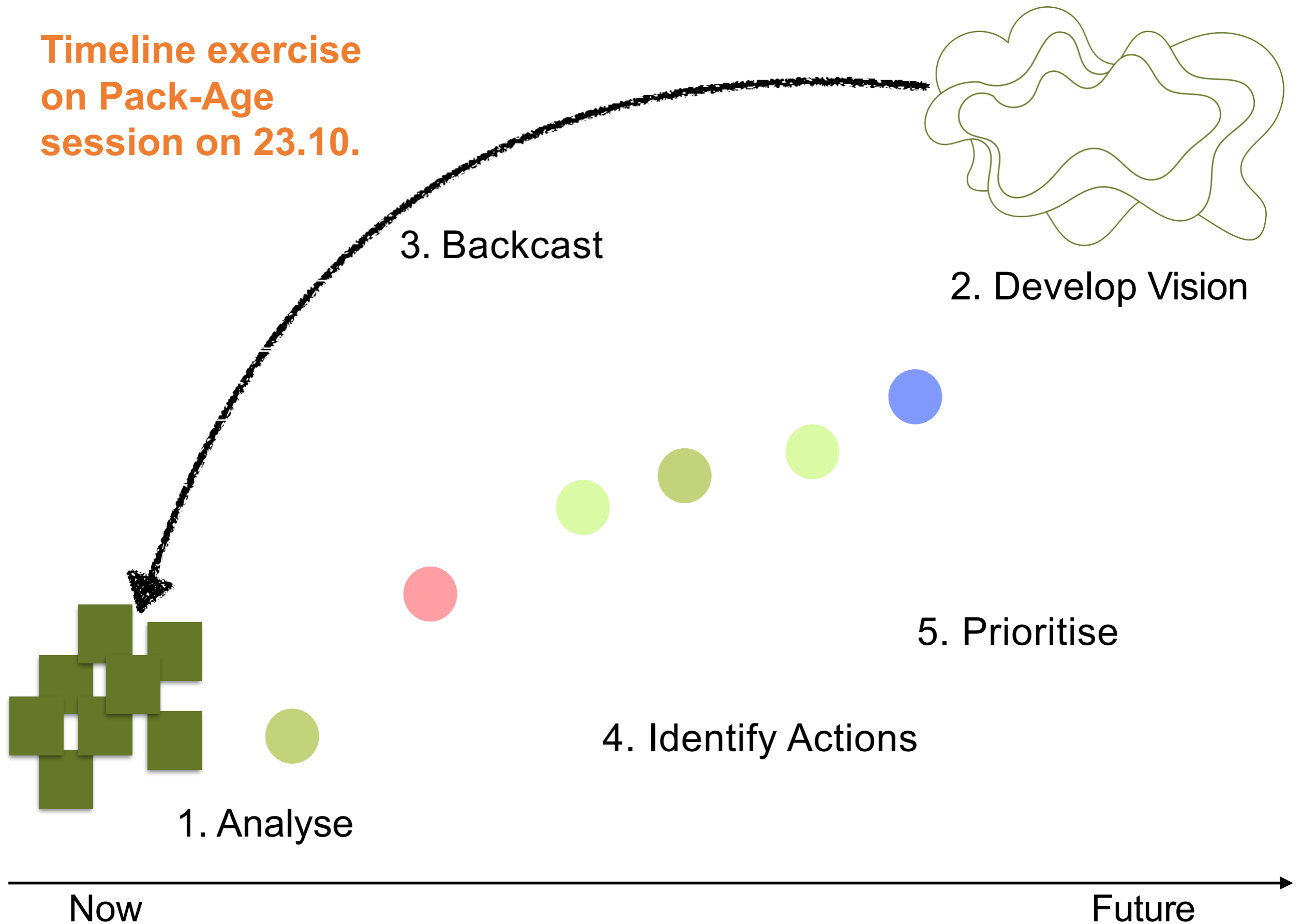


# Transition projects facilitation process:



# Transition projects facilitation process:

**Timeline exercise  
on Pack-Age  
session on 23.10.**



**What is your sustainability offering?**

# Case work: What are your DfS offerings for future sustainability?

You have 5 minutes for discussion to remind you of...

Discussion together:

- **What is/are the main sustainability offering(s) in your design?**  
Think of environmental and social, but also market benefits...
- ***How does your product change the markets, who/what needs to change?***
- ***What is the impact on sustainability? Who is affected by your design idea (and how)?***
- **Reflect on the vision for sustainability and your concept's main sustainability offering(s) in relation to key stakeholders at focus**



# Communicating Sustainability with(in) Design Action





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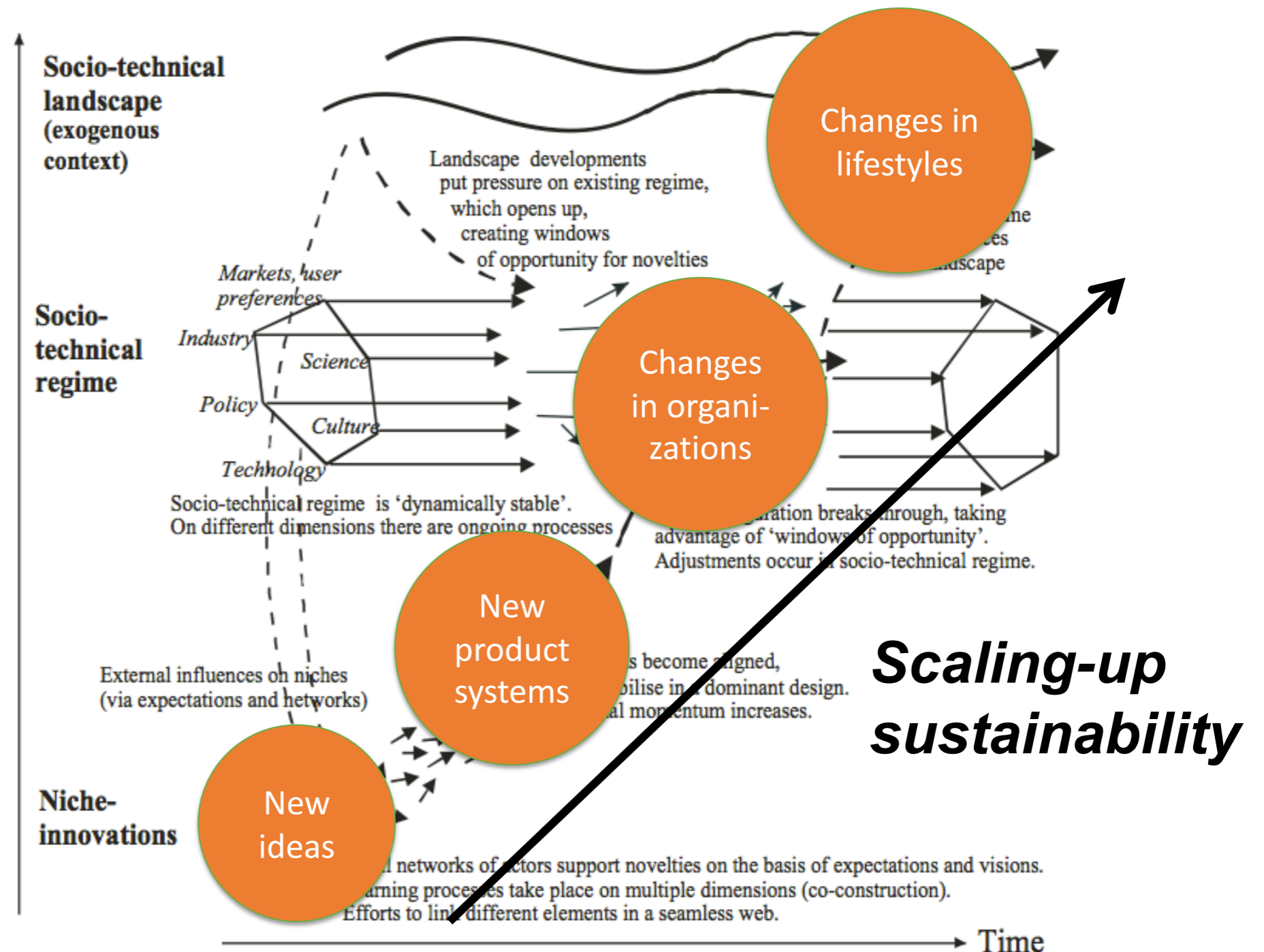
# Multilevel perspective to design



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# Designing scaling-up of your concept idea

Scaling-up  
concept ideas  
within the socio-  
technical context:



Source: Geels, F. (2011) Multi-level perspective on sustainability transitions

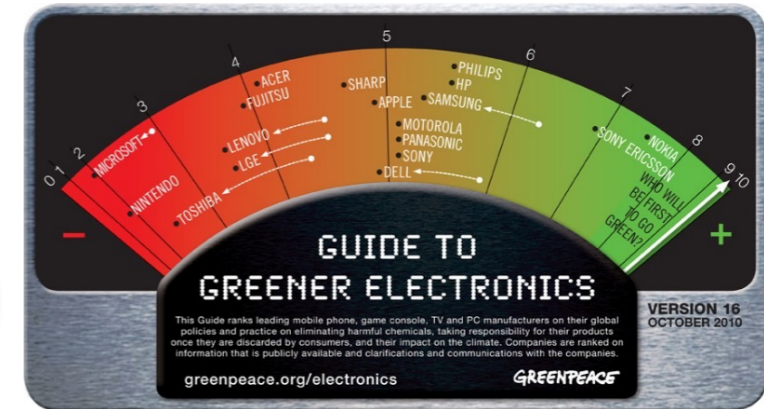
# Scaling-up sustainability in mobile ICT:

New ideas

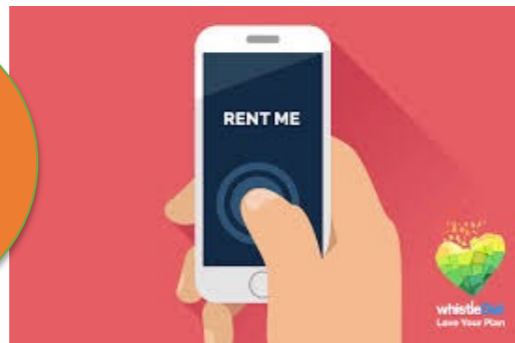


**FAIRPHONE**

Changes in organizations



New product systems



**SAMSUNG mobile take-back program**

Recycling is the first step toward environmental protection. That is why Samsung Electronics has actively participated in a recycling program for end-of-life mobile devices. Through the program Samsung is leading the efforts to create a recycling-based society where discarded products are reused as resources for manufacturing, and at the same time it is making great contributions to preserving the environment and using resources efficiently.

**PLUG-IN TO eCYCLING™ WITH U.S. EPA**

Samsung is a proud PLUG-IN TO eCYCLING™ partner. Find out more on how you can recycle your cell phone at [www.epa.gov/cellphones](http://www.epa.gov/cellphones). Recycle your cellphone. It's an easy call.

**Recycle your unwanted goods**

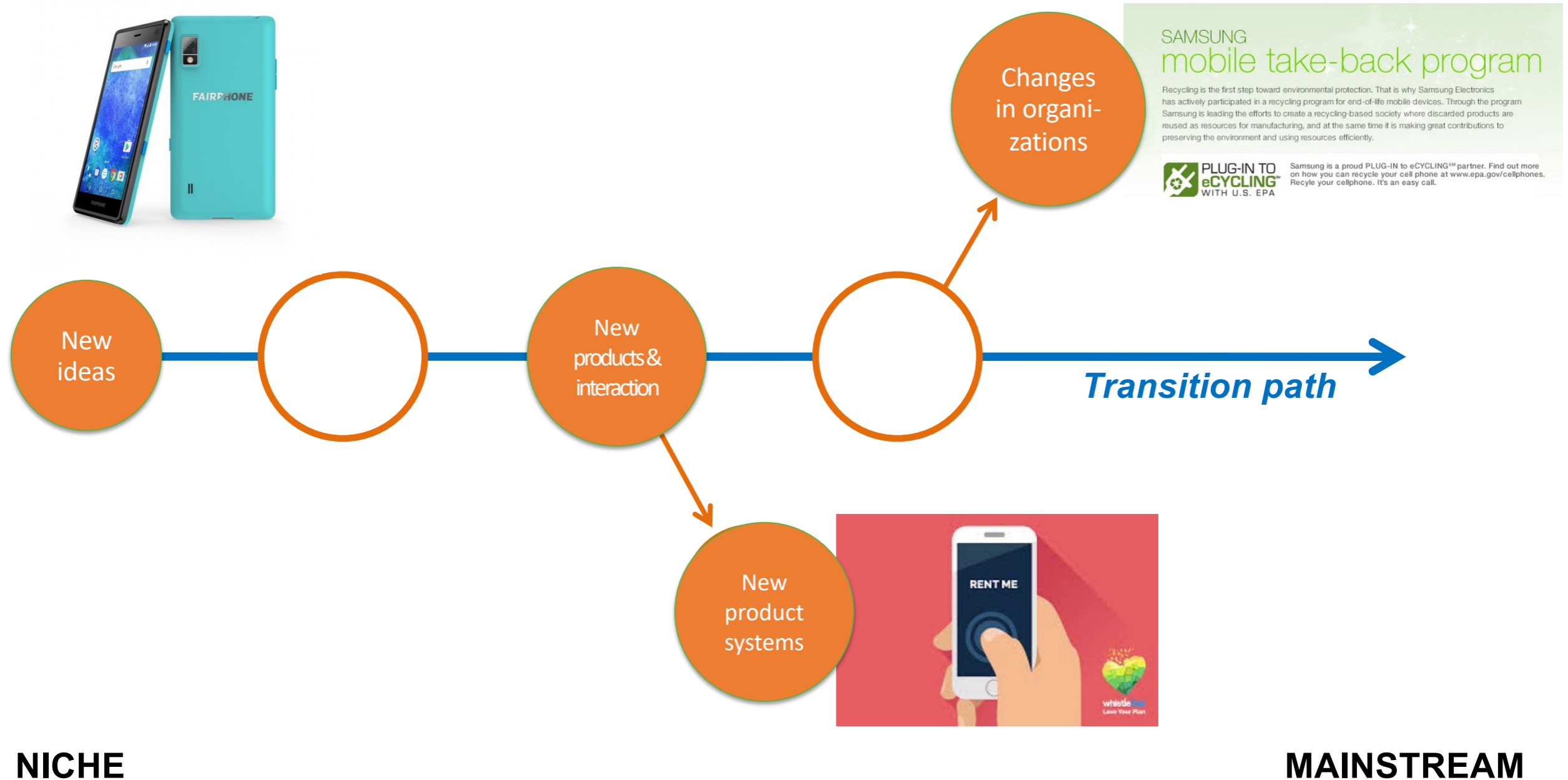
Every mobile phone, ink, laser or toner cartridge donated will mean a cash donation to us.  
Please help support us and recycle today!

**Green my Apple.**

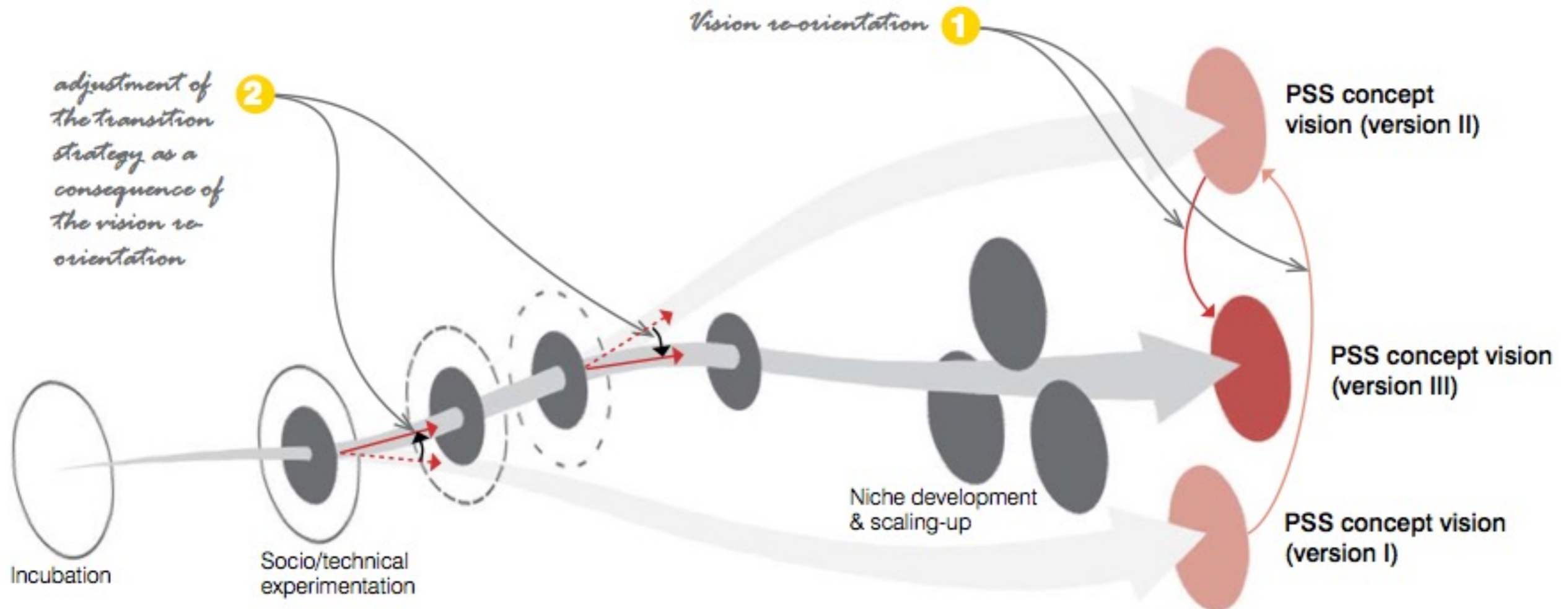
[www.greenmyapple.org](http://www.greenmyapple.org)

Changes in lifestyles

# Designing transition steps and phases for future sustainability:



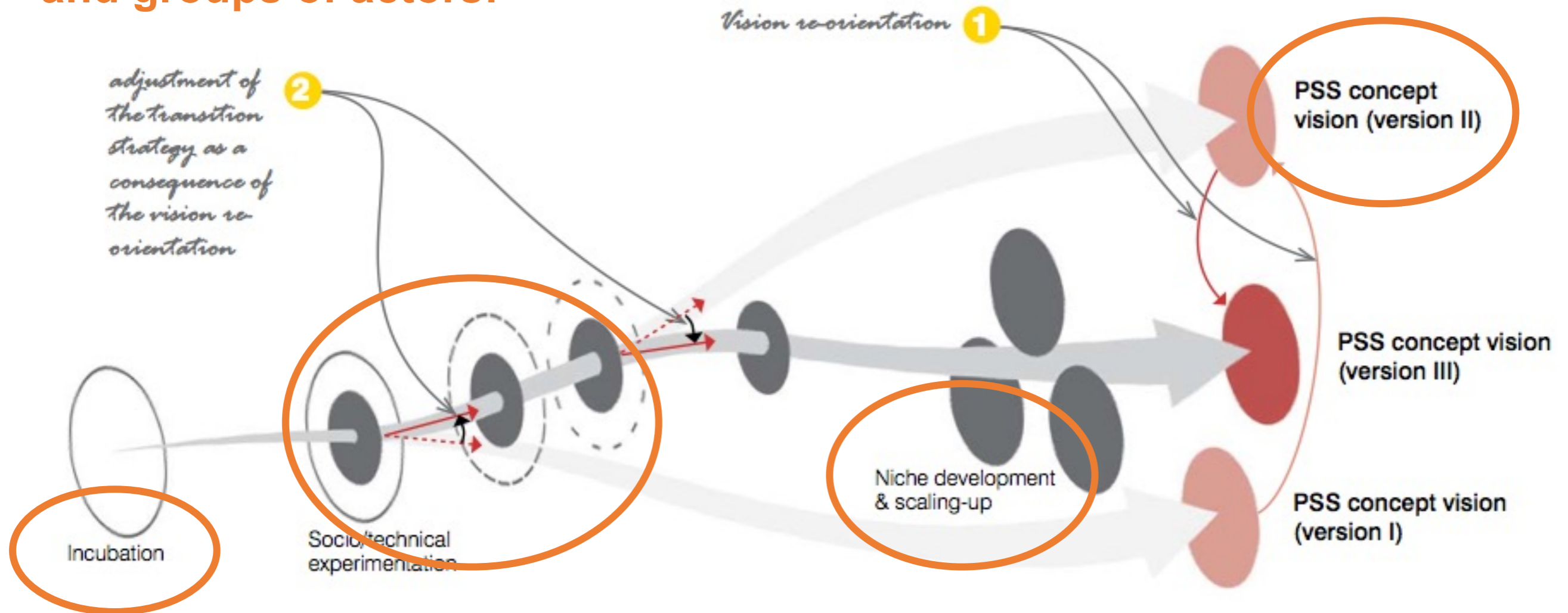
## Adjusting concept vision *iteratively*:



Source: Ceschin, Fabrizio. 2014. "How the Design of Socio-technical Experiments Can Enable Radical Changes for Sustainability." *International Journal of Design* (Vol 8, No 3)

## Adjusting concept vision *iteratively*:

**Communication in connection with several phases, points of interest, and groups of actors!**



Source: Ceschin, Fabrizio. 2014. "How the Design of Socio-technical Experiments Can Enable Radical Changes for Sustainability." *International Journal of Design* (Vol 8, No 3)



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# Communicating sustainability for scaling-up



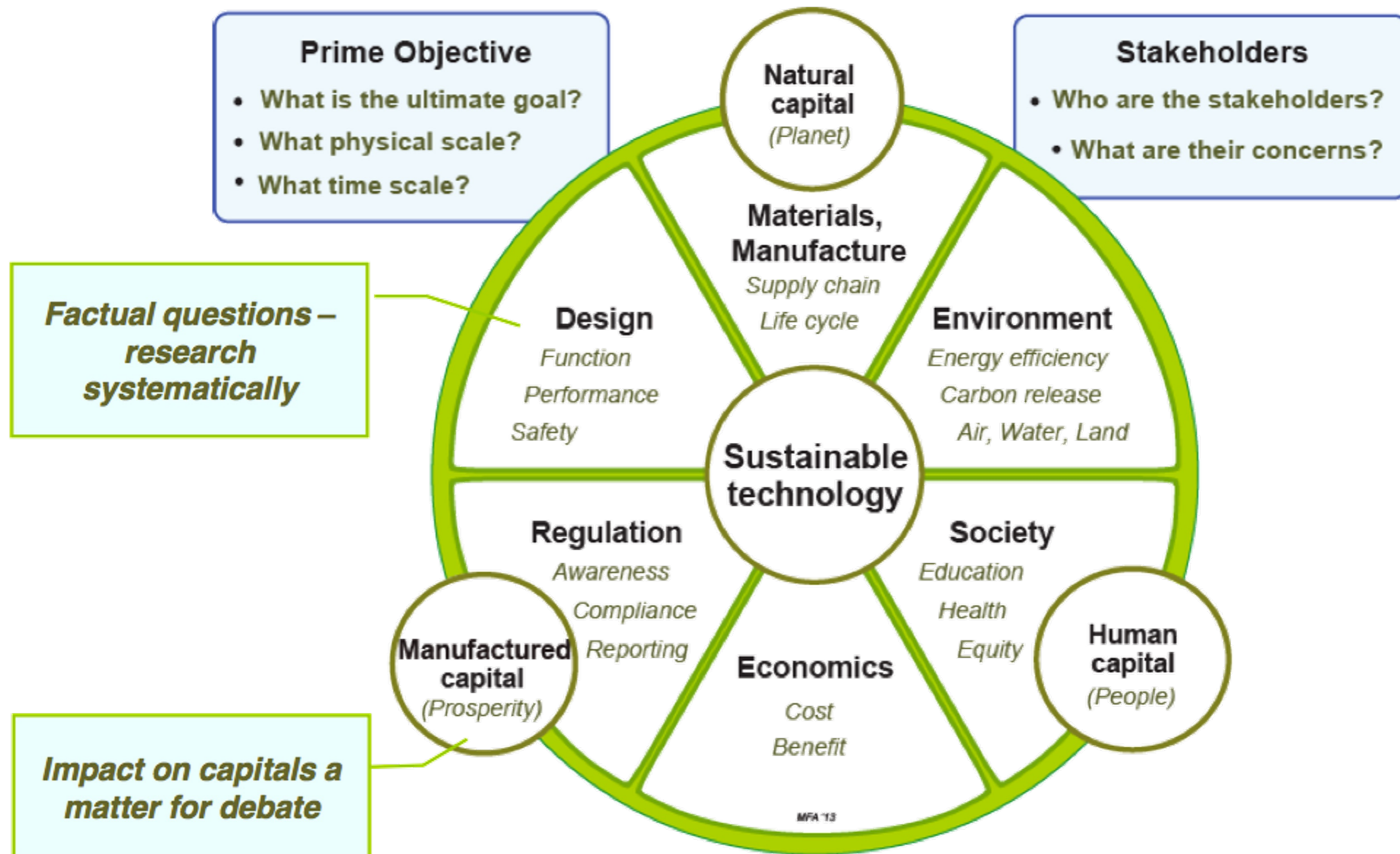
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# **Communicating Sustainability:** *During design process in the core design team*

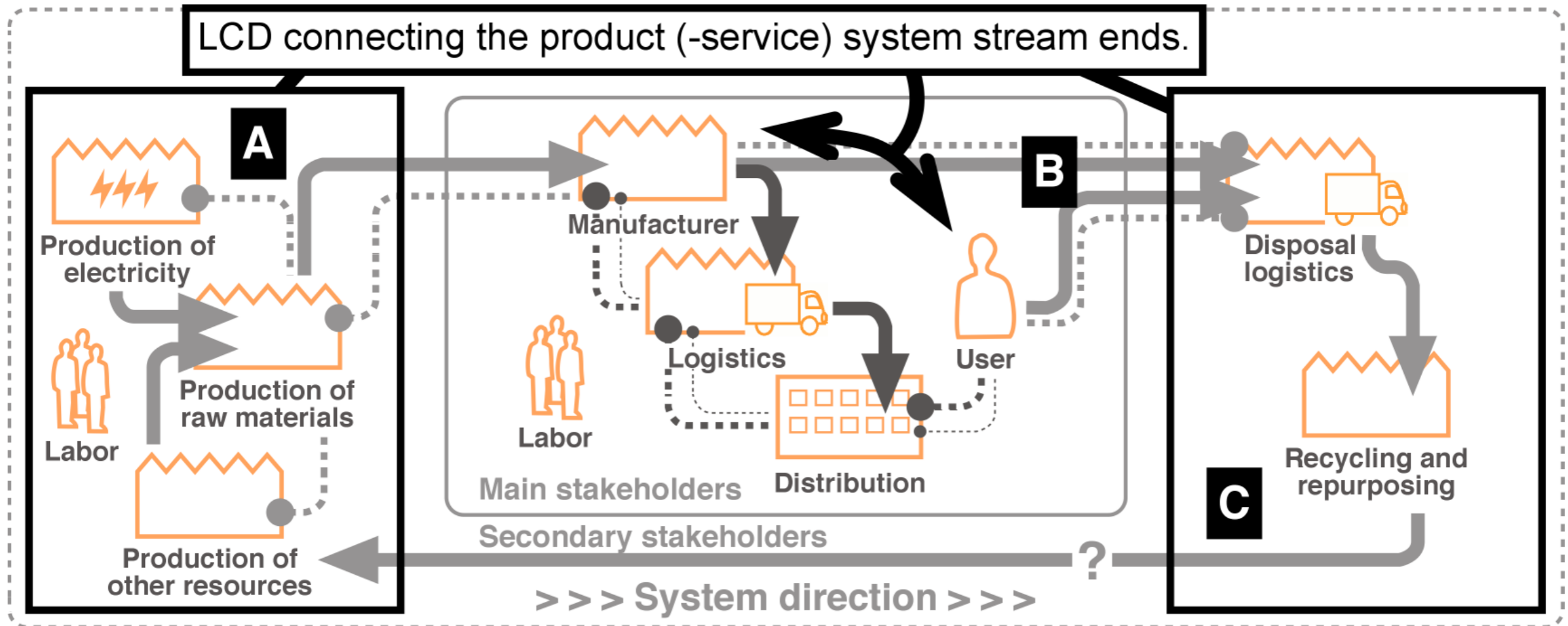


# Addressing systemic sustainability:

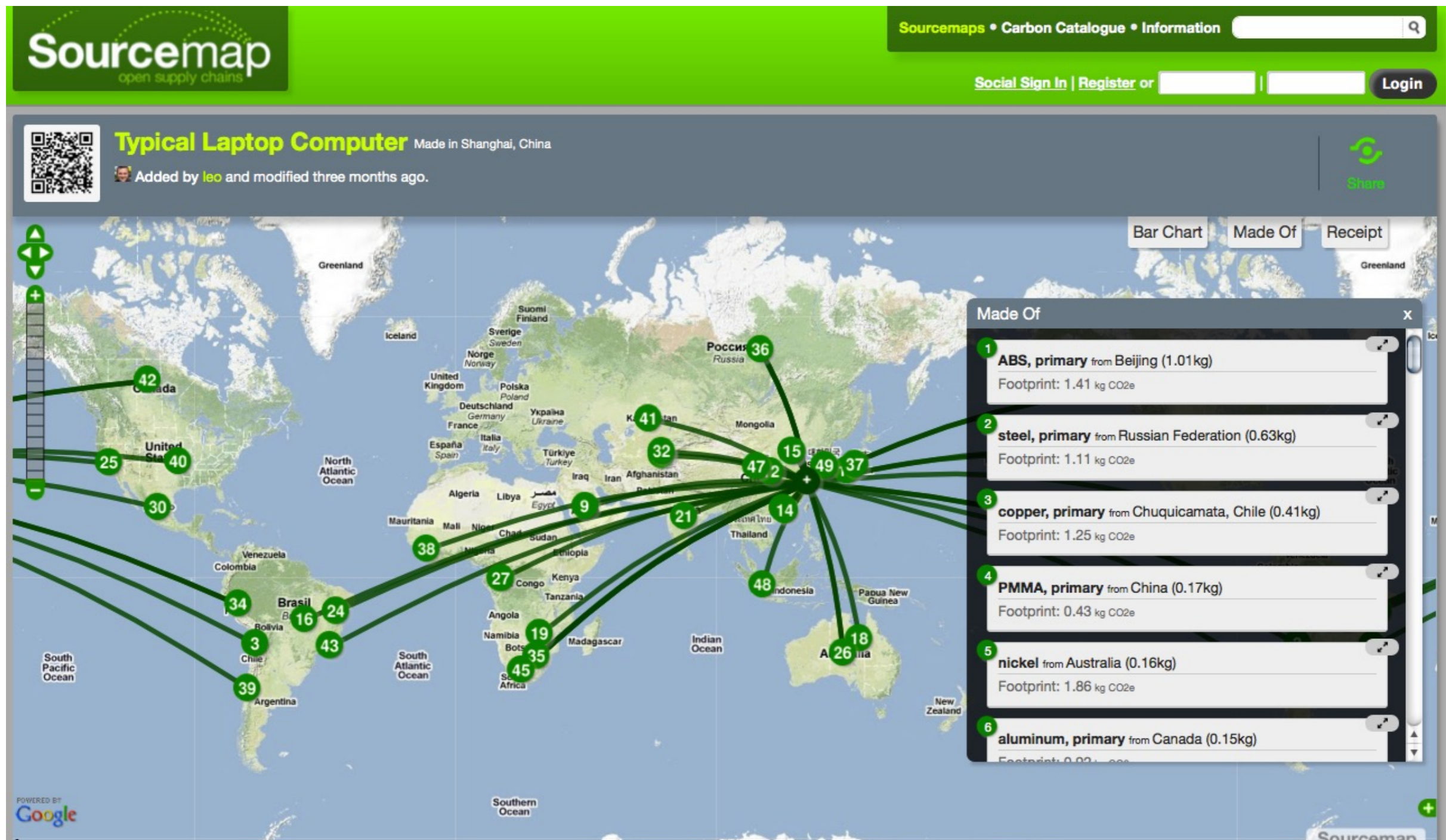


Source: Ashby et al. (2013) Materials & SD

Communicating production system and system of use, novel stakeholder & system interactions, or material/information flows:



# Assessing design-related aspects on a global scale:



See: [www.sourcemap.com](http://www.sourcemap.com)

## Communicating and assessing with life-cycle models:

Impact category	Material production	Manufacturing	Use-phase	End-life	Transport
M-Materials	<i>Add your reflection on impacts into each cell...</i>				
E-Energy					
T-Toxicity					
A-Socio-cultural					<i>...or use the matrix to ideate improvement</i>

# **Communicating Sustainability:** *In stakeholder engagement during experimentation and scaling-up process*

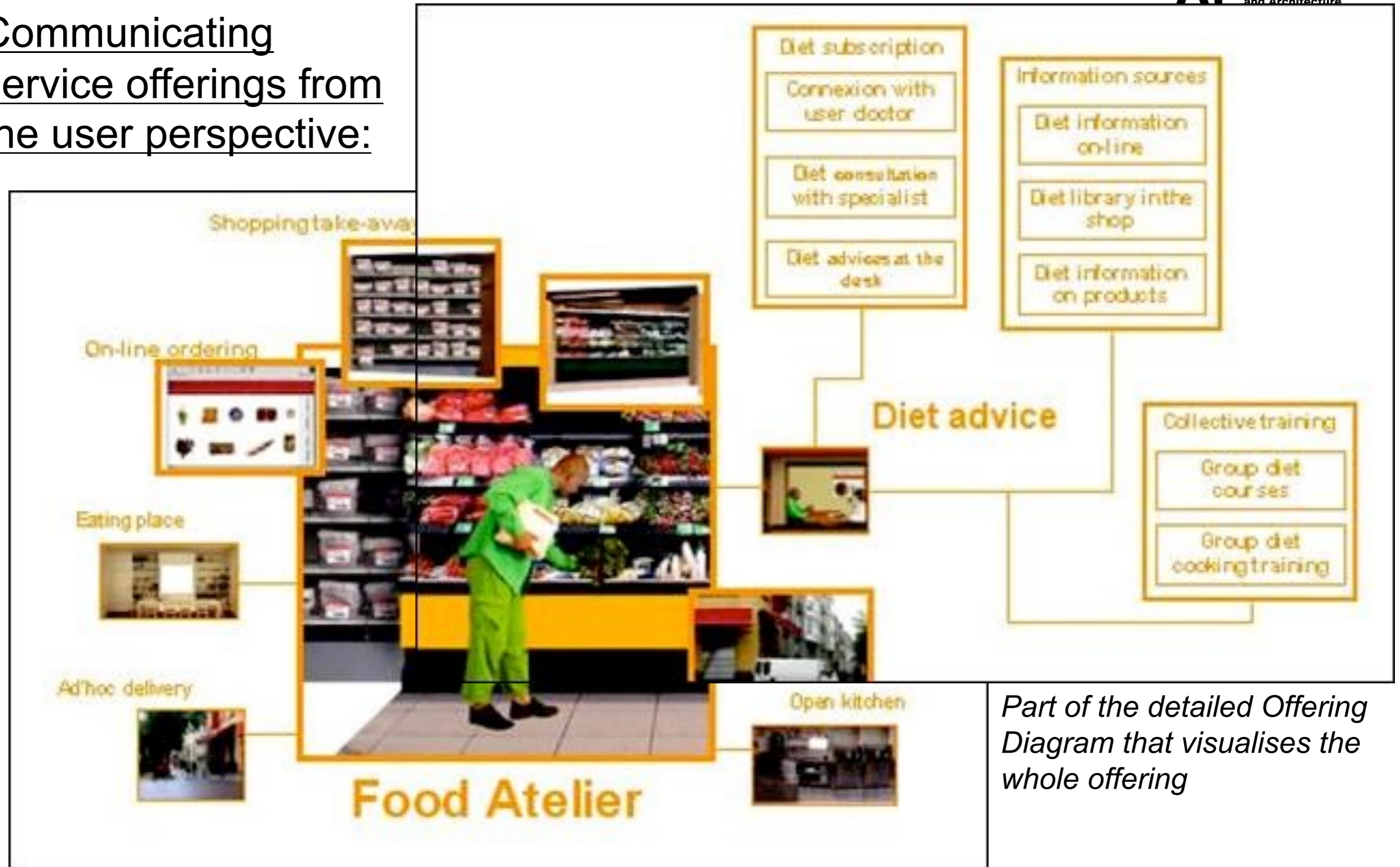


# Working with visions and scenarios for change:



See: <http://visionsandpathways.com/>

Communicating  
service offerings from  
the user perspective:







*Part of the detailed Offering Diagram that visualises the whole offering*

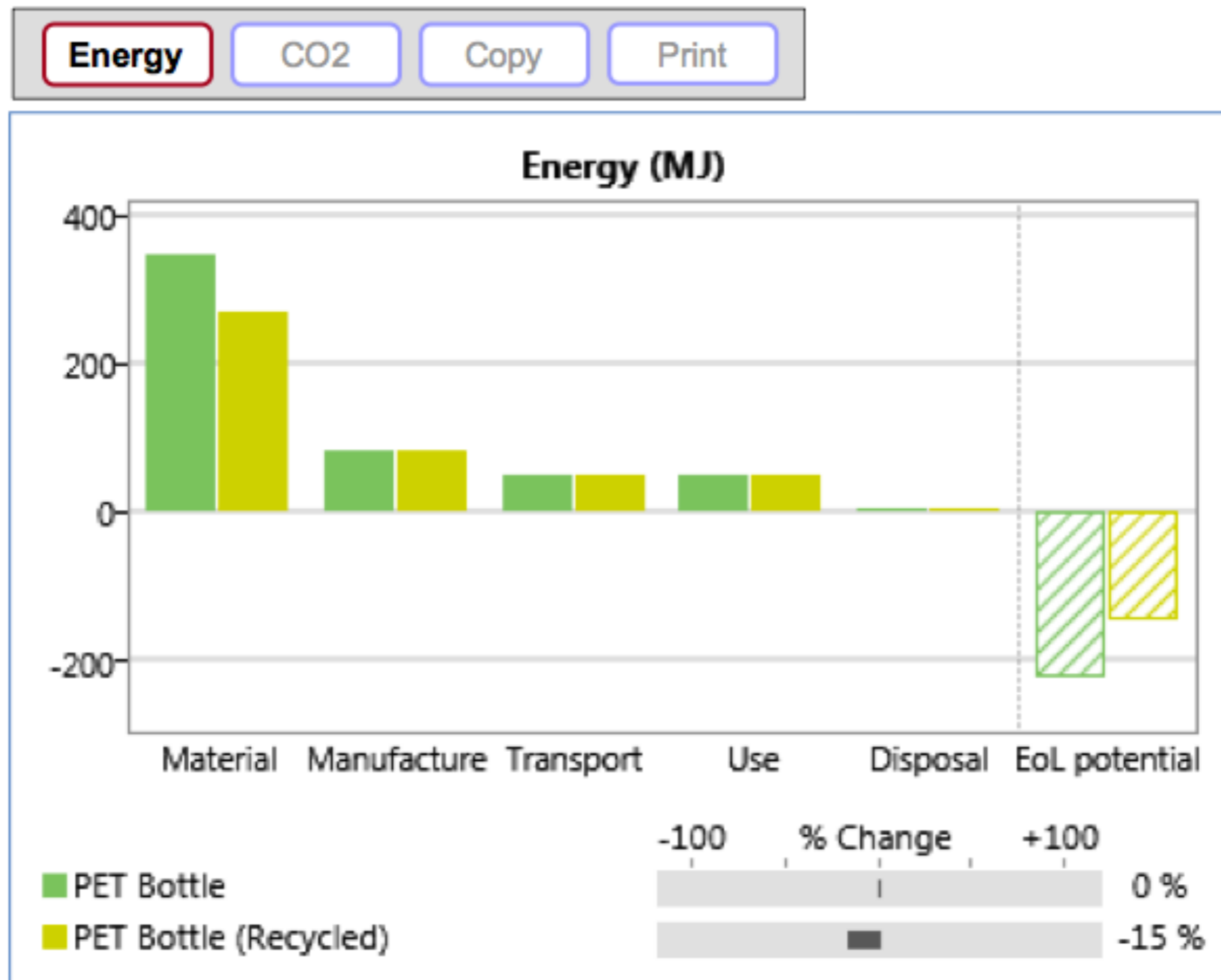
*Offering Diagram showing the basic and added-value functions of the design idea*



# Communicating system functions with storyboards:

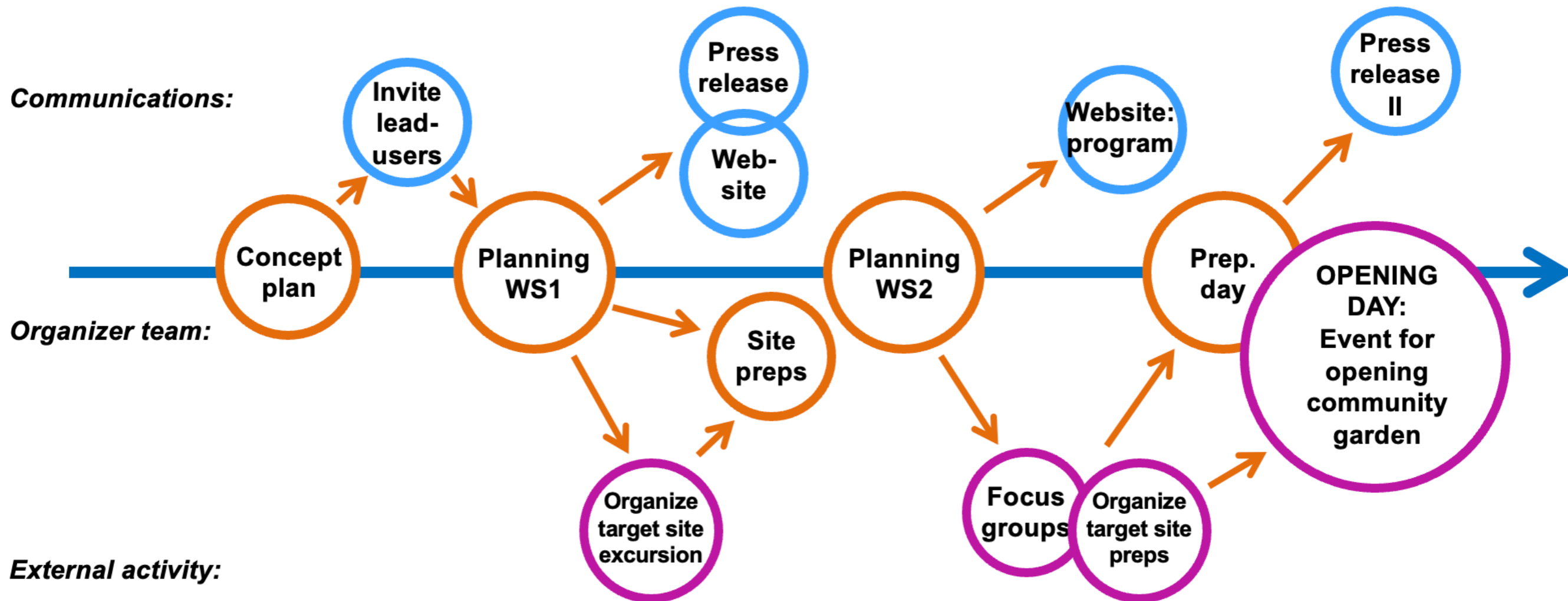
<p>SOLUTION</p>	<p>&gt; database to register information</p>	<p>&gt; menu formulation software</p> <p>&gt; communication system</p>	<p>&gt; menu formulation software</p> <p>&gt; communication system</p>	<p>&gt; order management system</p> <p>&gt; appliances</p>
<p>USER ROLE</p>		<p>&gt;users decide which ingredients the University kitchens has to order</p>	<p>&gt;users order the weekly menu</p>	
<p>LINE OF INTERACTION</p>	<p><b>Service action</b></p> <p><b>1</b></p>	<p><b>Service action</b></p> <p><b>2</b></p> 	<p><b>Service action</b></p> <p><b>3</b></p> 	<p><b>Service action</b></p> <p><b>4</b></p>
		<p>Representative of students chooses the weekly menus, basing on local producers disponibility</p>	<p>Students, using internet, communicate their weekly menu and the place where they will eat. The system return them a code/ticket</p>	
<p>SYSTEM ROLE</p>	<p>&gt;local producers cooperative gives information to university on products disponibility</p> 		<p>&gt;central kitchen receive orders and prepare the requested meals</p> 	

# Communicating life-phase impacts with infographics:



# Communicating strategic plans and action agendas:

## *Focus activities:*

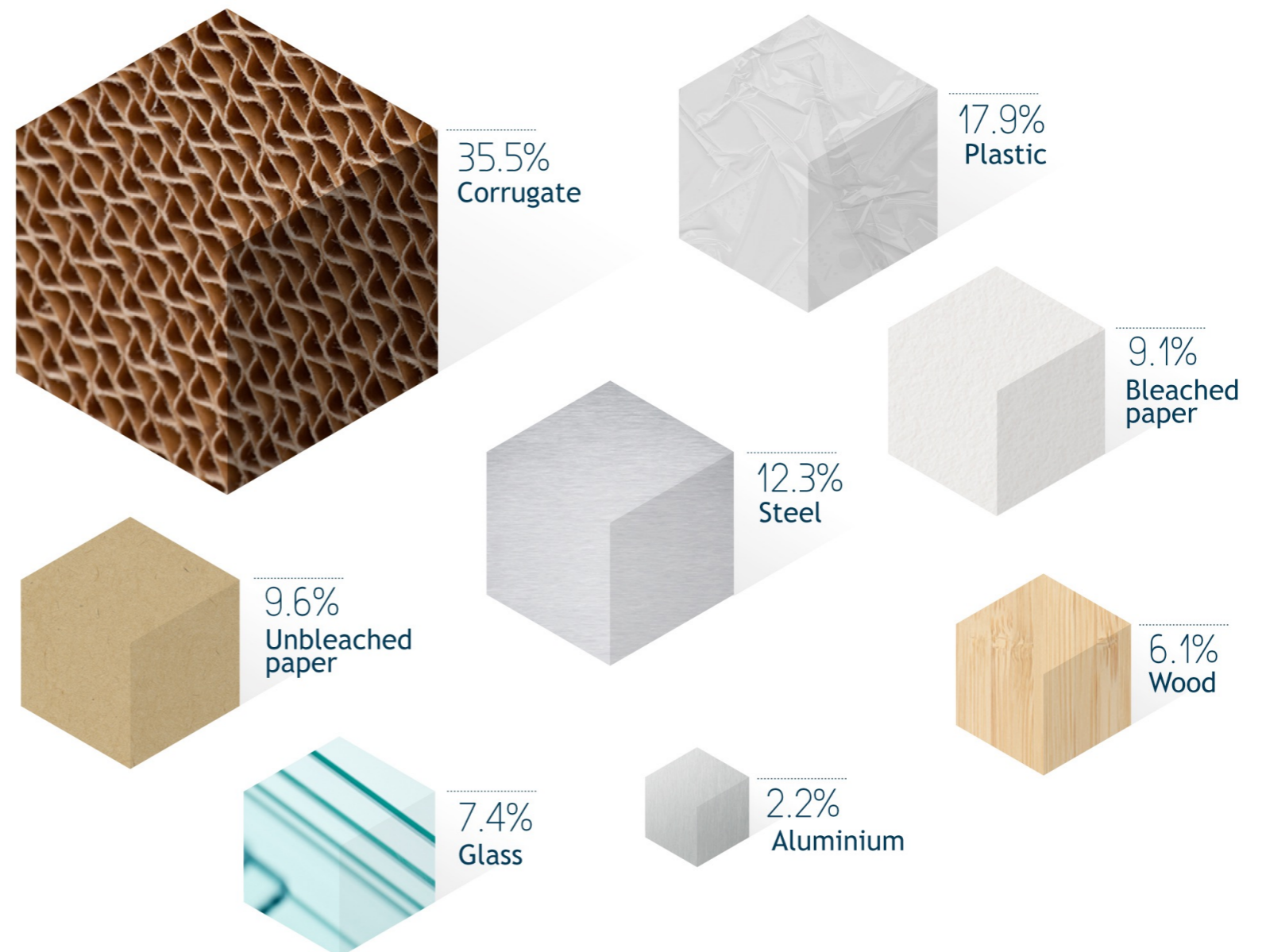


*Steps to co-create a community garden, with various actors and activities involved in different phases*

# Communicating Sustainability: *For laypeople and ordinary consumers*



# Communicating with material choices:



# Communicating with packaging and aesthetics:



Communicating with eco-labels and standards:

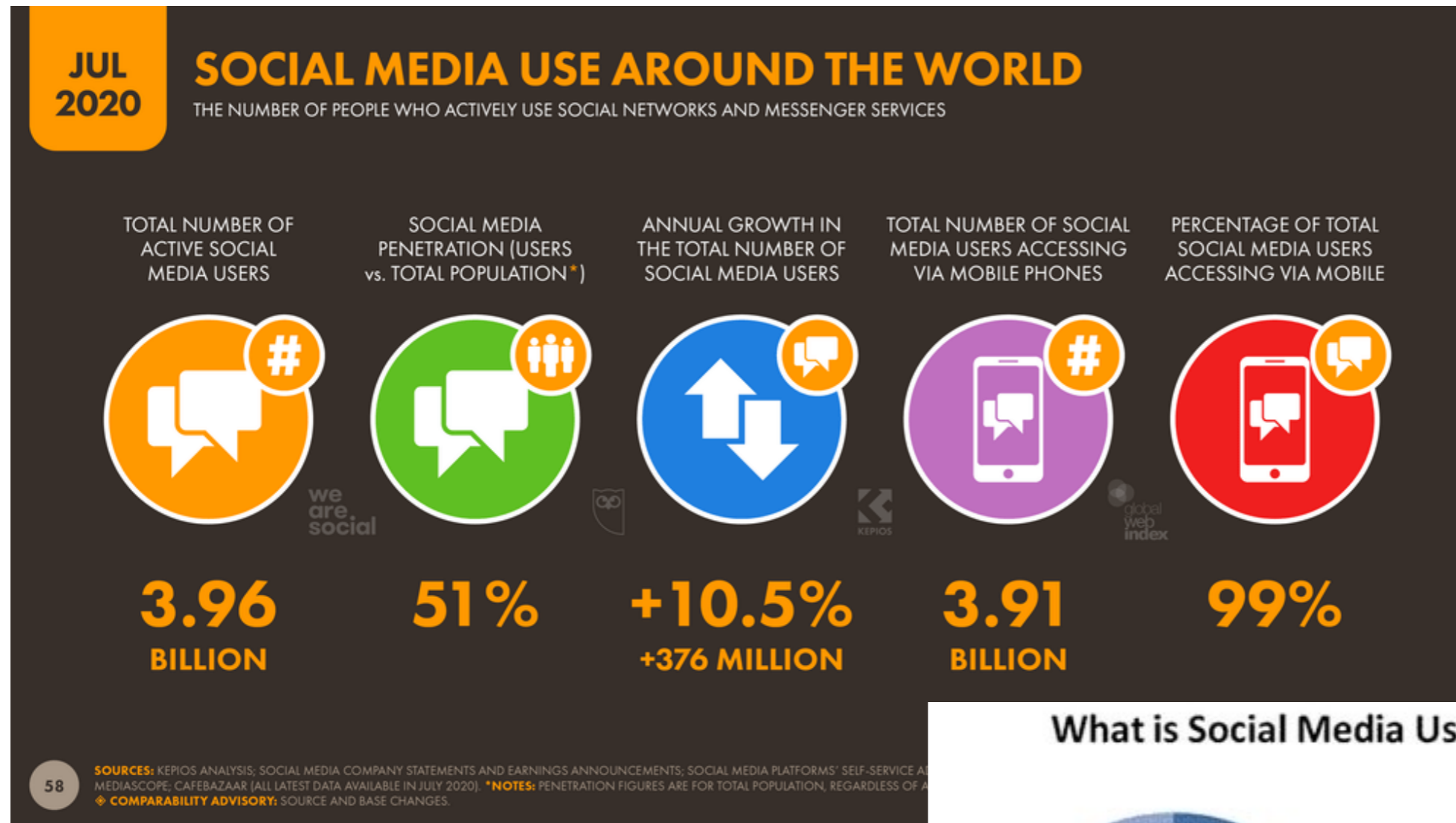


Communicating with the brand design:



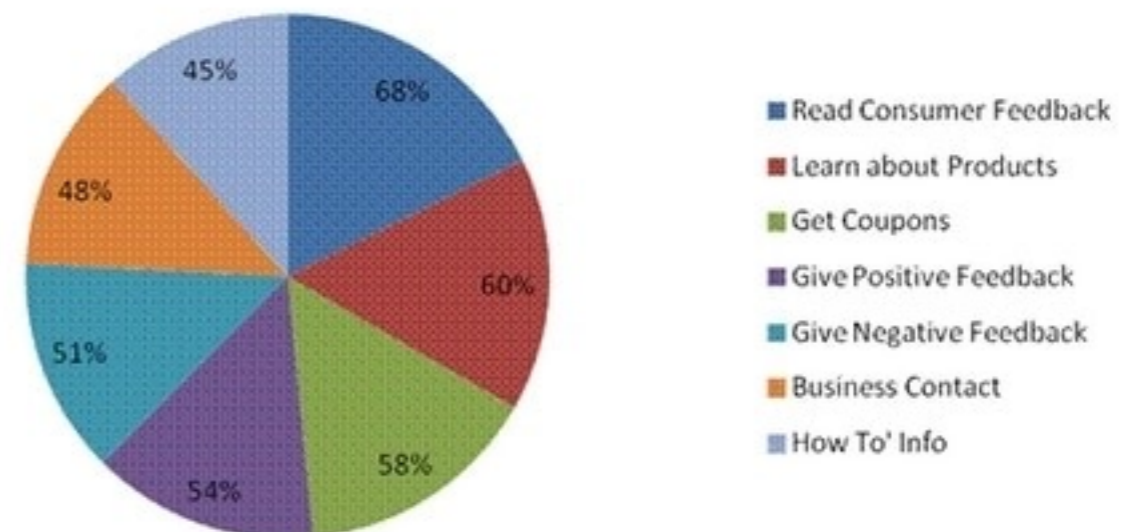


# Communicating with web & social media:



<https://www.smartinsights.com/social-media-marketing/social-media-strategy/new-global-social-media-research/>

### What is Social Media Used For?



<https://www.marketing91.com/what-are-the-uses-of-social-media/>

# Communicating Corporate Social Responsibility (CSR):



# Communicating sustainability

## - Summing up...

**Communicating the ecologic, socio-cultural and economic benefits of your design is communicating sustainability!**

- Communicating is possible with numbers, but also with stories and images
- Consider: How should the sustainability message be ‘packaged’, and to whom?
- Communication 1) during design process (and for its iteration), 2) in expanding stakeholder engagement, and 3) for consumers and laypeople
- Communicating sustainability for both (and between) producers and consumers

# Communicating sustainability

## - Future considerations...

### Questions to consider when communicating sustainability:

- **What is communicated?**

*For example: Attributes; Guidance; Information; Claims of improvement;*

- **What phase of design process is at hand?**

*For example: Research; Concept design; Beta testing;*

- **Who is the target audience?**

*For example: Users; Sub-contractors; Investors; Retailers;*

- **How & where should it be communicated?**

*For example: Numbers; Infographics; Stories; “Look & feel”*

*F2F communication; Communicating via product; Online communication etc.*



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# Working in case groups: Communicating your sustainability impacts



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# Working in case groups: Communicating your sustainability impacts

**You have now time to continue work in case groups!**

Continue project work in groups:

- **Reflect on your vision and your concept's offering for sustainability**
- **Consider your sustainability offerings to various actors**
- **Think about most important actors and how to 'package' your communications and process**
- **Utilize whiteboard/large paper if needed**
- **At the end of the session, discuss your work**

# Thank you!

*Questions &  
comments?*

