# Danish experience in transition to circular economy and other aspects of sustainability

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# Focus of presentation

- Social justice and sustainable transition in the acceleration society
- Transition towards a more circular economy
- Transition towards more renewable energy
- Sustainable transition and workers / employees

## The acceleration society (Hartmut Rosa, 2014)

- The self-inforcing acceleration cycle:
- Technological acceleration
  - Acceleration of production and transportation processes
  - Acceleration of innovation
- Acceleration of social change
  - The shrinkage of the present: Norms, values and knowledge lose value faster
- Acceleration of the speed of life
  - The (paradoxical) constant lack of time



# Environmental initiatives shaped within the society: Social justice?

- Acknowledge existing inequalities in society
- Environmental initiatives shaped by/within existing inequalities. *Electrical cars? Good products expensive?*
- Avoid reinforcing existing inequalities
- Social justice challenges for:
  - Social groups: Low income groups
  - Professions within 'black' sectors: Meat industry, oil drilling
  - Local areas: Esbjerg: Oil and gas => wind turbines
  - Internationally: Impact of consumer demands and changes in consumer practices on working conditions and employment?

# Circular economy

# **Circular economy principles**

### • Slowing resource flows:

 Through the design of long-life products and product-life extension through repair, upgrading etc.

### • Narrowing resource flows:

 Increasing resource efficiency by using fewer resources per product and by covering needs with fewer products through sharing strategies

### • Closing resource flows:

Closing the loop between post-use and production through recycling

Ref.: Bocken et al, 2016; Jørgensen & Remmen, 2018

# **Circular economy principles**

### Slowing resource flows:

Waste - new resources or lost resources?

- Through the design of long-life products and product-life extension through repair, upgrading etc.
- Narrowing resource flows:
  - Increasing resource efficiency by using fewer resources per product and by covering needs with fewer products through sharing strategies

#### Closing resource flows:

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#### **Consumer survey 2020 in The Capital Region of Denmark:** Repair practices: Electrical and electronic products

Product group	Share of	Share of	Share of repair	Share of repair	Share of repair
	households with	"broken"	needs where the	needs where the	needs where the
	repair need 2019-	products being	product was	product was	product was
	2020 (per year)	repaired	< 2 years old	2-5 years old	5-10 years old
Mobile phone	18%	45%	32%	56%	9%
Computer	10%	50%	16%	41%	32%
TV-set	4%	14%	9%	17%	40%
Refrigerator or freezer	6%	24%	6%	18%	31%
Washing machine or tumble dryer	7%	37%	9%	19%	35%
Dish washer	5%	26%	7%	19%	36%
Kitchen machines	11%	13%	22%	35%	27%
Tools	3%	14%	13%	23%	37%

#### **Consumer survey 2020 in The Capital Region of Denmark:** Repair practices: Electrical and electronic products

Product group	Share of households with repair need 2019- 2020 (per year)	Share of "broken" products being repaired	Share of repair needs where the product was < 2 years old	Share of repair needs where the product was 2 5 years old	Share of repair needs where the product was 5-10 years old
Mobile phone	18%	45%	32%	6%	9% Repaired:
Computer	10%	50%	16%	41%	-
TV-set	4%	14%	9%	17%	Not repaired: More expensive
Refrigerator or freezer	6%	24%	6%	18%	than new
Washing machine or tumble dryer	7%	37%	9%		product Could not be
Dish washer	5%	26%	7%	19%	repaired
Kitchen machines	11%	13%	22%	35%	27%
Tools	3%	14%	13%	23%	37%

#### It is not new to repair household products....

But new that 'modern' citizens organise their own pop-up repair facilities **because** repair has become too expensive and too difficult to access

Denmark: Around 85 local repair cafes within 5 years International network with > 1500 repair cafes developed => 'Right to repair' movement => hard lobbying necessary



# **Governance in the acceleration society**

- State relunctant to regulate
- Market trust in 'spontanous coordination'
- Civil society expecting the knowledgeable consumer
- Lock-in governance
  - Relunctant to regulate the basic system dynamics
  - Suddenly: The power of urgency
- From relunctant recycling to urgent liberalisation of the waste sector
  - Claiming incineration capacty will be reduced

# Renewable energy - Public or market-based transition?

## Fast green transition versus local democracy? (recent Danish governmental programme)

4.6 Increase the expansion of renewable energy and transition away from fossil heating:

Initiate an analysis of whether the current **distribution of tasks** between **state authorities, regions and municipalities** can be made more efficient, with a view to **ensuring a high pace in the development of renewable energy on land** 

The government will work for the state to play an active role in the planning of energy parks as a supplement to the municipal planning of renewable energy projects. The expansion of the energy parks **must be market-driven and handled by private actors** 

#### 6.1 A coherent Denmark....

Investigate how neighbors and local municipalities can best gain economic benefits by 'offering' land for onshore renewable energy

Maybe: Establishing local energy communities. Expanding a current bonus scheme

Sustainable transition and workers / employees

# National plan for green transition from the Danish national trade union association (FH)



Trade union confederation survey among employees

#### • Positive expectations to green transition (>50%):

- Can improve environment, nature and biodiversity
- Improved conscience in relation to future generations
- Can improve health

#### • Negative expectations to green transition (>20%):

- Goods and services become more expensive
- Inequality is increased
- Might create conflicts and reduce social cohesion

Demands to green transition from the Danish national trade union confederation (FH) (greentransitiontogether.com)

- 1) Denmark must be a leading country
- 2) The green transition must create more good jobs
- 3) The solution is collective decisions and binding international cooperation:
  - Society must finance the green transition
  - The individual can take on co-responsibility, but it cannot be left to the individual to solve the challenge of climate change
- 4) The climate crisis and the green transition must not increase inequality in Denmark