

System Change – Sustainability by Design??

Joint Action for Climate Change
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Presentation during System Change and Design Workshop

Structure

- What is at stake?
- What can we do?
- Is design the solution?

What is at stake?

- The challenge
 - A decent life requires 10.000 \$
 - This requires doubling GNP till 2050
 - CO2 has to go down 80%
 - Economy needs to become a factor 10 less CO2 intensive
- Implications
 - Technical fixes (decoupling) cannot do this
 - We need new and more equitable consumption patterns

	Now	2050	Factor
CO2	28 Gt	5 Gt	20%
Population	6 Bio	9 Bio	
Income	45 Tr	90 Tr*	200%
Reduction C-intensity			Factor 10

•* assuming that all global citizens have a right on a 10.000\$ a year income needed to live a decent life

Key Areas: Food, Mobility, Housing, EuP

COICOP	Study	Dall et al.	Kok et al.	Labouze et al.	Nemry et al.	Nijdam and Wilting	CEDA EU25
	Indicator	Energy	Energy	GWP	GWP	GWP	GWP
	Main approach	Bottom-up	Hybrid	Bottom-up	Bottom-up	IO	IO
CP01-02	Food	26,2%	13,0%	7,0%NA	3,6%NA	22,1%	31,0%
CP03	Clothing	1,3%	2,2%	3,3%	1,3%	6,5%	2,4%
CP04-05	Housing	40,8%	54,3%	58,8%	53,5%	33,4%	23,6%
CP06	Health		1,8%		0,3%	0,3%	1,6%
CP07	Transport	19,5%	18,3%	29,6%	32,9%	17,3%	18,5%
CP08	Communication			0,0%	2,9%	0,0%	2,1%
CP09	Recreation	7,2%	8,1%	0,0%		15,1%	6,0%
CP10	Education		1,8%			0,7%	0,5%
CP11	Restaurants					2,8%	9,1%
CP12	Miscellaneous	5,1%	0,4%	1,3%	5,4%	1,8%	5,2%
	TOTAL	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Some Success Stories



- Douwe Egberts Coffee Solutions

- Chemical Management Services



...but also failures

- Why are many purpose designed sustainable PSS confined to niche markets?
- Shouldn't we acknowledge that design cannot do it alone?

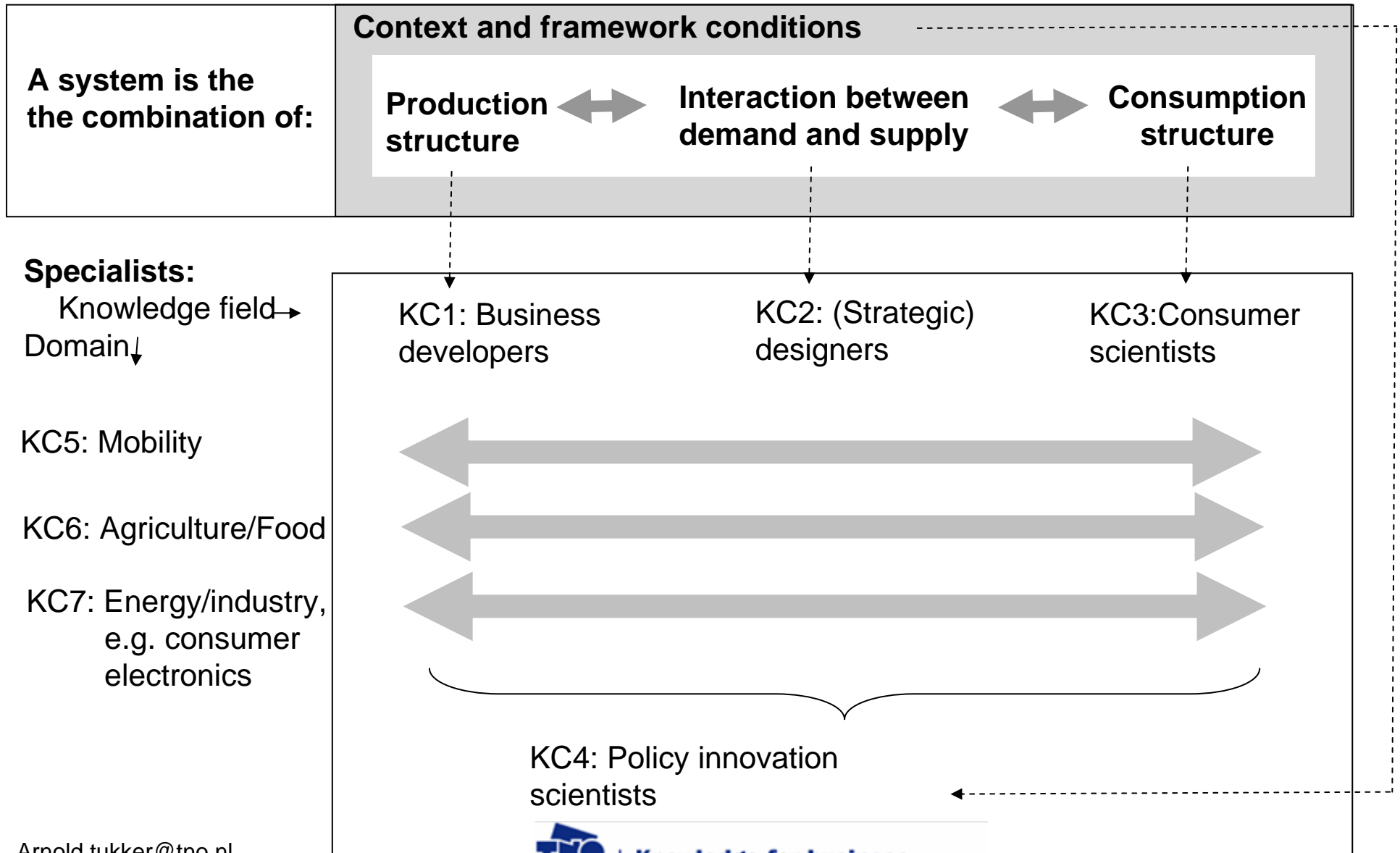


MITKA by Gazelle, Nike and TNO

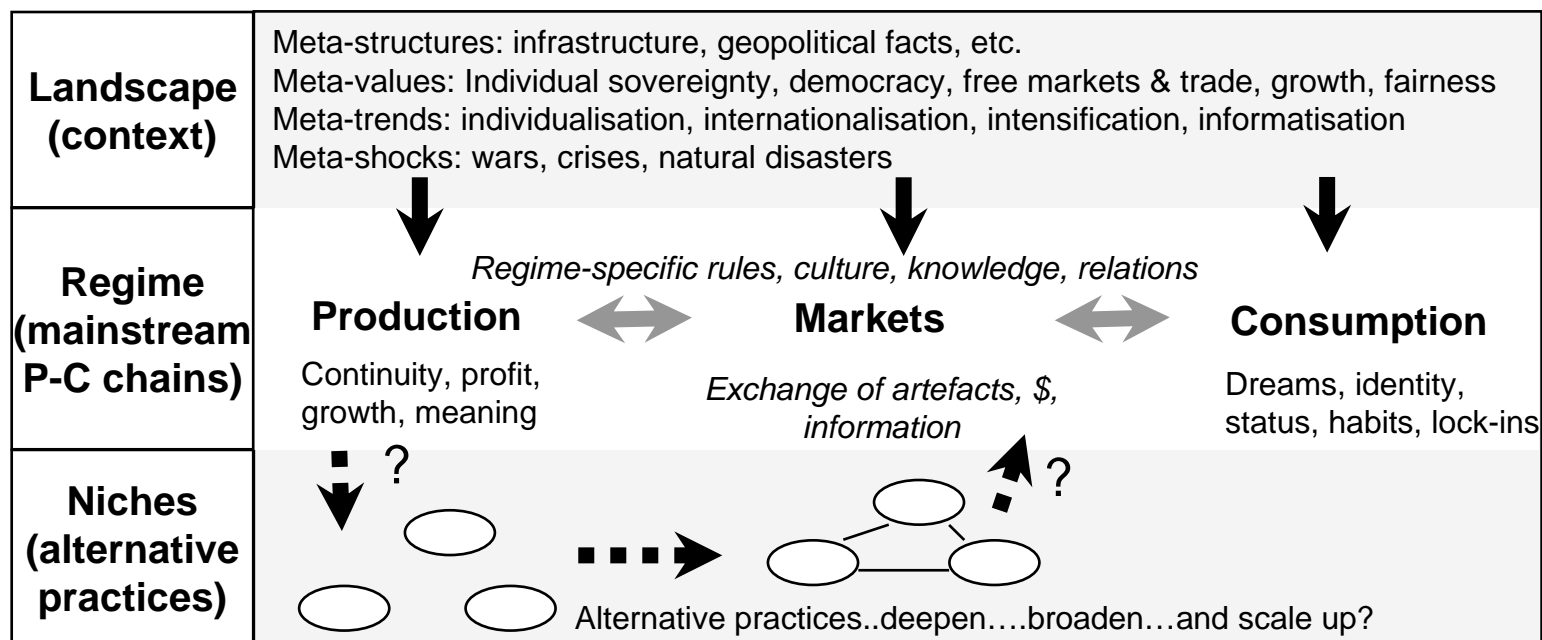


Odin biological food subscription

But can design do it alone?



Policy action for SCP: a systemic view



- Implications for policy: 2-3 levels of action
 - Regime compliant measures: agreement on means and ends
 - Experimentation: agreement on ends, means uncertain;
 - Paradigm changing processes: disagreement on means and ends
- First: regime-compliant action for housing, mobility and food
- Second: paradigm changing processes

Influencing impacts of a product life cycle

•Three Where's:

- Where is the power?
- Where is the impact?
- Where to target: top and/or bottom?

