# "TARGETING HOUSEHOLDS – FUTURE POLICIES TO CAP CONSUMPTION DEMAND"

22nd Annual ISDRS Conference, Lisbon 2016

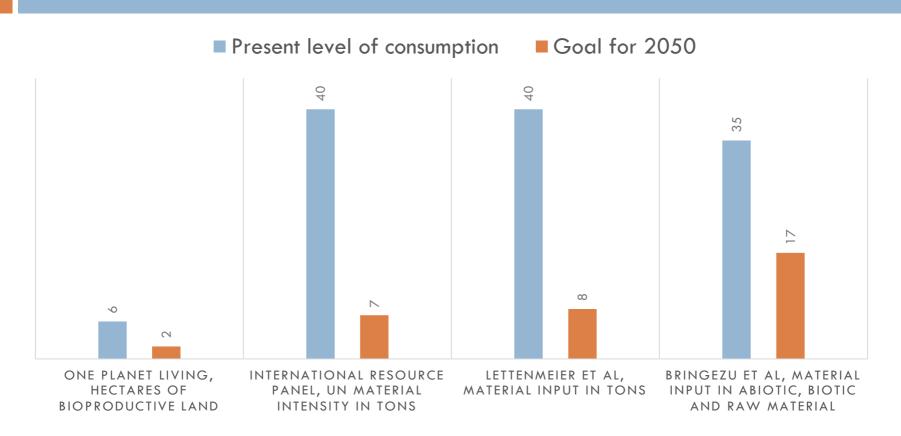
# Background



#### Decision makers' images of the future

Are our decision makers ready to take more radical action and try new ways, since old ones are not enough?

# Research estimates 50 - 80 % cut in natural resource consumption is necessary



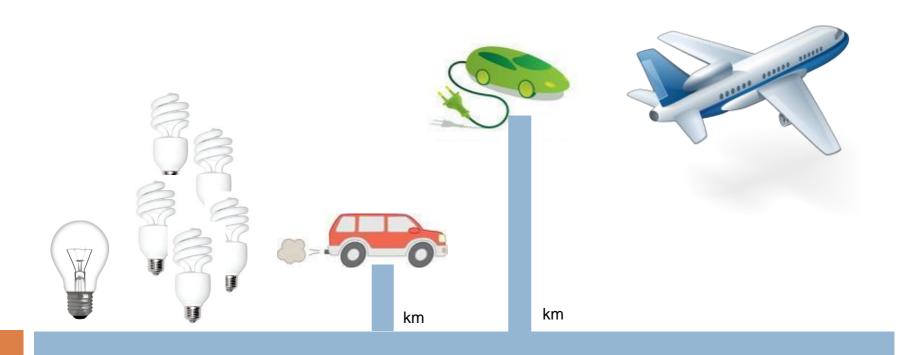
## Environmental sol Economic sphere Extraction Reus AJANOR Production Emissions Waste Consumption www.balticuniv.uu.se/index.php/5amanufacturing--sustainable-production

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# Rebound effect / Jevons' paradox



# Targeting the demand

How to achieve a radical reduction in natural resource consumption?

#### Finnish experts – 17 interviews International & Finnish peers – 24 survey responses

	Social impacts	Environmental impacts	Economic Impacts
8 Researchers	F F M	M M F	M
4 Activists	F	M M	М
5 Practitioners		M F F M	F



# Eliminate most harmful options

- Ban harmful products
- Improved product standards

Reduce attraction of harmful products

- Ban advertisements
- Targeted taxation

Limit impacts from

Promote low-consumption

Capping total

consumption

- Mat footprint indicators
- Sharing systems
- Gen. consumption tax
- Local bonus trading system

Quotas or allowances Reducing wealth

Housing Mobility Food Consumables

Sanna Ahvenharju - FFRC

# Eliminate most harmful options

Reduce attraction of harmful products

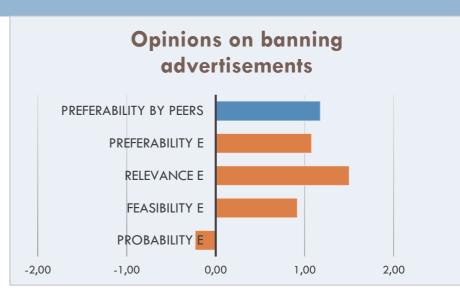
Promote low-consumption

Capping total consumption

#### Ban advertisements



- Specific harmful products
  - Cars, flight travel, meat, etc.
  - Based on material footprint or other similar criteria
- Certain types of advertising
  - No human photographs
  - No pictures
  - No street or outdoor advertising
- All kinds of advertising

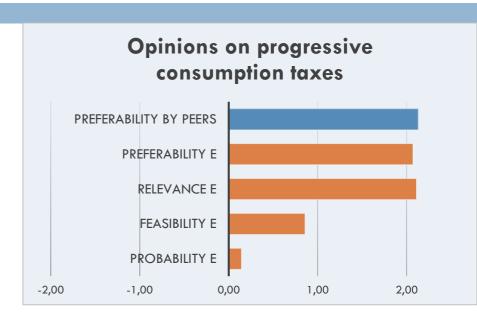


Compulsory signs of harmfulness instead?

## Targeted tax (compensation)



- □ High 60-70% tax on
  - Housing square metres
  - Temporary second residences or vacation homes
  - Cars, parking spots
  - Fossil based fuel & energy
  - Meat, dairy
- Minimum thresholds?



Tax as compensation => The impact becomes more visible to consumer

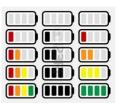


Reduce attraction of harmful products

Promote low-consumption

Capping total consumption

## Material footprint indicator



- Per capita footprint
  - Current national average
  - Target for 2025 and 2040
- Personal/household footprint
  - Reported yearly with tax accounts
  - Compared to national target
  - Basis for further quotas or taxation thresholds?

- Consumption of
  - heating energy
  - water
  - travel miles
  - housing square metres
- Number of
  - cars/other motor vehicles
  - pets
- Consumption of
  - meat
  - dairy
  - electronic devices

## Sharing systems



- Urban planning & building codes
  - Increased share of housing square metres to shared spaces
  - Minimum distance to 'sharepoints'
- Virtual infrastructure
  - Neighbourhood sharing systems & co-ops
  - Individual sharing



Combined with high ownership taxation? And bonus systems?

### General consumption tax



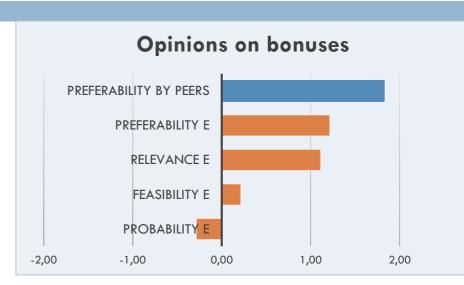
- To all products
- Based on CO2 emissions
  - First household energy and car & flight emissions
  - Later food and consumables
- Based on material footprint

Also progressive?

### Local Bonus trading system



- □ Bonuses awarded on
  - Usage of energy and water
  - Car mileage (local)
  - Housing square metres, lot size, distance from infrastructure
  - Participation in sharing schemes
- Bonuses used to
  - Pay municipal taxes
  - Buy local products
  - Buy certified eco-friendly products



Similarity to local currency schemes



Reduce attraction of harmful products

Promote low-consumption

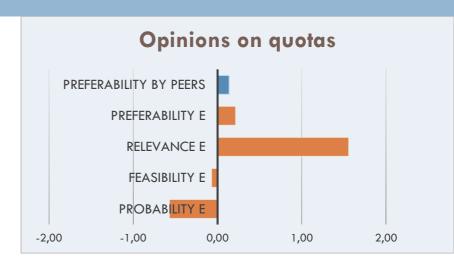
Capping total consumption

#### Quotas or allowances





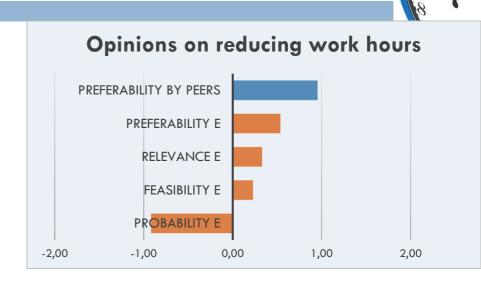
- 1. Personal CO2 emission quota
  - Include first household energy and car & flight emissions
  - Later include food and consumables
  - Incorporate into the taxing system
- 2. Individual consumption quotas
  - Energy consumption (kWh)
  - Flight travel mileage (km)
  - Household size per inhabitant (m2)
  - Not absolute quotas but with a high tax threshold?



Should this be combined with a trading system and or bonuses?

#### Reducing wealth

- Capping wages
  - Max. 200 000 per year
  - All income beyond is taxed 100 %
- Capping work time
  - Max. 24 hours per week



Elasticity btw income and consumption is low

#### Observations

- Enforcement and control vs. expense and efficiency
- Targeted policies vs. generalised approaches policies
- Control vs. privacy
- Financial vs. regulatory instruments
- Capping vs. freedom of choice
- Win-win policy impacts environmental & social impacts
- Equality in consumption?

#### Thank you!



#### Sanna Ahvenharju

Finland Futures Research Centre
Turku School of Economics
FI – 20014 University of Turku

**FINLAND** 

sanna.ahvenharju@utu.fi

http://users.utu.fi/sajoahv

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#### References

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  - LETTENMEIER, M., LIEDTKE, C. and ROHN, H., 2014. Eight Tons of Material Footprint" Suggestion for a Resource Cap for Household Consumption in Finland. *Resources*, **3**(3), pp. 488-515.
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- WWF One planet living <a href="http://wwf.panda.org/what we do/how we work/conservation/one planet living/ab">http://wwf.panda.org/what we do/how we work/conservation/one planet living/ab</a>
  <a href="mailto:sanna-do-how-narju-ref">Sanna Anvenharju - FFRC</a>

#### My questions for the audience

- □ Is this set enough to
  - Provoke discussion?
  - Focus on the essential things to cap the consumer demand for natural resources?
  - □ Present a feasible although presently not so probable
    - alternative?
  - Really change the consumption system and radically reduce consumption?