

# Vergen duurzaamheidstransities een andere economie?



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## Transitions that we need

- Away from fossil fuels
- Circular economy
- Corporate responsibility and sustainability
- A good & purposeful life
- Humanisation of the economy
- More local economy?



## Transitions to more sustainable systems of energy, mobility, housing & resource use



### Some historical examples of transitions

1. From sail to **steamships** UK (1840-1890)
2. From horse-drawn carriage to **automobiles** US (1870-1930)
3. From cesspools to sewer systems NL (1870-1930)
4. From pumps to **piped water** systems NL (1870-1930)
5. From traditional factories to mass production (1870-1930)
6. From crooner music to rock 'n' roll US (1930-1970)
7. From propeller-aircraft to jetliners US (1930-1970)
8. Transformation of Dutch highway system (1950-2000)
9. Ongoing transition in NL electricity system (1960-...)
10. Pig meat: From mixed farms to **bio-industry** (1930-1970)
11. Emergence of horti-culture (1900-1970)

From presentation Frank Geels in Maastricht, 2007

## Examples of “sustainability transitions”

- **In energy use:** moving to renewables (solar PV, CSP, biofuels, geothermal, hydro, ...)
  - **In mobility:** bicycles, modal shift, intermodality, green cars, reducing the need for transport, ...
  - **In buildings:** zero-energy, ..
  - **In waste management:** waste prevention, recycling and re-use
  - **Resource efficiency** as a cross-cutting challenge (together with responsible behaviour)
- away from fossil fuels
- circular economy
- 
- The diagram consists of a list of five bullet points on the left. The first three bullet points are grouped by a right-facing curly bracket and labeled 'away from fossil fuels'. The last two bullet points are grouped by another right-facing curly bracket and labeled 'circular economy'. The text 'away from fossil fuels' is positioned to the right of the first bracket, and 'circular economy' is positioned to the right of the second bracket.

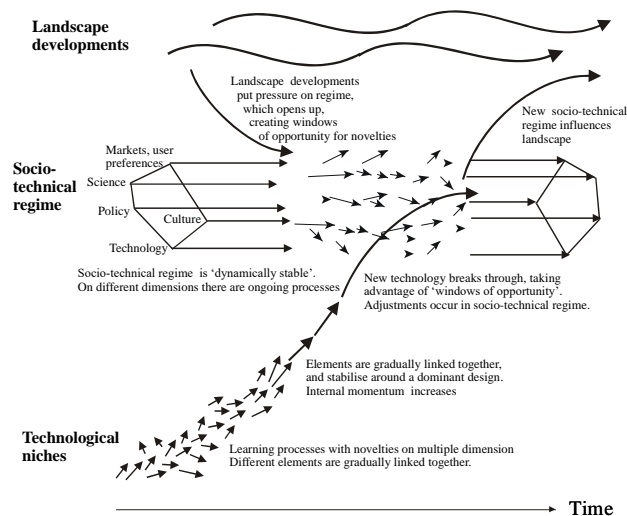
The **socio-technical** transition  
perspective

## Over transitie

- **Transities gebeuren (zijn niet centraal gestuurd)**
- In onze complexe samenleving met hindermacht en gegroeide afhankelijkheden kun je niet een nieuw systeem ontwerpen en realiseren. Dat is onmogelijk om ten minste twee redenen:
  - *Geen actor heeft het benodigde overzicht en overwicht*
  - *Het nieuwe is niet op alle onderdelen beter maar scoort slechts beter op een deelaspect; pas na langdurige verbetering en aanpassing en verandering van de omgeving kan het nieuwe doorbreken.*

Bron: Kemp en Grin

## The (multi-level) transition perspective



Bron: Frank Geels,  
2002 in *Research  
Policy*

## In transitions

- Multiple developments are involved (co-evolution)
- Example of cars:
  - **Suburbanisation** *preceded* the use of cars
  - Car use went hand in hand with an **increase in mobility** and **new practices** (vacations, recreational trips, ..)
  - The features of cars changed in reaction to societal demands besides user demands



### Emergence of automobiles in niches

#### 3.1. Electric vehicles:

- Light tricycles
- Heavy coaches

#### EV used in:

- Parks, promenading
- Taxi-niche (EVC, 1898-1902)
- Speed racing
- Long-distance racing (failed)

Bron: presentation Frank Geels in Maastricht, 2007



#### Gasoline cars, used in:

- racing
- touring (adventure, practicing health, repair skills)



Build on: petrol infrastructure, repair network, cultural enthusiasm



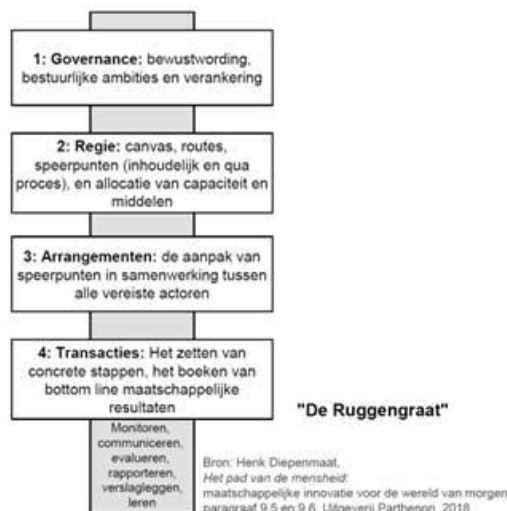
Bron: presentation Frank Geels in Maastricht, 2007

Nieuw niches voor elektrische mobiliteit

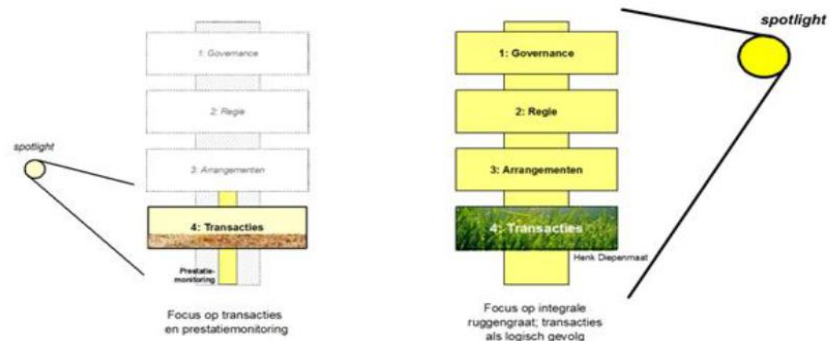


# Transities

- Zijn processes van **co-evolutie** waarbij het nieuwe *inbreekt in het gangbare* en gewoon wordt
- Dit gebeurt onder invloed van **veranderende omstandigheden**
- Dankzij **nieuwe arrangementen, denkbeelden en producten** (die gevolg zijn van leer-en afstemmingsprocessen)
- **Na omslagpunt, blijft het oude nog lang bestaan**
- Een omslagpunt is bereikt bij zonne-PV en windenergie, bij de circulaire economie **nog niet** (verdienmodellen zijn moeilijk te vinden) evenmin als bij duurzame mobiliteit en de gebouwde omgeving (met zero-energy houses & buildings)



"De Ruggengraat" voor maatschappelijke innovaties



*Van "Transacties als focus" naar "Transacties als logisch gevolg"*

Diepenmaat, Henk (2018). [Ruggengraat voor het klimaat - Hoe maken we onze scholen sneller duurzaam?](#) Rapport Actors Procesmanagement BV, Zeist

## A transition in values

- More responsible & relational
- Less materialistic
- Self-improvement
- Sufficiency



Consumers are like children in a candy store, knowing that sugar is bad to eat, but unable to resist the temptation. This is a system in which no one is free. People are trapped by their own desires (Tim Jackson)

## A transition in life styles and practices

- Slow food, science, ...
- Eating less meat
- Refraining from high-mobility life
- Better work-family balance
- Doing things that are meaningful



*Zie: De kunst van het goede leven, waarin het ware, het schone en het goede samenkomen – Bram van de Klundert*

- Transition theory says that *you don't have to wait for value change and life style change*
- **This can happen as part of the process**
- *Cultured meat and attractive vegetarian recipes shown in TV programmes make it easier to eat less meat*





## A transition in capitalism → an economy of the common good



## We need a **more social and moral** economy

*Competitive markets are wonderful—so long as (...) they benefit many of us while serving some of us.* What we are seeing instead are markets of entitlement, which benefit some of us at the expense of many of us: markets for subprime mortgages, markets for executive compensation, markets for housing that favor absentee owners over local residents, markets that are destroying the planet by what they allow us to ignore as externalities – [Henry Mintzberg](#) in *Rebalancing Society*



## Problems of present-day systems and solutions

System	System faults	Social-material 'solutions'
Energy	Fossil fuel use is root cause of climate change, a source of local pollution, and comes with geo-political dependencies	Use of renewable energy technologies (owned by sustainable energy utilities and energy cooperatives), zero energy houses
Mobility	Too many cars and too much car use turning streets in arteries for cars, causing bottlenecks in physical infrastructure, especially in the urban context. Cars and air travel are also responsible for noise and pollution	Cycling, electric cars, car sharing via organisations, car-free zones, less long distance holidays.
Health care and social work	Overspecialised and money-driven. Insufficiently patient-centered. Excessive reporting requirements for care professionals for reasons of efficiency and accountability. People with multiple problems cannot be helped well.	Neighbourhood care, use of experience experts (ex-drug addicts, prisoners), family conferences, caring as a normal activity for everyone (not just for paid professionals).
Work in the market economy	Job insecurity and anxiety. Profits are unequally shared. Workers are subjected to strong performance pressures. Competition amongst workers degrades relational values.	Work that is meaningful, fulfilling and fitting with values and competences, better work-life balance. Worker cooperatives

State welfare system	Unemployment claimants are coerced to apply for jobs they have little interest in and very low chances at getting; failure to comply with requests from welfare officers lead to punishment in the form of financial sanctions.	Basic income and vouchers for training to assume life in such a way that it is expressive of people's integrity.
Land ownership and use	Private and individual ownership, scarcity of homes creates huge benefits for profit-seeking property owners, gentrification.	Land as a common property, land rents are used for the common good. Rental income from property is taxed.
Production and consumption of goods	The production of short-lived goods consumed for status and fancy which are disposed after first time use. External costs are passed on to society. Values of responsibility play a low role.	Product-service systems, repair cafes, use of products through sharing platforms. Less materialistic lifestyles with an importance role for self-development and doing-it-yourself (cooking, growing vegetables). Orientation to the local economy
Financial system	Unsustainable levels of debts. Endemic tax avoidance. Orientation towards short-term financial gains at the expense of long-term stability. Contributing to disparities in wealth.	Separating high-risk 'casino' investment banking (e.g. derivative-market speculation) from traditional banking. Use of local currencies. Cryptocurrencies?
Cultural relations	Cultural divides resulting in bigotry, racism and undeserved privileges. Paid work is of greater status than unpaid work involving care. Objectification and domination of women.	Building egalitarian relationships based on mutual respect. Putting an end to identity politics. Community service. Work based on relational values with an active concern for other people's well-being.

## Waarom een andere economie belangrijk is voor socio-technische transitie

- Lokale duurzame energie-initiatieven zorgen voor toepassing van zonne-PV en leden fungeren als **ambassadeur**
- Groene consumenten en responsible bedrijven zorgen voor **draagvlak** voor transitiebeleid
- Groene bedrijven zorgen voor **tegenmacht** tov Nederlandse fossiele aanbieders
- Downshifting met produktdelen zorgt voor een lagere milieudruk (*zonder negatieve rebound effecten*)
- Consumismewordt geadresseerd (via culturele kritiek)
- Het geeft **co-benefits** een meer centrale plaats en helpt meerdere transitie te beschouwen (op basis van duurzaamheid en immateriele behoeften)

## Duurzaamheidstransities

- Gaan over veel meer dan verandering van technologie
- Onze samenleving is te gehaast, competitief, onvoldoende gericht op immateriele behoeften
- Sustainability transitions include *two challenges*: on the one hand a long-term change to various technologies and infrastructures, while on the other hand **ensuring that consumer criteria change** in the same move (Kemp and van Lente, 2011)
- Je bouwt iets af, en wat op (met special aandacht voor co-benefits en negatieve onbedoelde effecten)
- Stelling: twee soorten systemen en economieën kunnen naast elkaar bestaan

*“One has to make up his mind whether he wants **simple answers** to his questions – or **useful ones**... ....you cannot have both.”*  
Joseph Schumpeter

## Examples of bad policies

- EU Emission Trading Systems (teveel uitzonderingen, te veel grandfathering & banking, geen oplopende minimum CO2 prijs / Carbon Price Floor which goes up)
- Oversubsidiering elektrische auto's (Mitsubishi Outlander, Tesla)
- Automobiel emissies (emissies *per* auto hadden beprijsd moeten worden obv onafhankelijke testen, al dan niet in combinatie met emissie-eisen)
- Vraag : Hoe kon dit zo fout gaan?

## Over beprijzing

- Ja dat is zeer wenselijk, maar je kunt er zo weinig mee doordat de weerstand ertegen enorm, inmiddels zelfs van wetenschappers:
- It is well documented that carbon markets have failed spectacularly in achieving their environmental objectives and that many carbon offset projects have a devastating social impact. In spite of this evidence, carbon markets remain the main policy tool to address climate change in Europe, based on the misguided hope that they will work "once the price is right". <https://greenfinanceobservatory.org/wp-content/uploads/2019/03/open-letter-to-European-policy-makers-on-carbon-markets-2.pdf>
- Een **prijspad** (van stijgende milieubelastingen) is een betere aanpak (dat geeft bedrijven tijd om zich daarop in te stellen)
- De **combinatie met normen** krijgt te weinig aandacht (had gebruikt kunnen worden bij automobiel emissie-normen: bij overschrijding van een norm betaal je een boete)
- **Bonus-malus** is ook een prima system (budgetneutraal)

## Een andere economie & samenleving

- Ander soort bedrijven en bedrijfsvormen
- Community service? Voucher for 'time out'
- Zinvol werk voor iedereen
- Actief op latere leeftijd bijv via **time banks** (ontzorging mantelzorgers)
- Mutual support ipv competition (minder strife, stress, misgunst)
- Immateriele behoeften (autonomie, verbondenheid, iets doen met je vaardigheden)
- Orientatie op de common good & acceptatie van beleid dat daar op gericht is