

Why foresight?

*Planning in the age of global
megatrends*

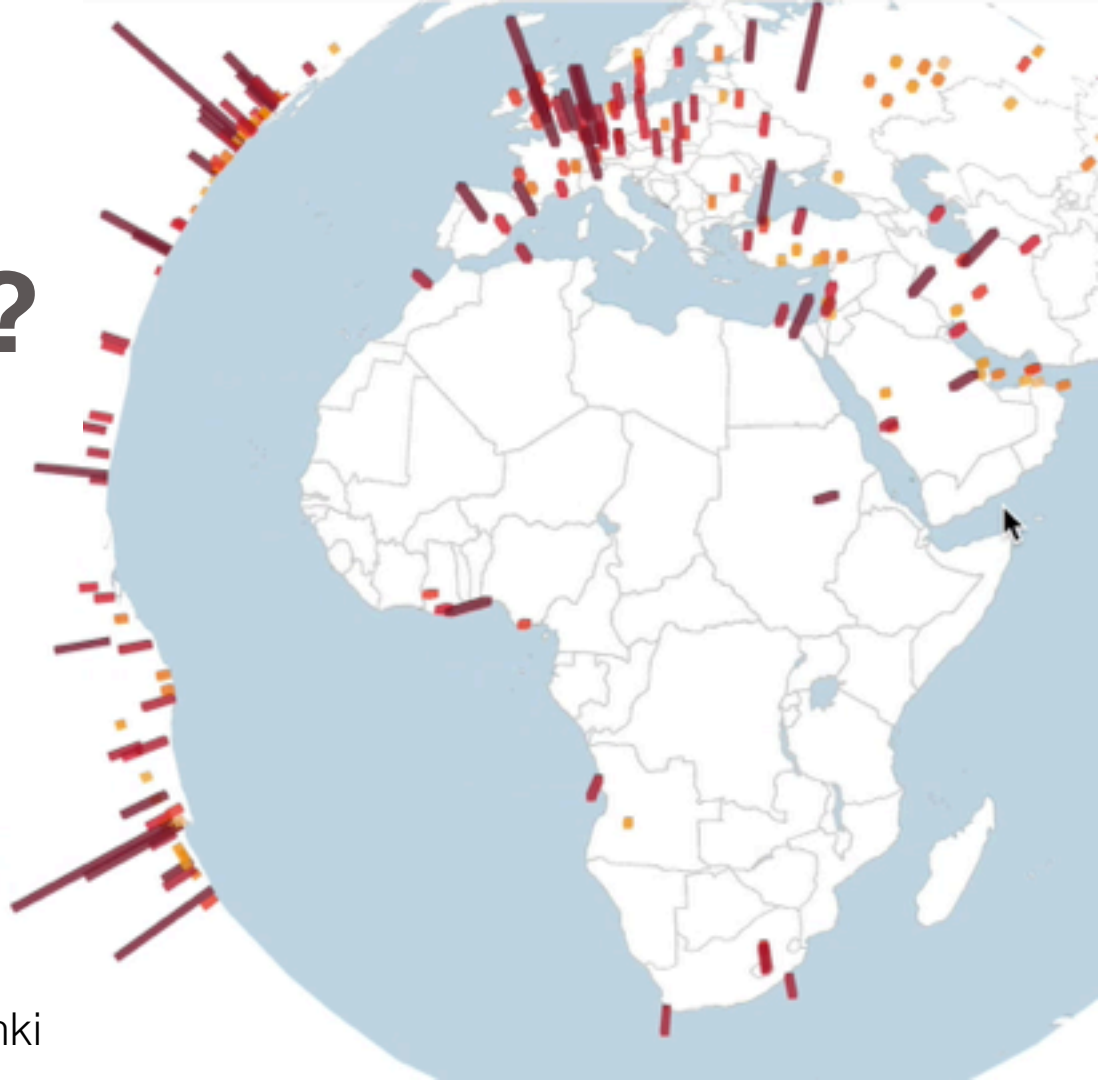
Roope Mokka
Founder
Demos Helsinki



@mokka



@demoshelsinki





Lesson learnt from region 2050

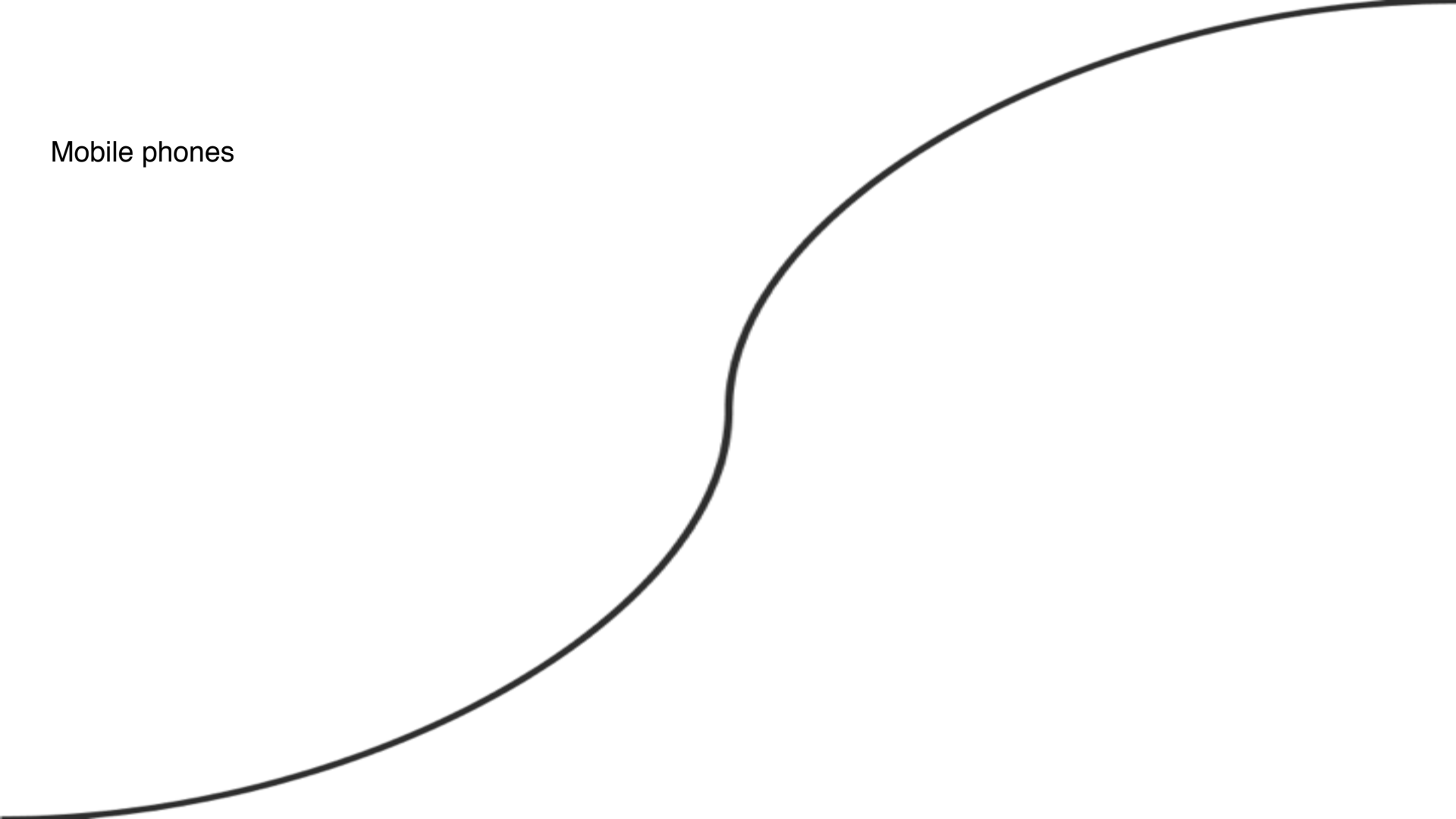
Two best outcomes

1. Foresight helps in understanding the core of strategy - målkonflikter
2. The future-table really helps in getting rid of today's topics.

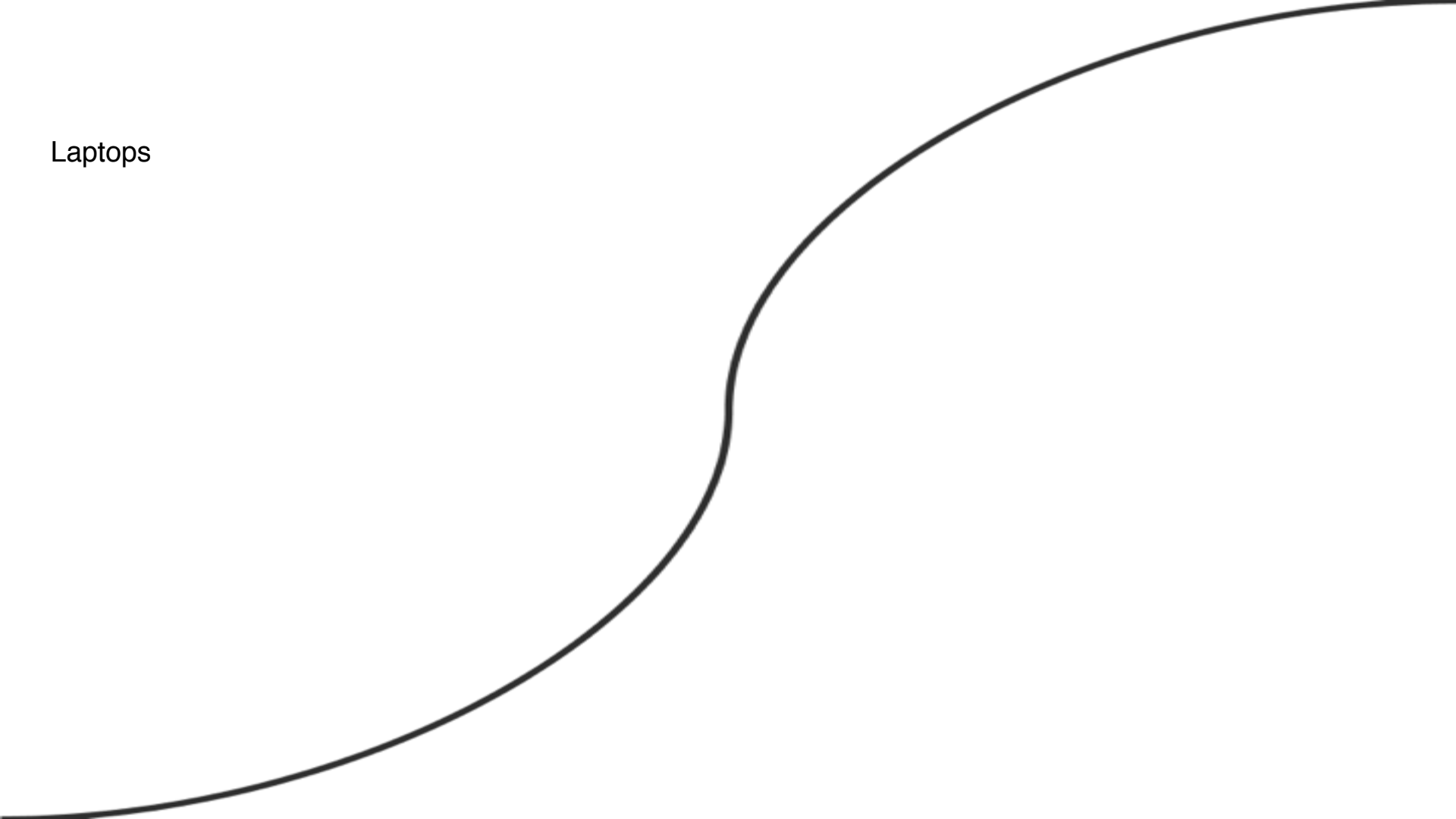


Forecasting

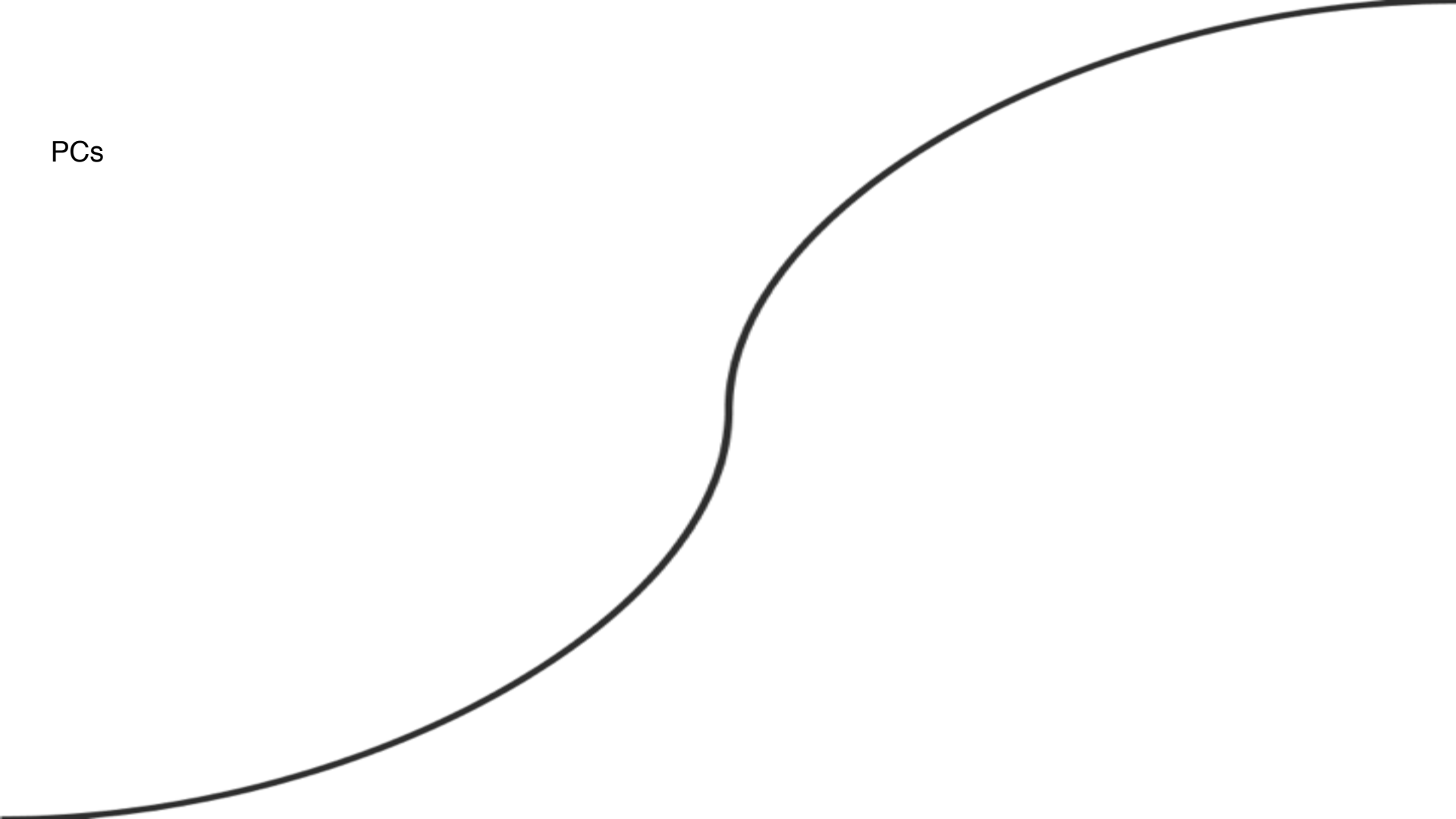
Mobile phones



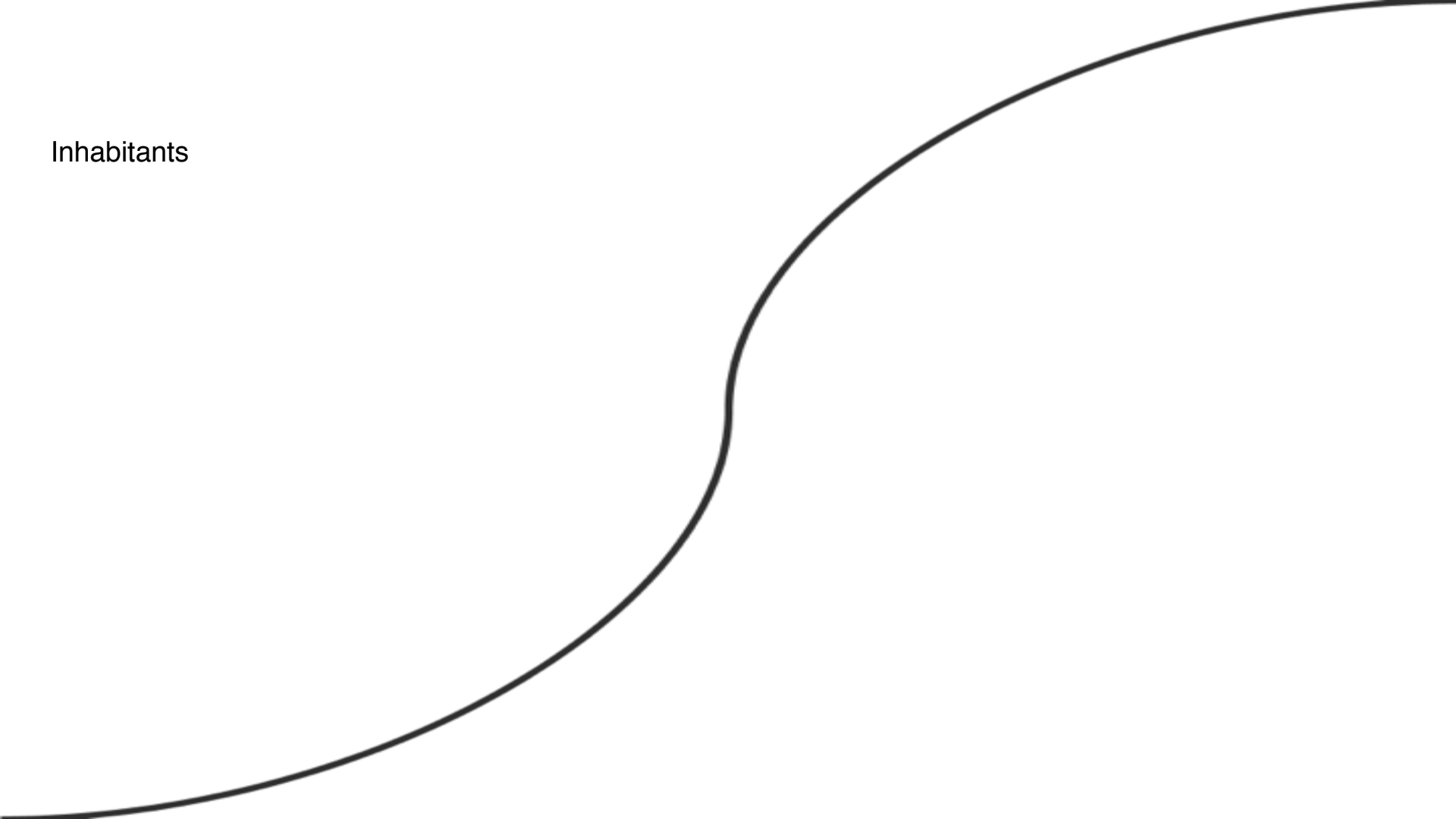
Laptops



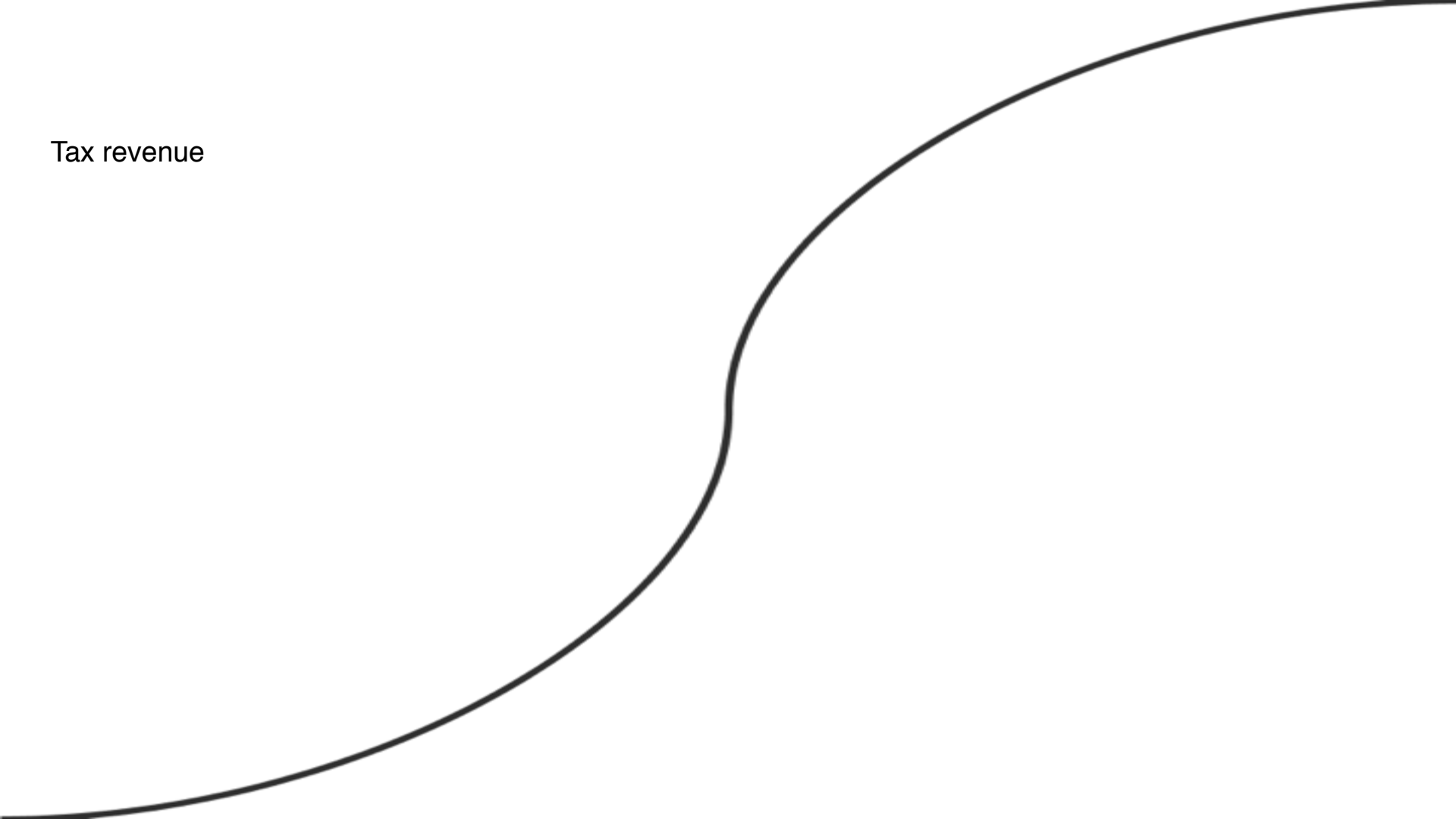
PCs



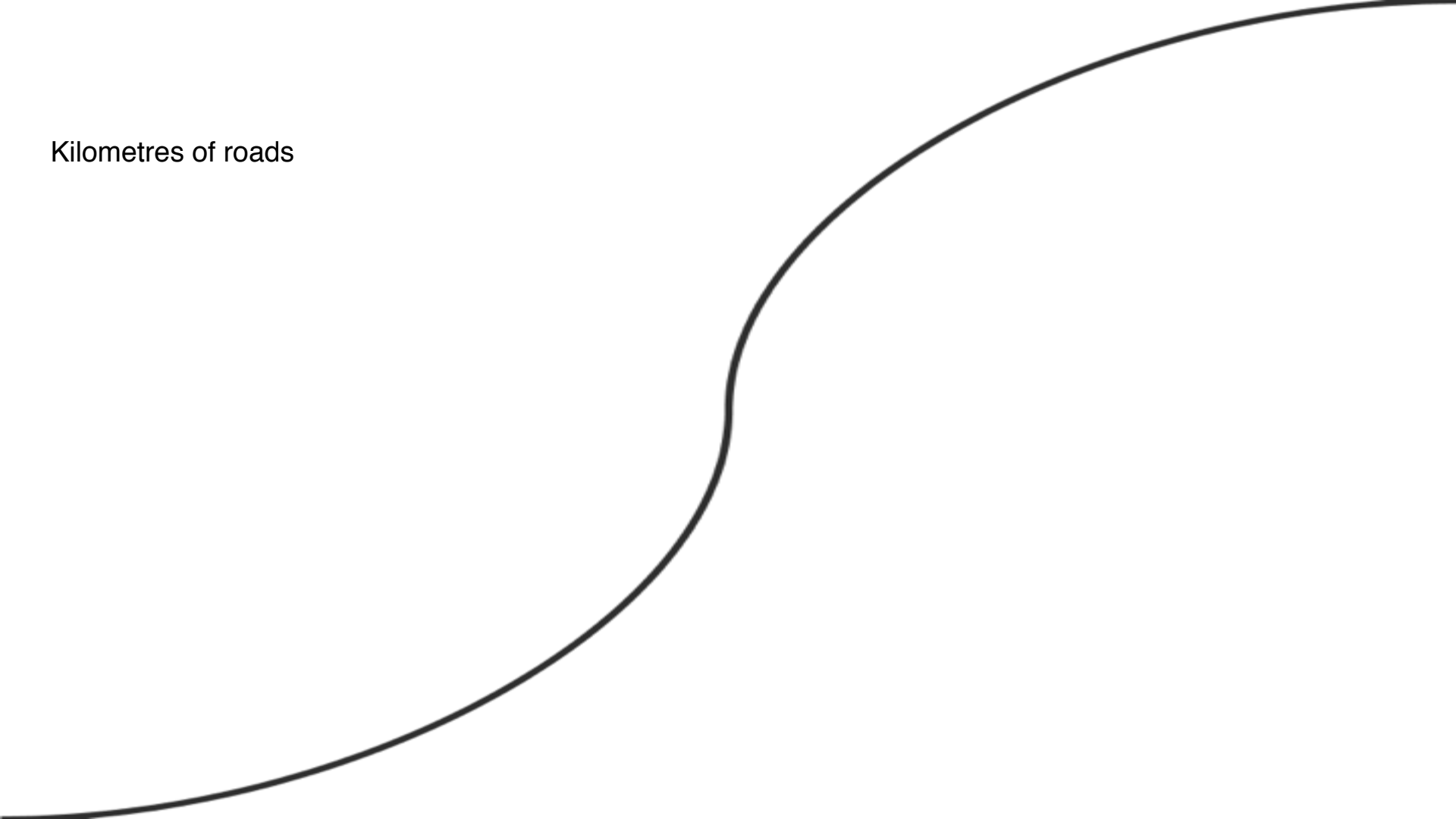
Inhabitants



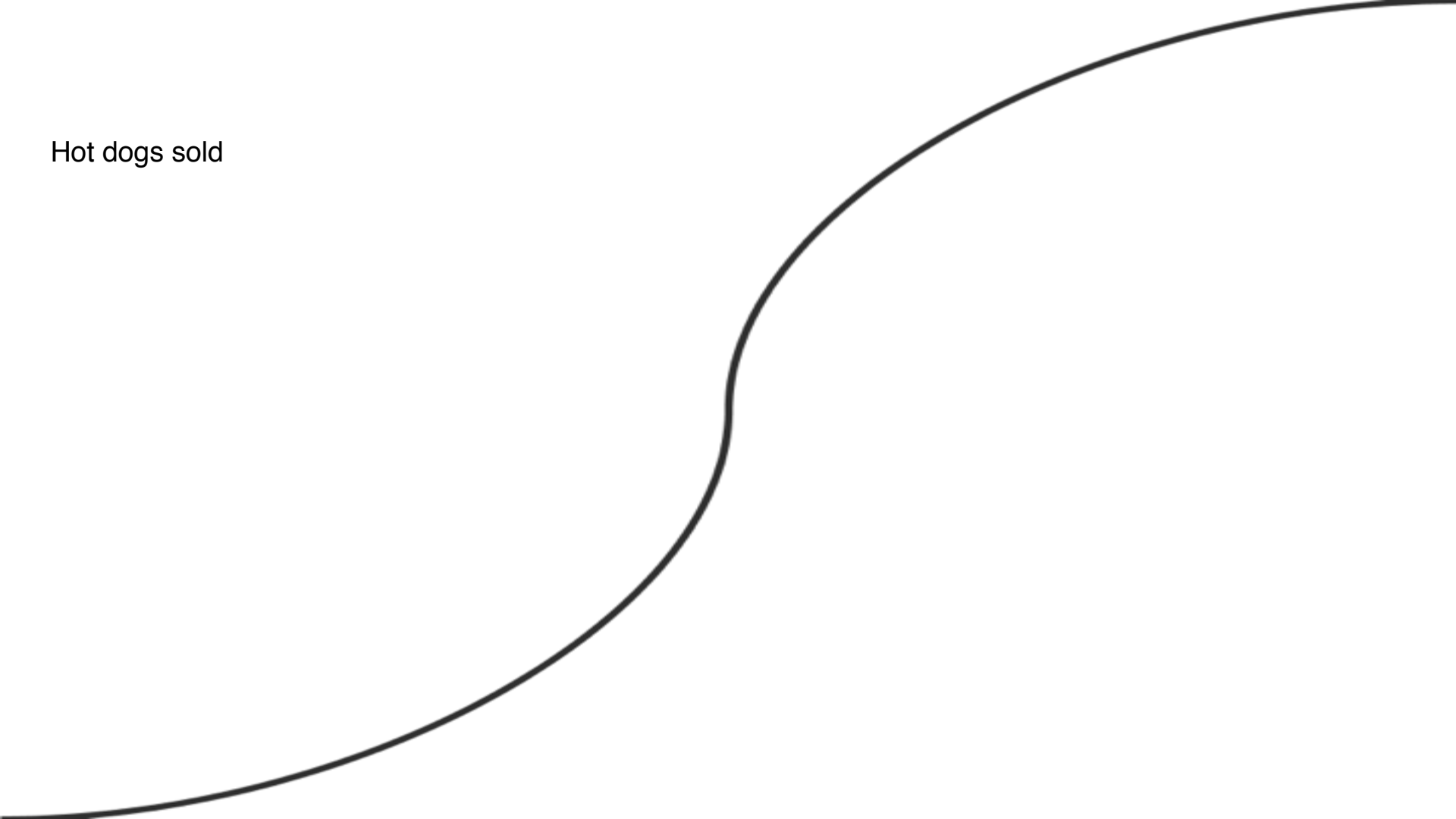
Tax revenue



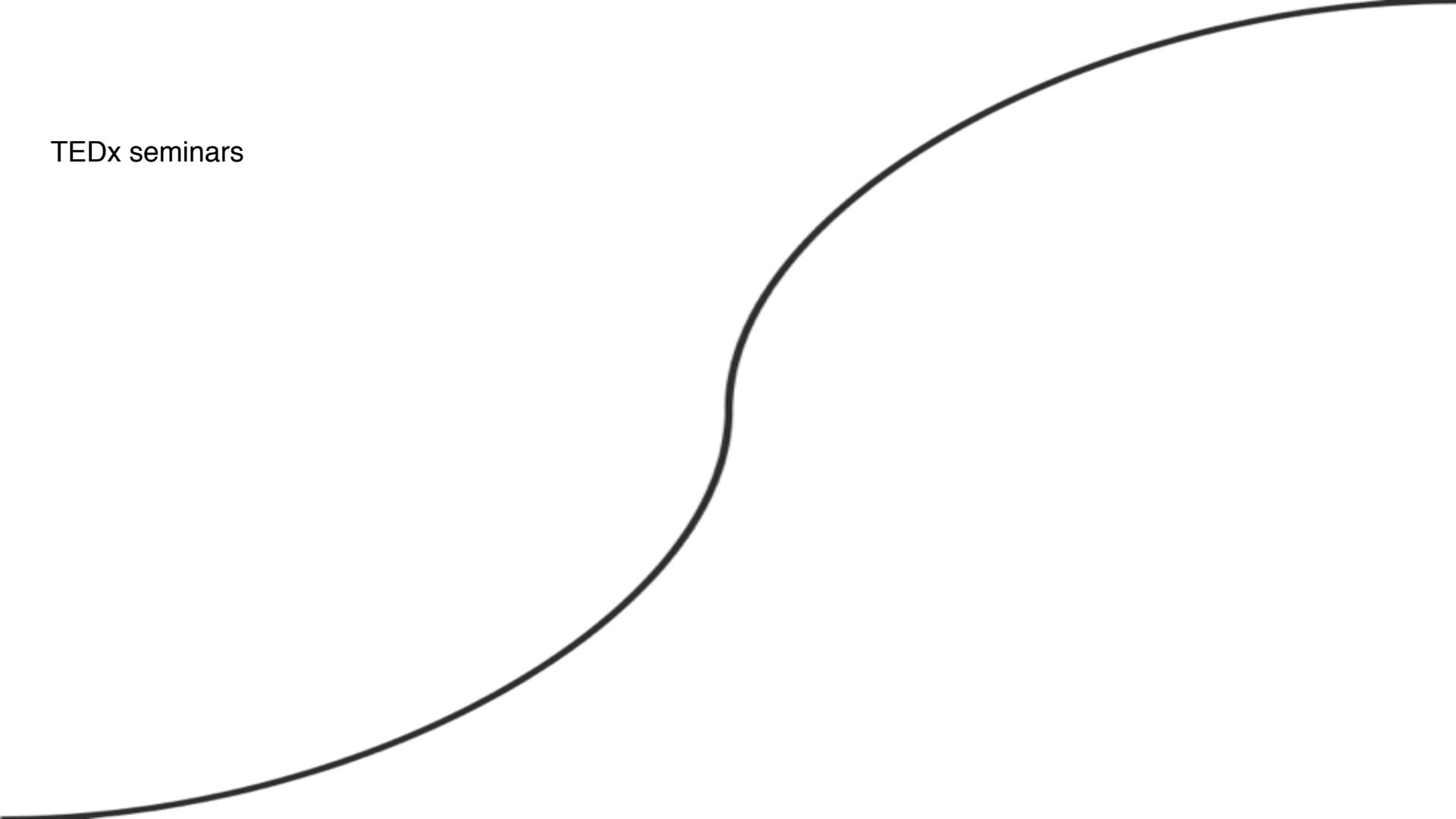
Kilometres of roads



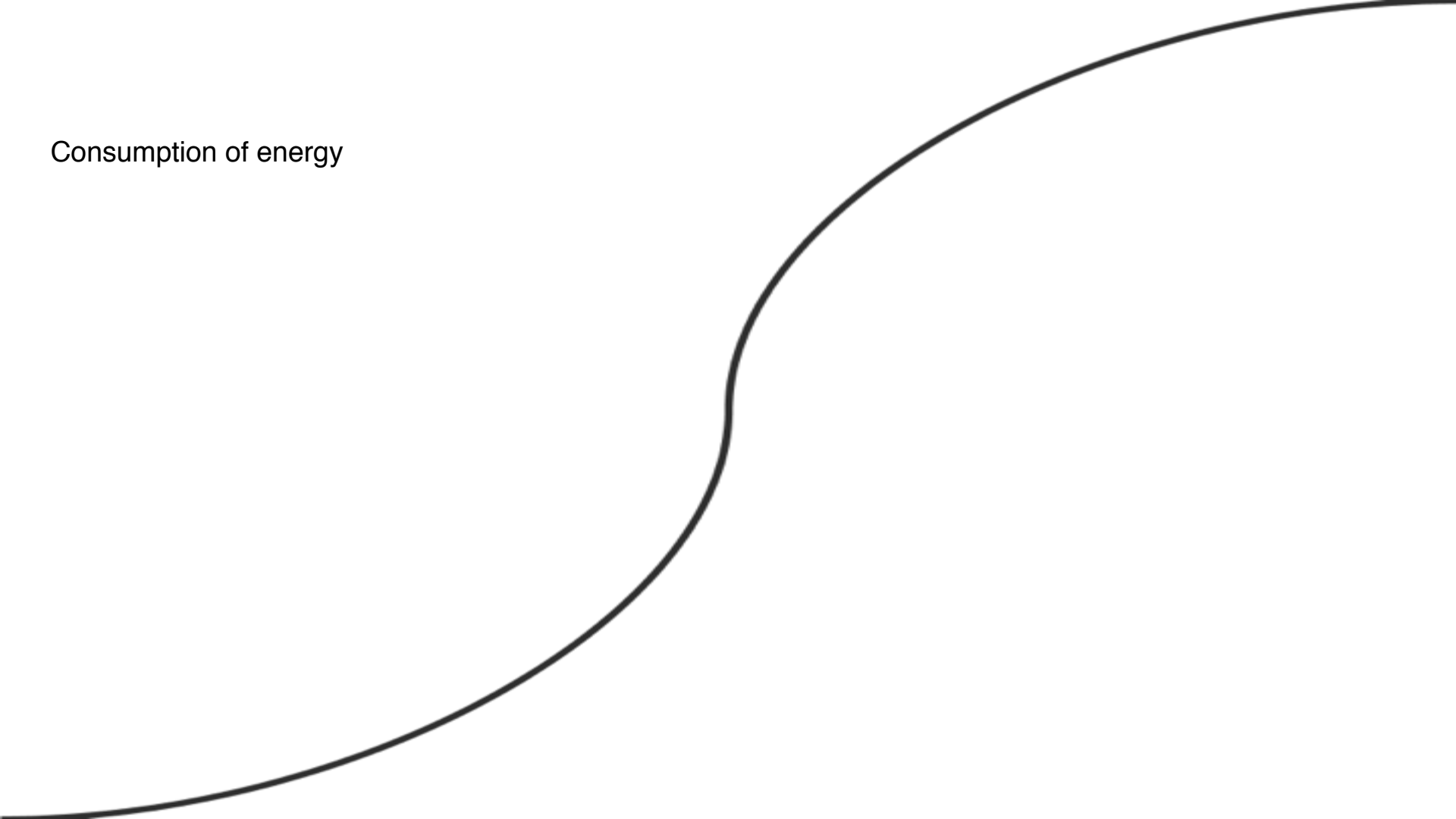
Hot dogs sold



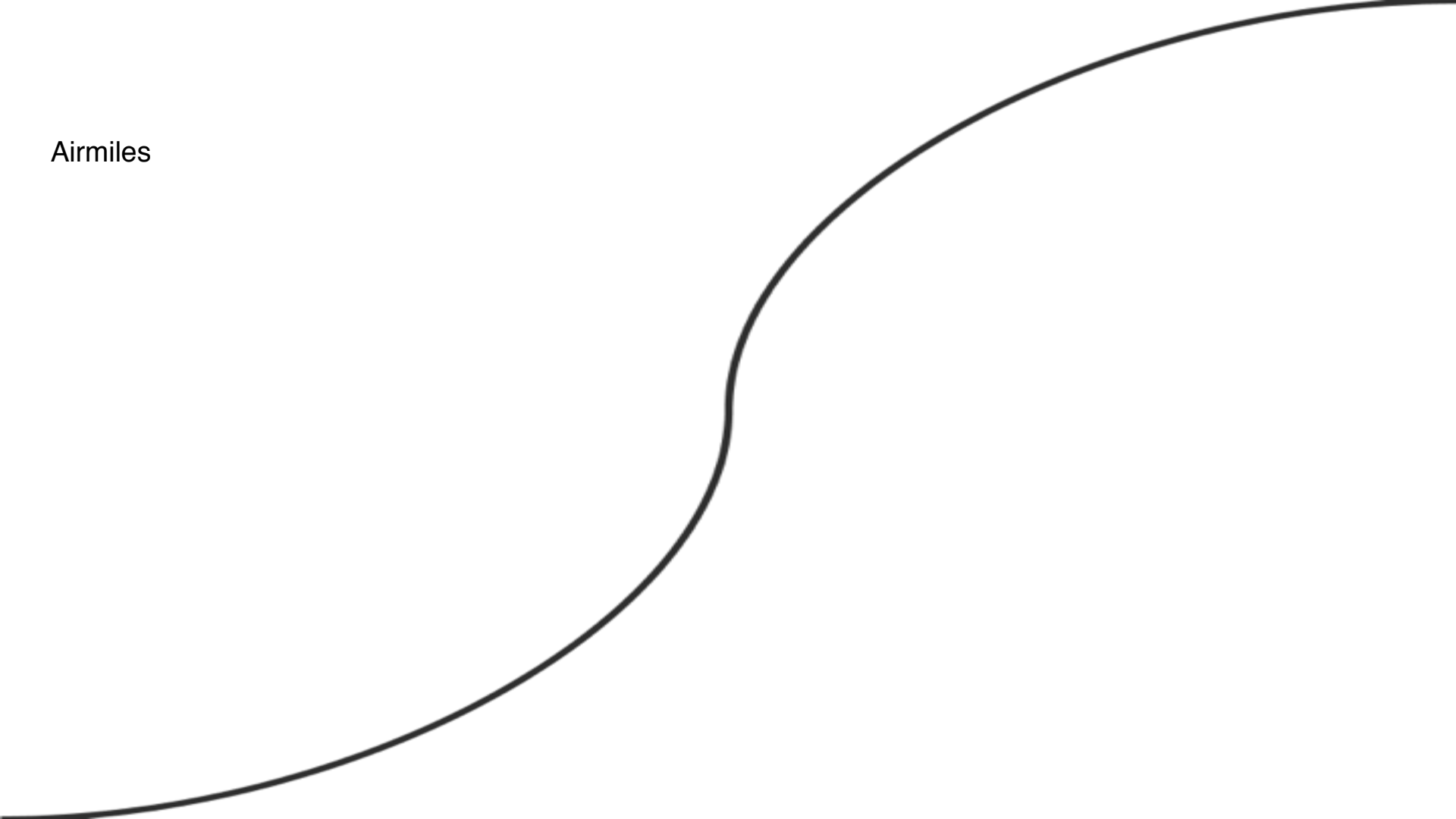
TEDx seminars



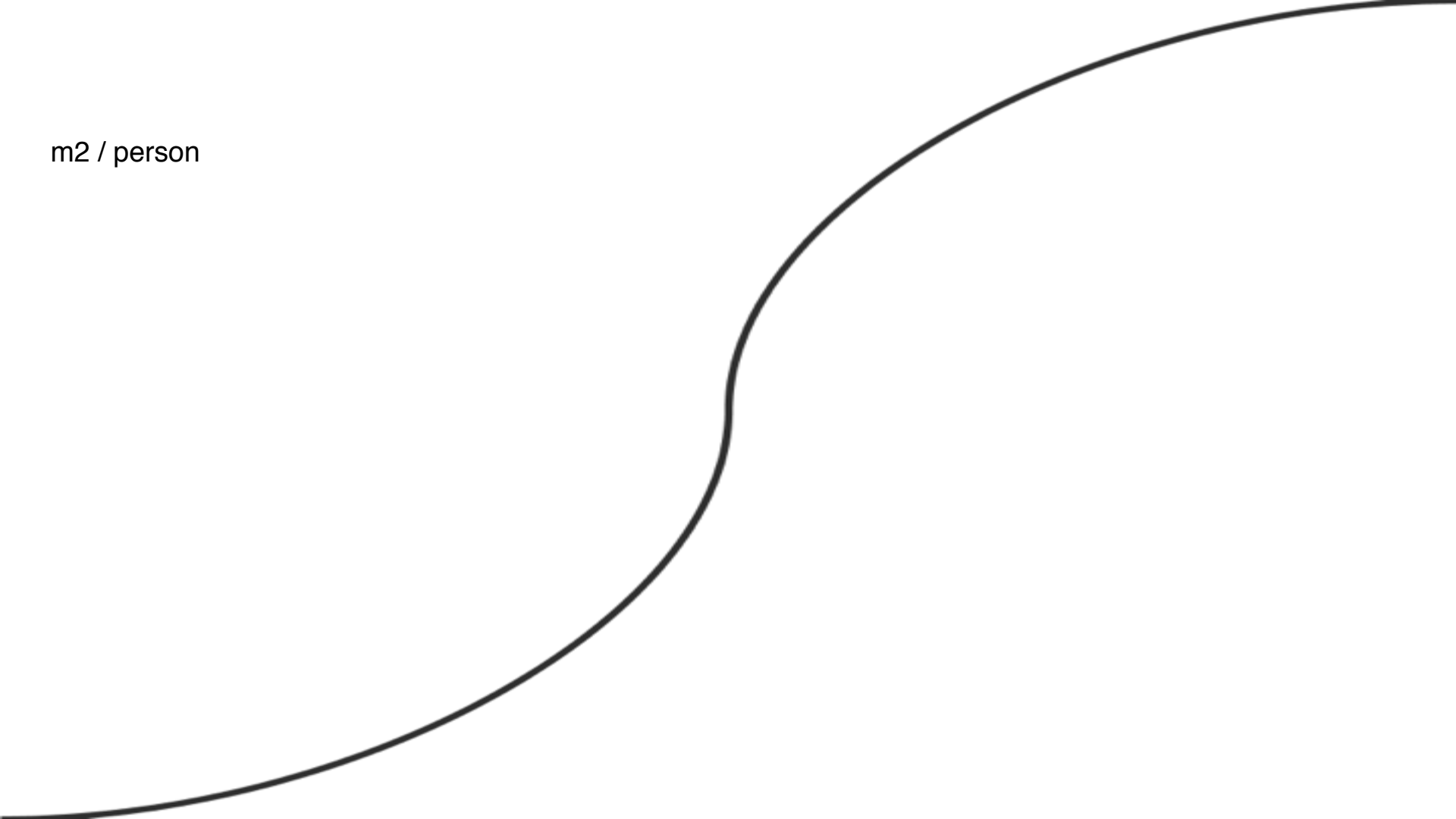
Consumption of energy



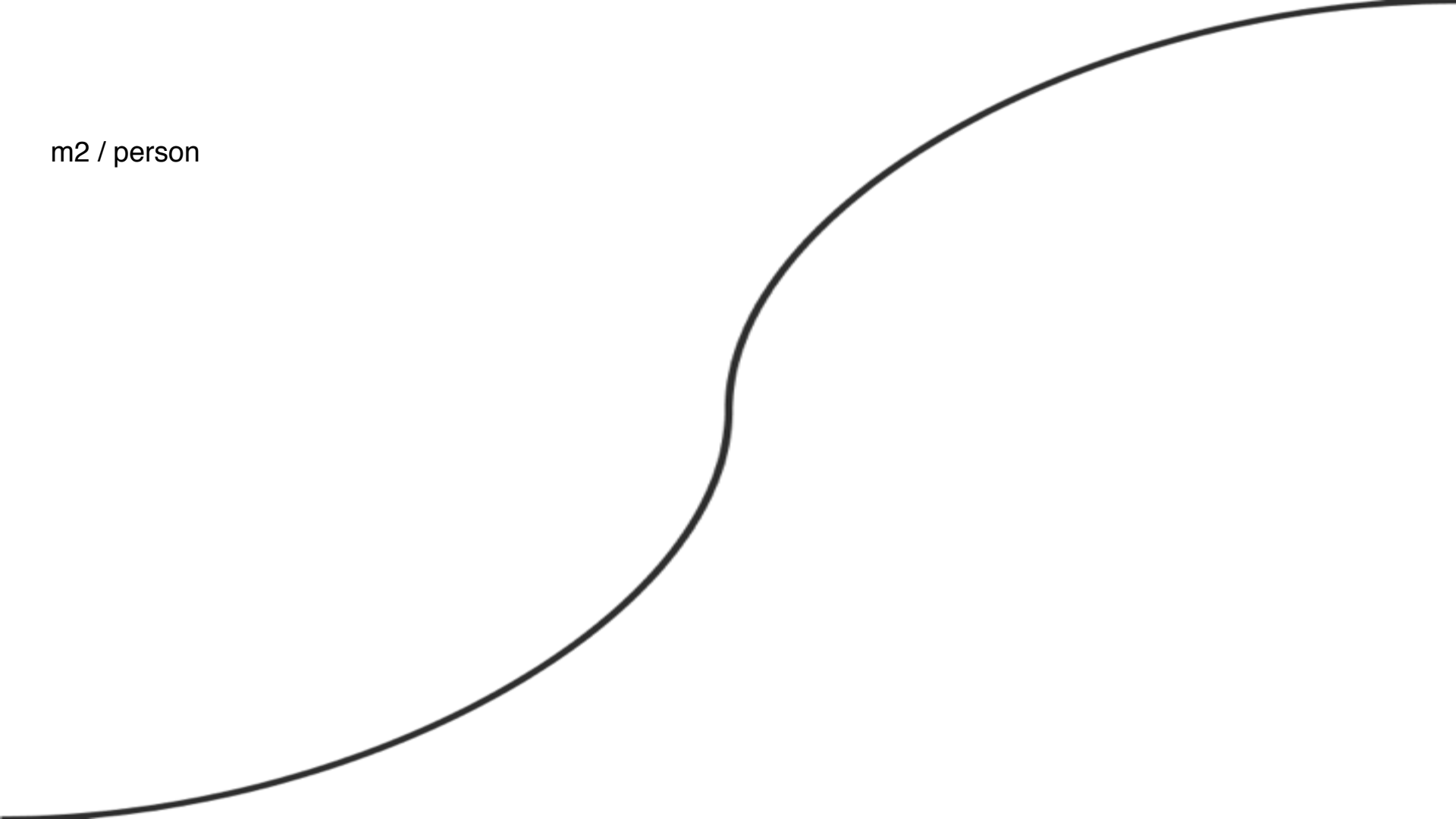
Airmiles



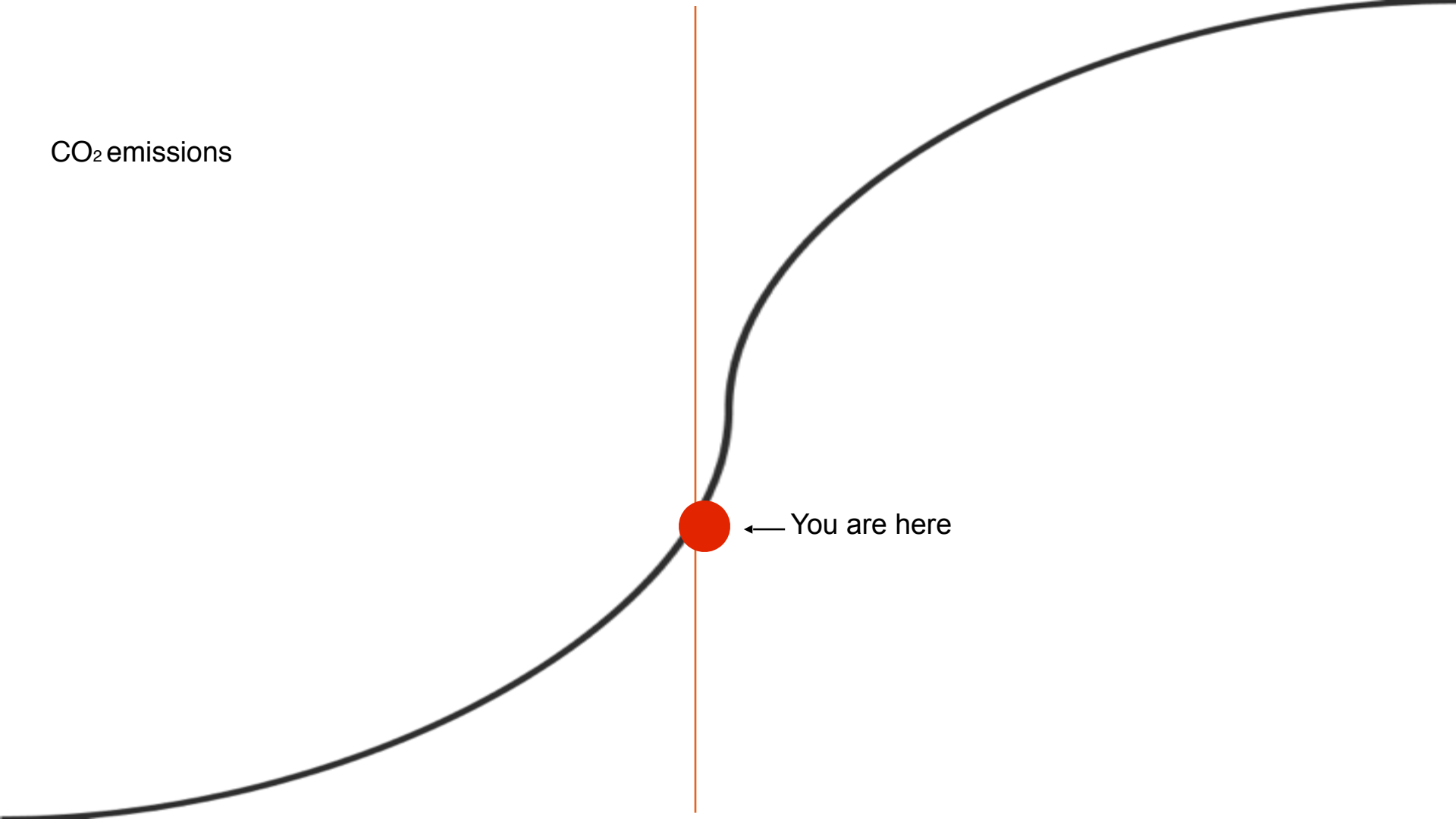
m2 / person



m2 / person

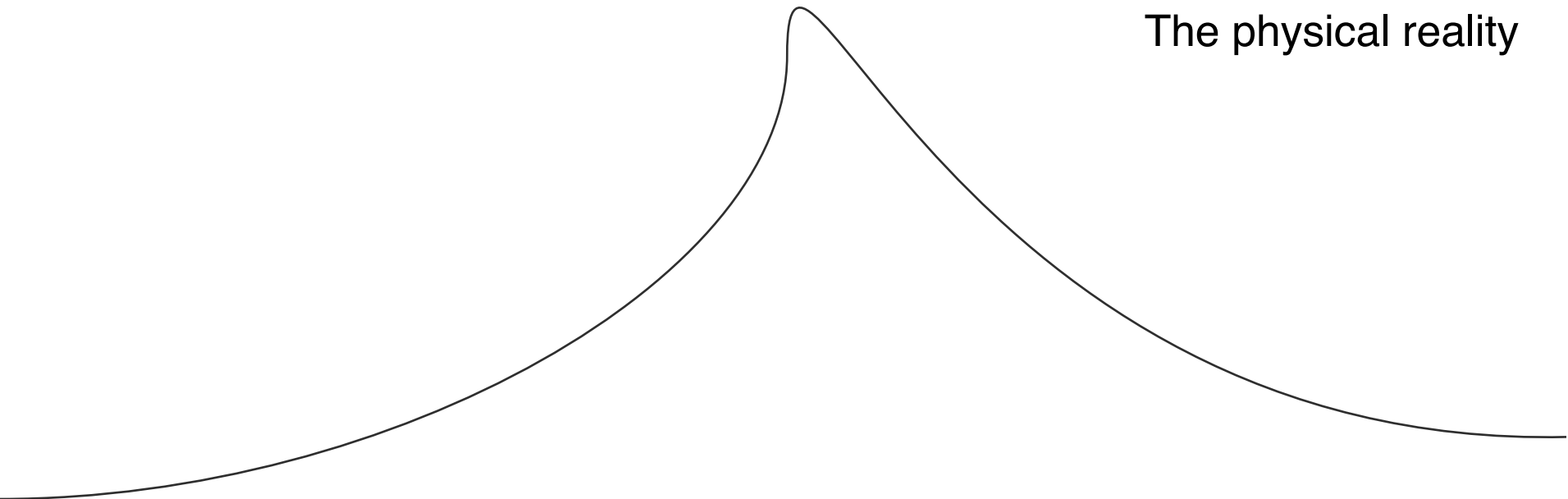


CO₂ emissions

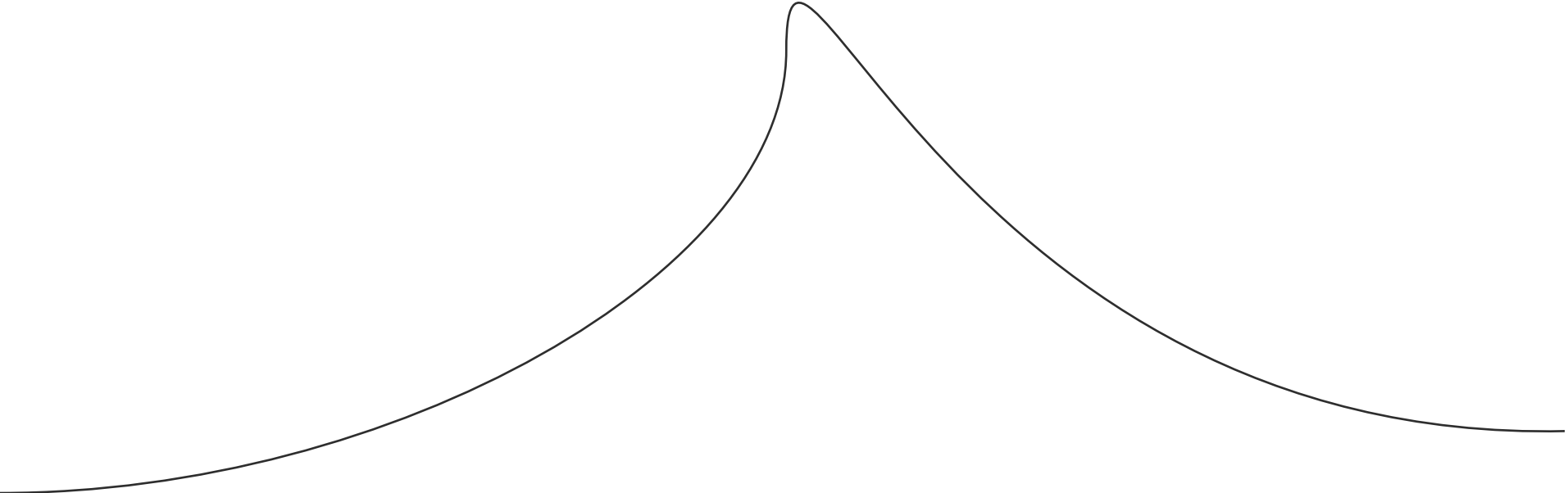


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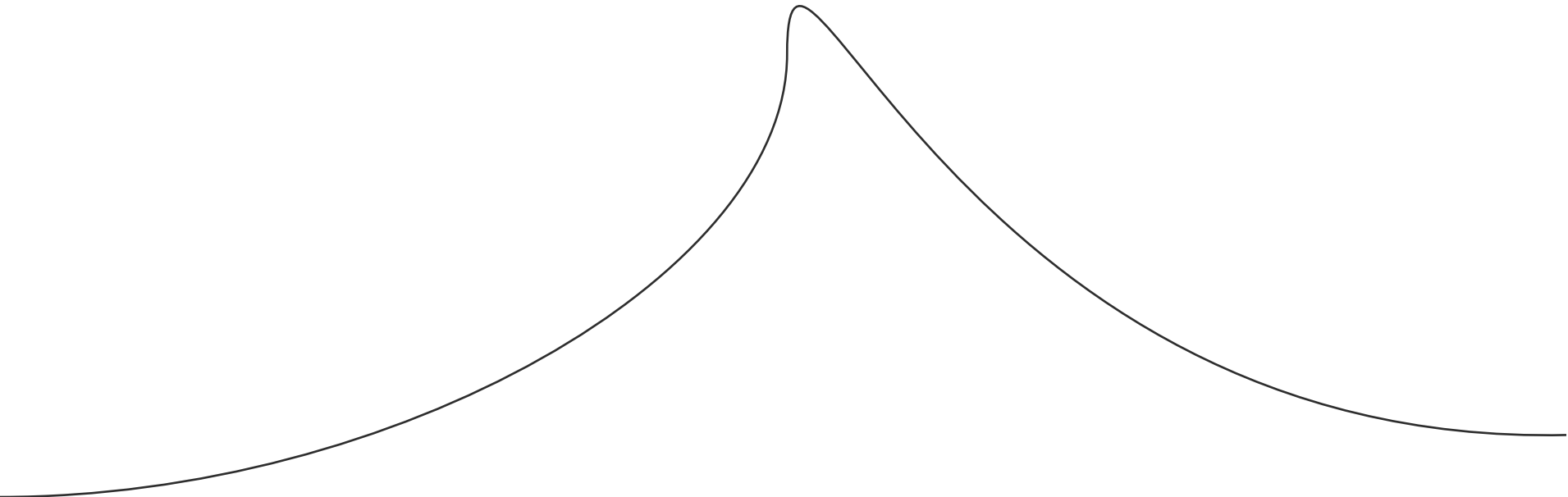
CO₂ emissions



Foresight looks
at these points
in future.
Its about
understanding
discontinuities.



**Instead of
extrapolating
a single trend (robotisation, work)
it looks at a collection of
megatrends to get a holistic picture.**





Megatrends

What are megatrends:

- a list!
- affect everything
- unlikely to go away
- interact with each other
- create trends, technologies and industries
- may change in definition, but remain the same in essence
- a short(est possible) list of phenomena you can explain the future with

What megatrends are not:

Trends or fashions

Technologies or industries

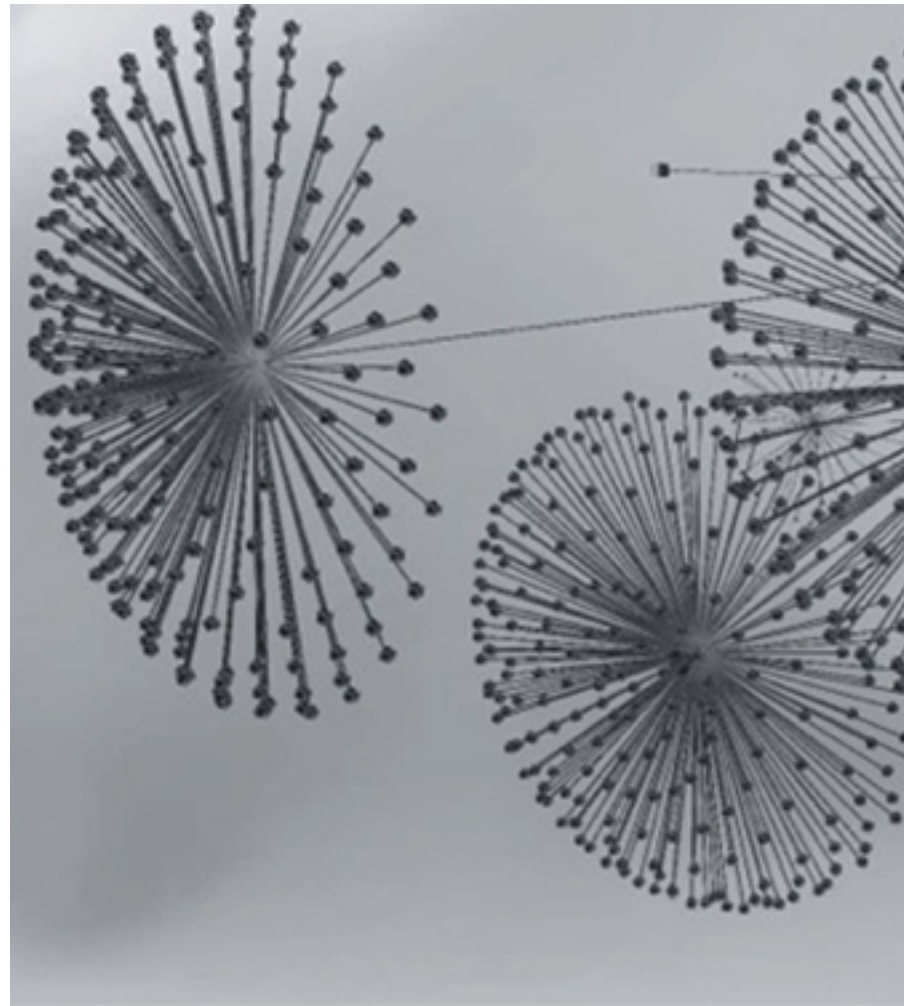
Local phenomena

Something you can abolish with a **magic bullet**

5 DEMOS HELSINKI MEGATRENDS

1. Planetary technology combines bits and atoms
2. Population tetris replaces population segments
3. Individualisation turns into participation
4. The emerging metropolises become the dominant global structure
5. Resource economy delivers constant disruptions

(Demos Helsinki, 2015)



MEGATRENDS BECOME REAL ONLY IN A GIVEN REGION.

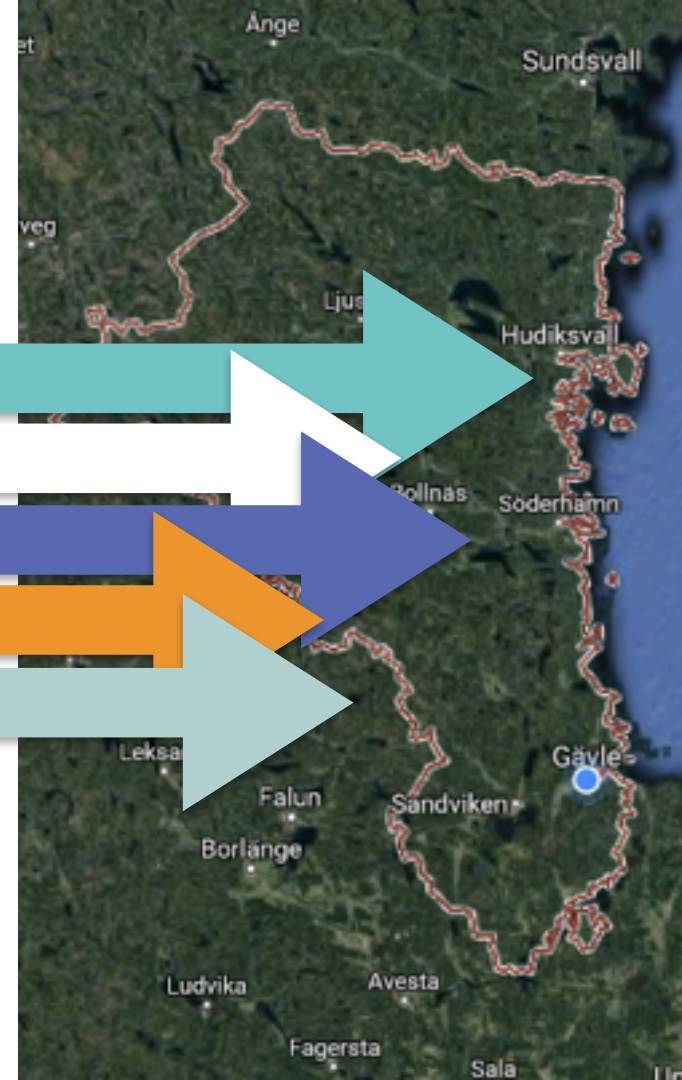
Planetary technology

Population tetris

Individualisation becomes participation

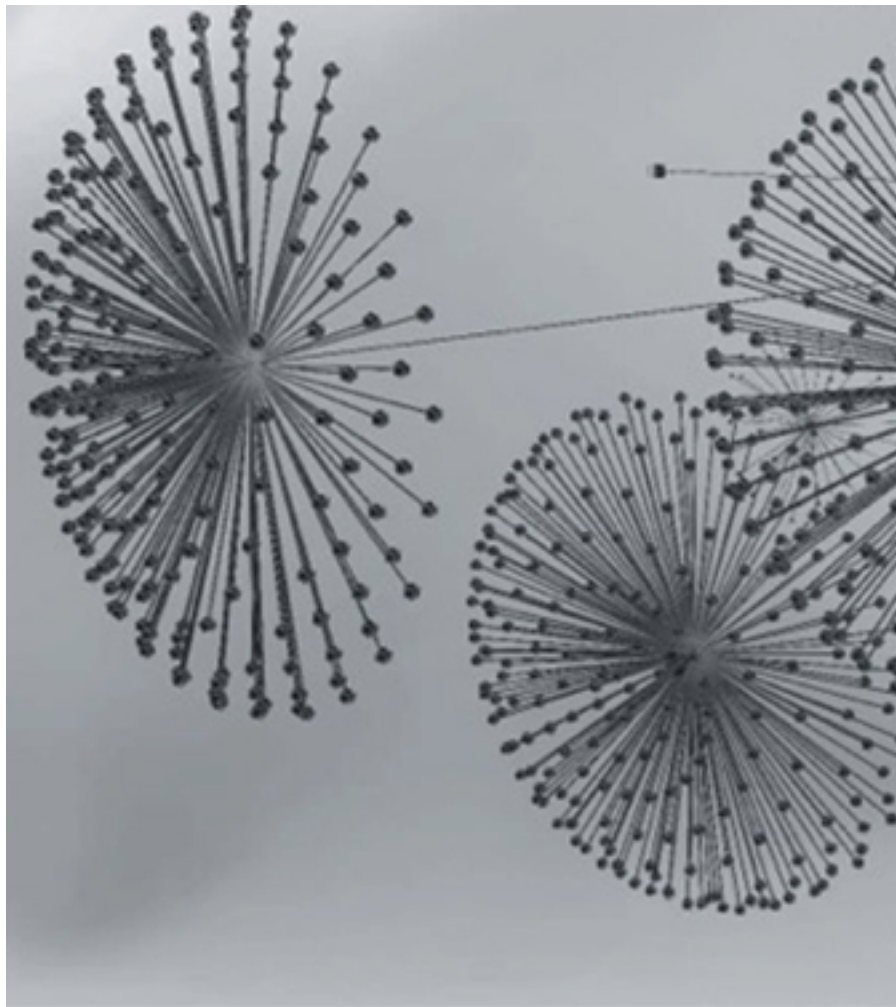
The emerging metropolis

Resource disruptions



MEGATREND 1

Planetary technology combines bits and atoms. The next phase of digitalisation connects the entire planet into a web of data, that is getting beyond human control.



**When is the last
time that you
watched your
mobile phone?**

**We look at our
phone every
6th minute**

**In ten years time
we will never look
at our phones.**

A large black arrow pointing upwards, containing the text 'Function-nalities' in white.

**Function-
nalities**

A large black arrow pointing downwards, containing the text 'Size Price' in white.

**Size
Price**

THE LAW OF HYPERCONNECTED PLANET

Size & Prize

Functionalities

Mainframe computers

Personal Computers
Laptops

Smart Phones

Smart Watches

Wearables

Nearables

Smart Environments

"Smart dust"

THE LAW OF HYPERCONNECTED PLANET

Size & Prize

Mainframe computers

Personal Computers
Laptops

Smart Phones

Smart Watches

Wearables

Nearables

Smart Environments

"Smart dust"

**you
are
here**

Functionalities

Bits and atoms are joining already and its creating a lot of value. Already.

Uber \approx \$18.2bn
Airbnb \approx \$30bn

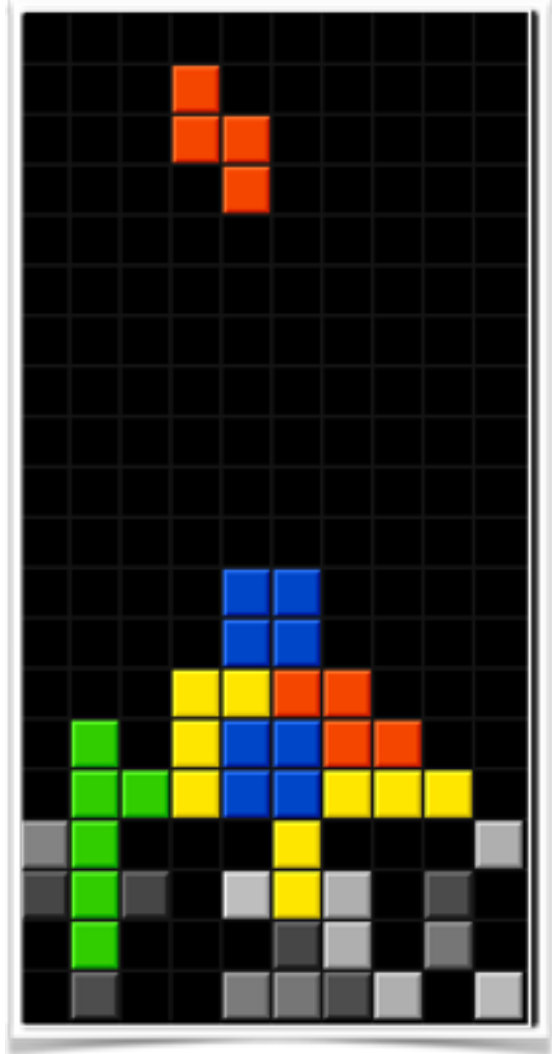
Pokemon GO increased
the valuation of
Nintendo w. \$11 bn
(oops!)





MEGATREND 2

Population tetris replaces population segments. There are holes in the society and reaching everyone is hard..





Population tetris replaces
population segments

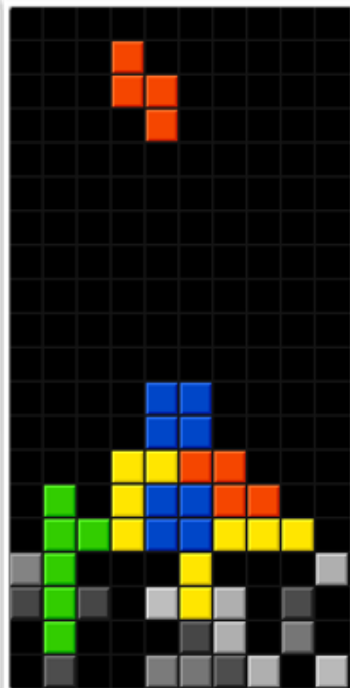
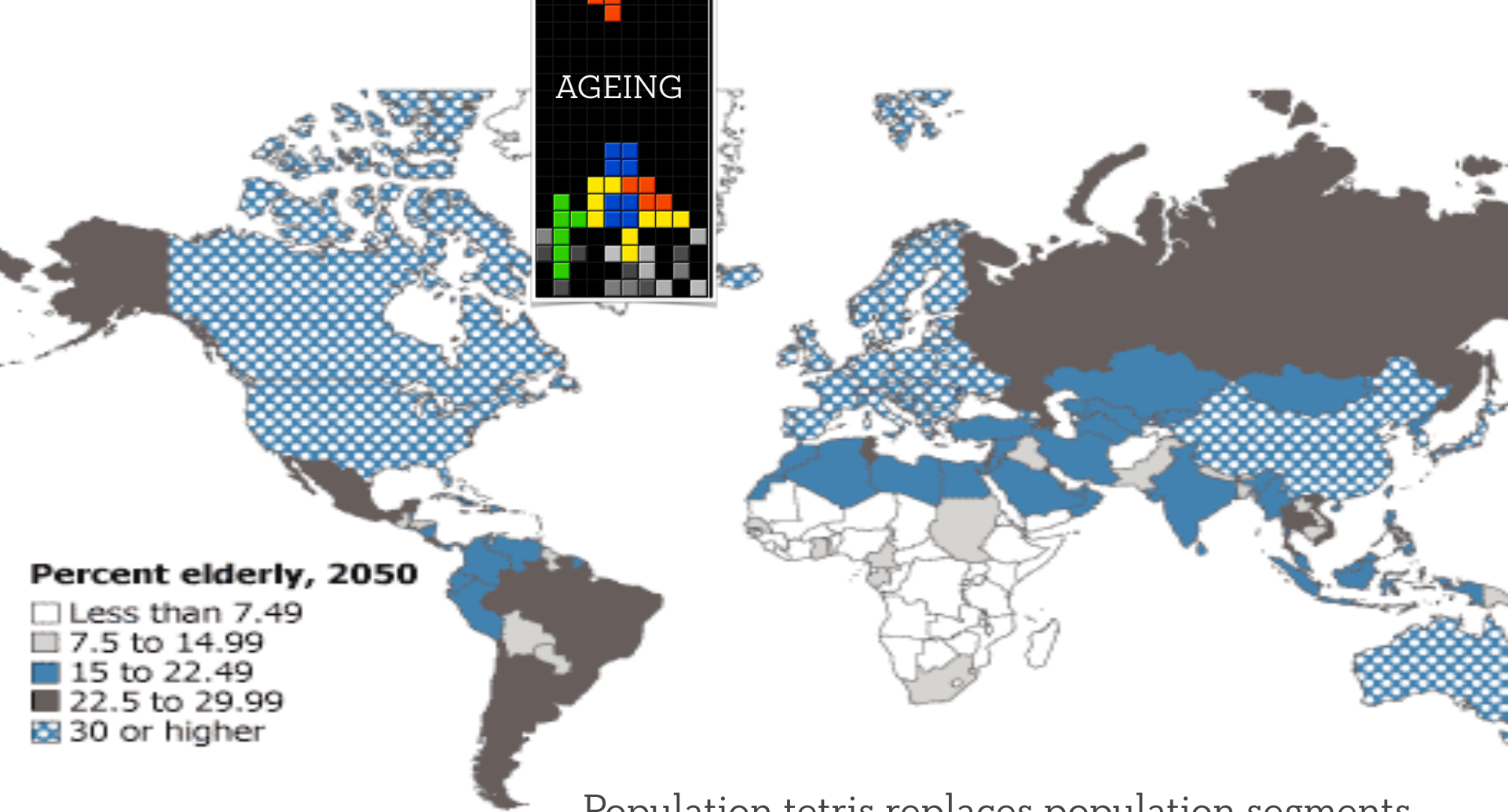


Figure 1. Immigration rates in high-income countries have tripled since 1960, following the same trajectory as the trade/GDP ratio

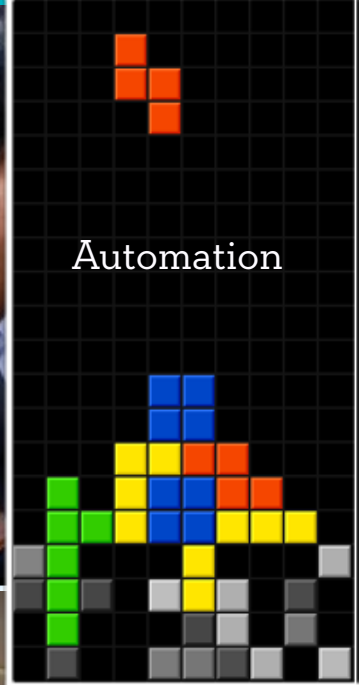
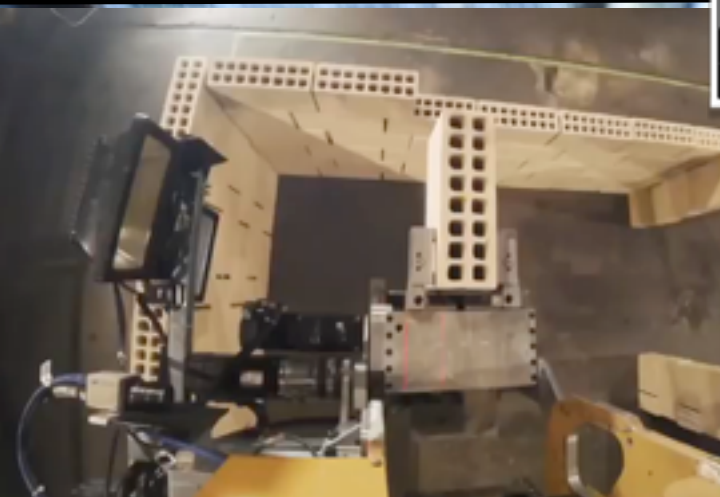


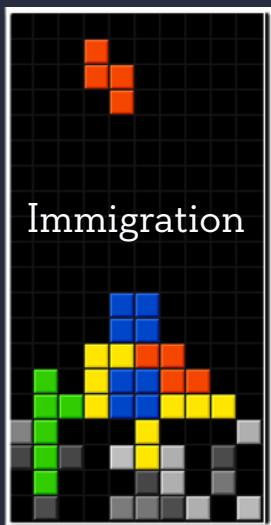
Source: United Nations database on international migrant stock, 2008 revision (<http://esa.un.org/migration/>) and World Trade Organization online database (<http://stat.wto.org/>).





Population tetris replaces population segments

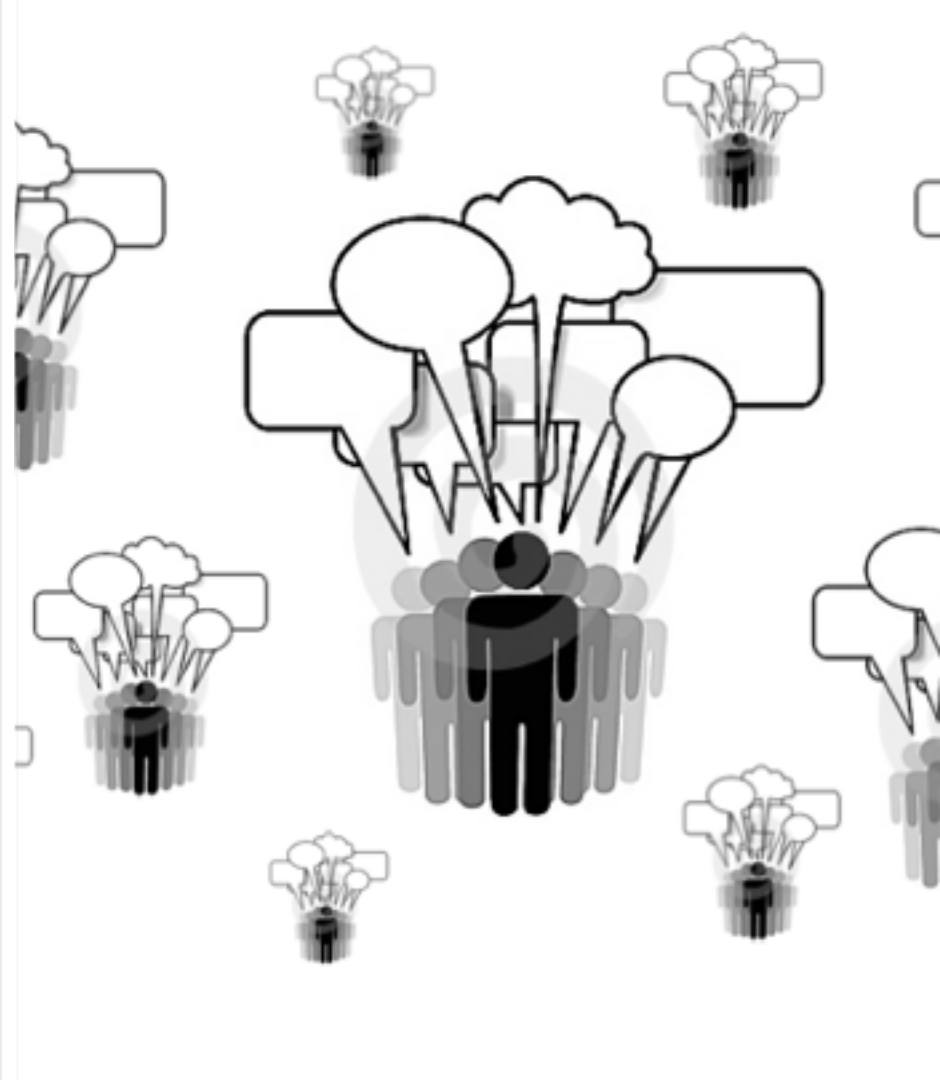




Population tetris replaces population segments

MEGATREND 3

Individualisation happens through participation. We become individuals through participating in many informal groups.



Individualisation through participation replaces population segments with groups.

Swedes

Individualisation through participation

Women

Men

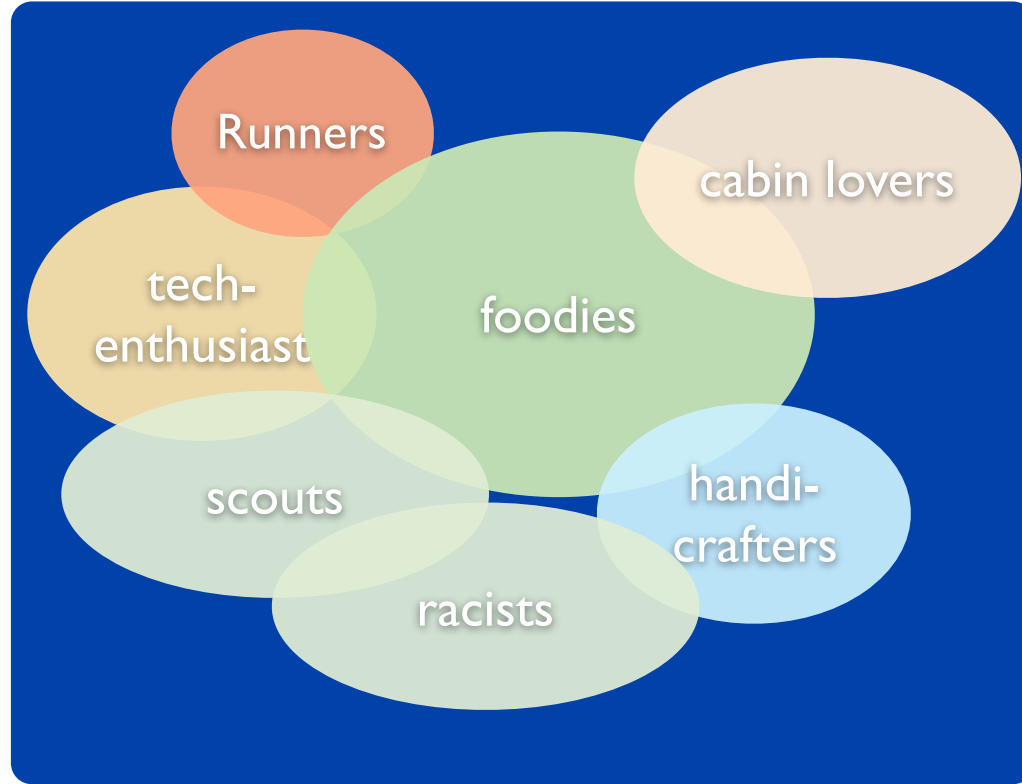
Individualisation through participation

Fully employed

Students
and
pensioners

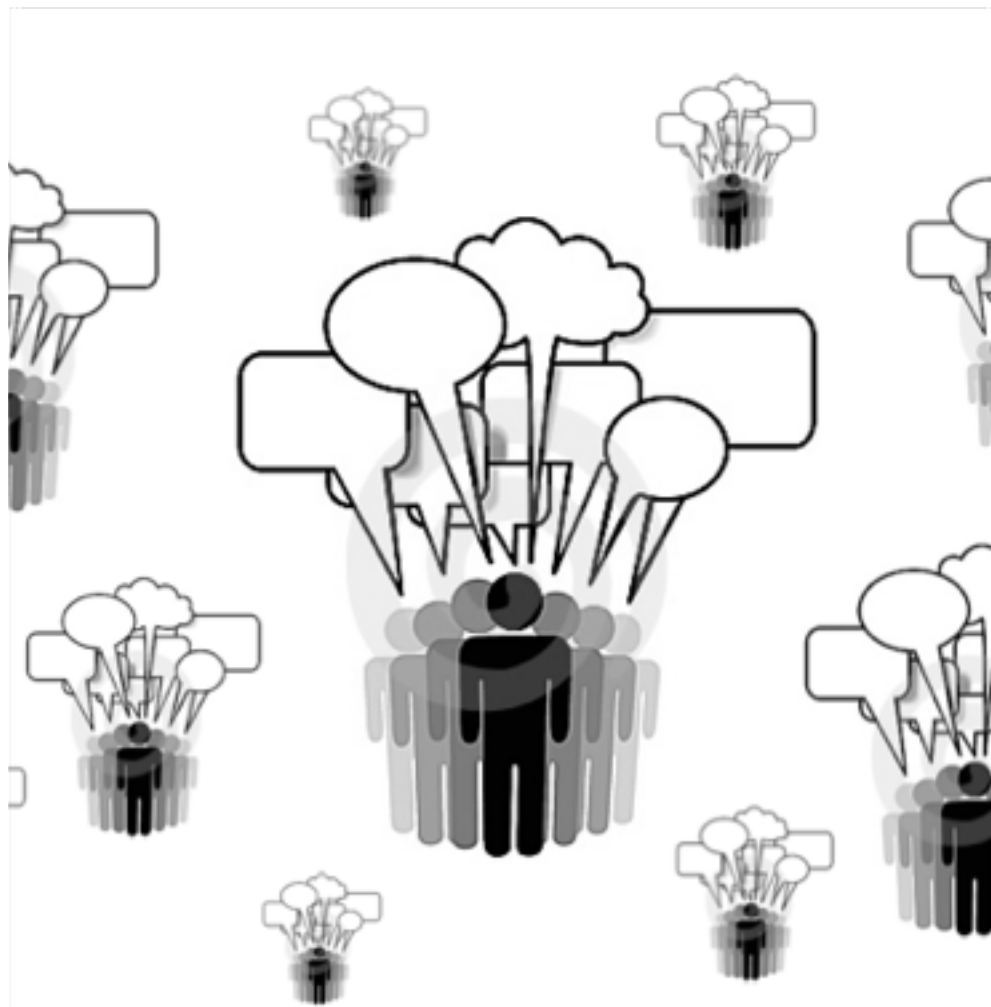
The
unemployed

Individualisation through participation

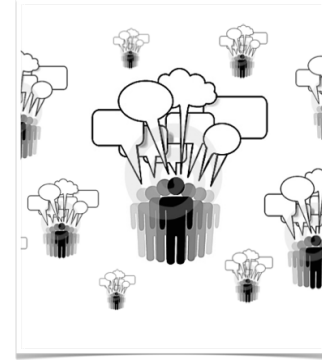
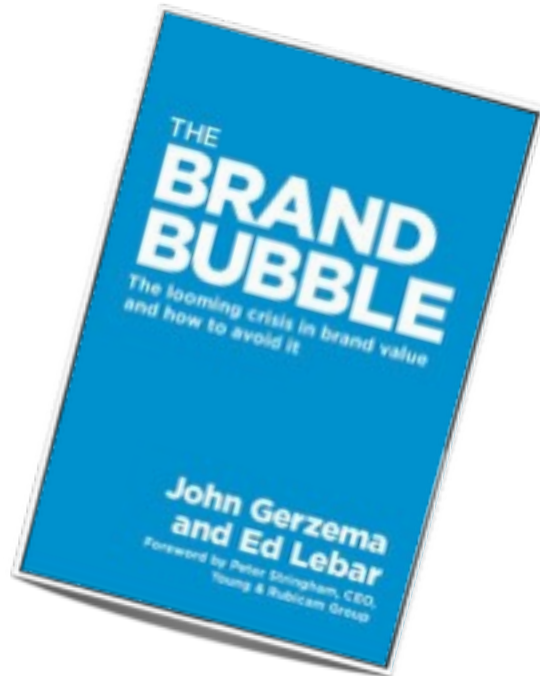


Individualisation
through
participation

Groups
challenge
institutions
power
fundamentally.

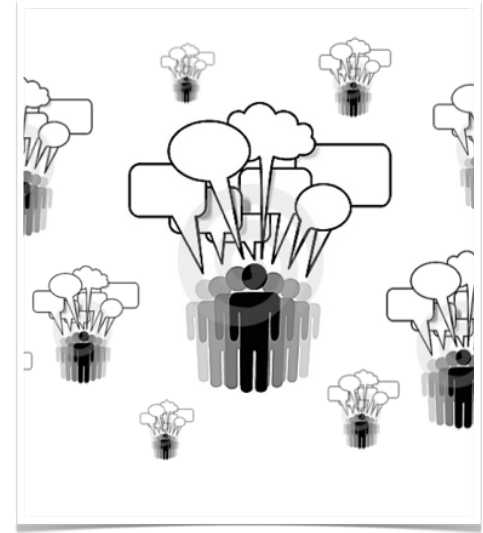
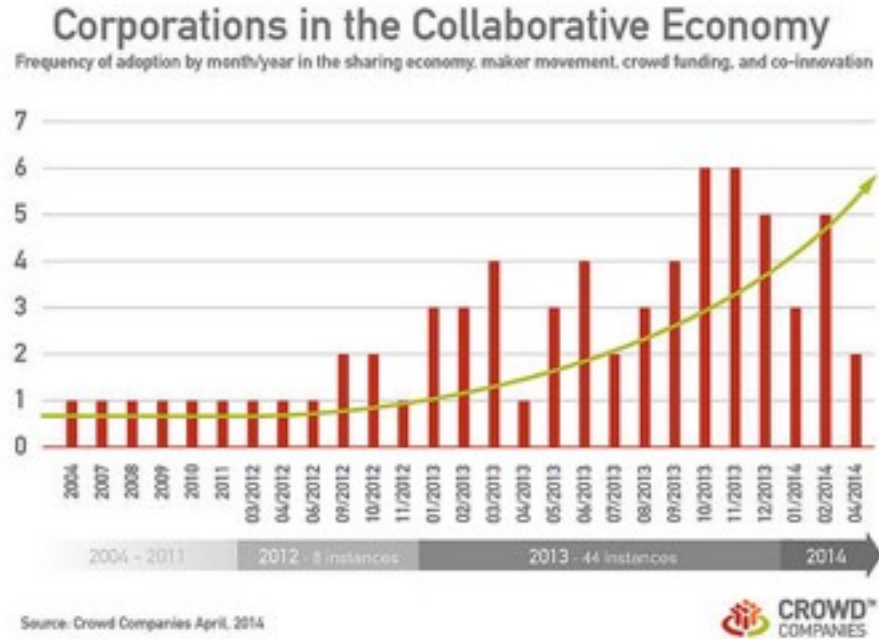


Individualisation through participation



Reaching people with
top down approach
fails:
...consumer trust in
brands has **declined
by 50%** in a decade,
down from 52% **to
25%**. Instead, people
trust their **peers**.

Individualisation through participation shows in new economic structures.



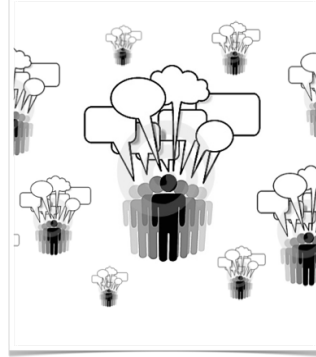
The Mayor's Crowdfunding Programme

#CrowdfundLDN

We want to help you create special local places that bring Londoners together.

LEARN MORE

Individualisation through participation



Black Rock City - A Future City?

- No money, everything is free
- Everything is produced by the attendees "burners"
- Tickets sell in seconds
- Desert city of 75 000 inhabitants
- A platform for co-creation

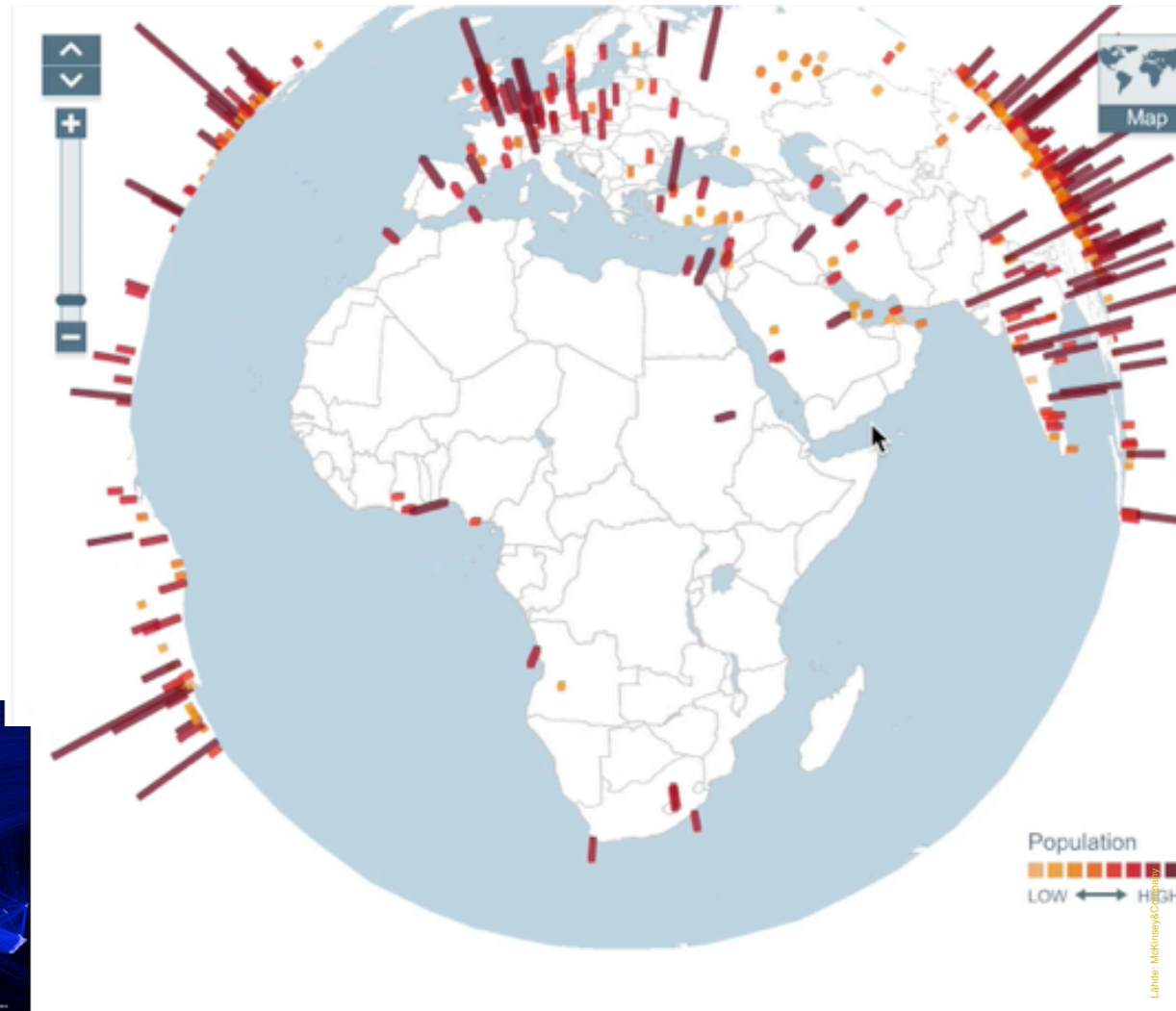


MEGATREND 4

The emerging metropolises become the dominant global structure. The economic and soon cultural dynamism moves to Asia and then to Africa.



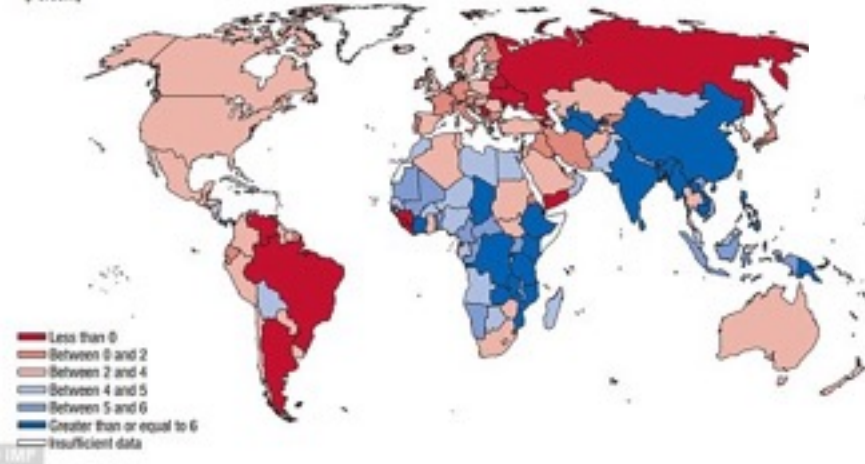
The emerging metropolises
remake the map, beyond
national states.



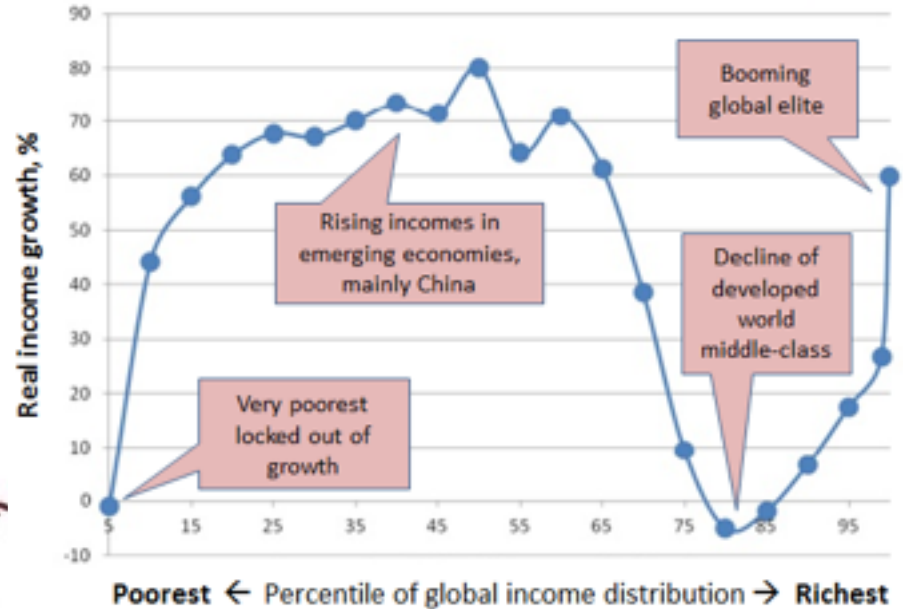
The emerging metropolises
make most of the growth
and world economies

Figure 2.1. 2015 GDP Growth Forecasts and the Effects of an Oil Supply Shock

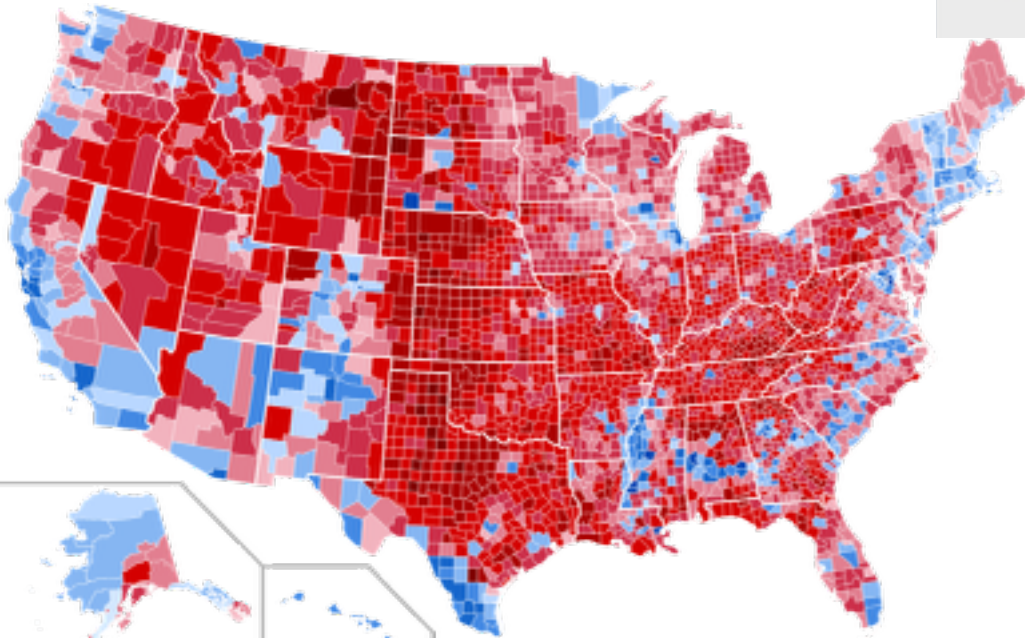
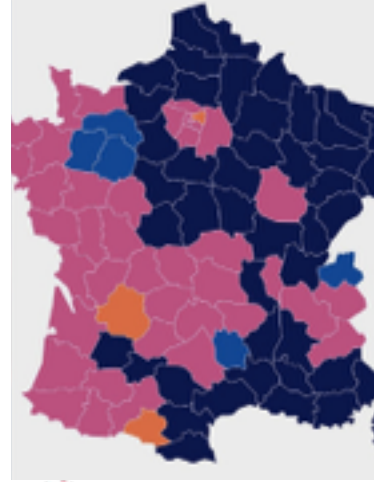
1. 2015 GDP Growth Forecasts¹
(Percent)



Global income growth from 1988 to 2008

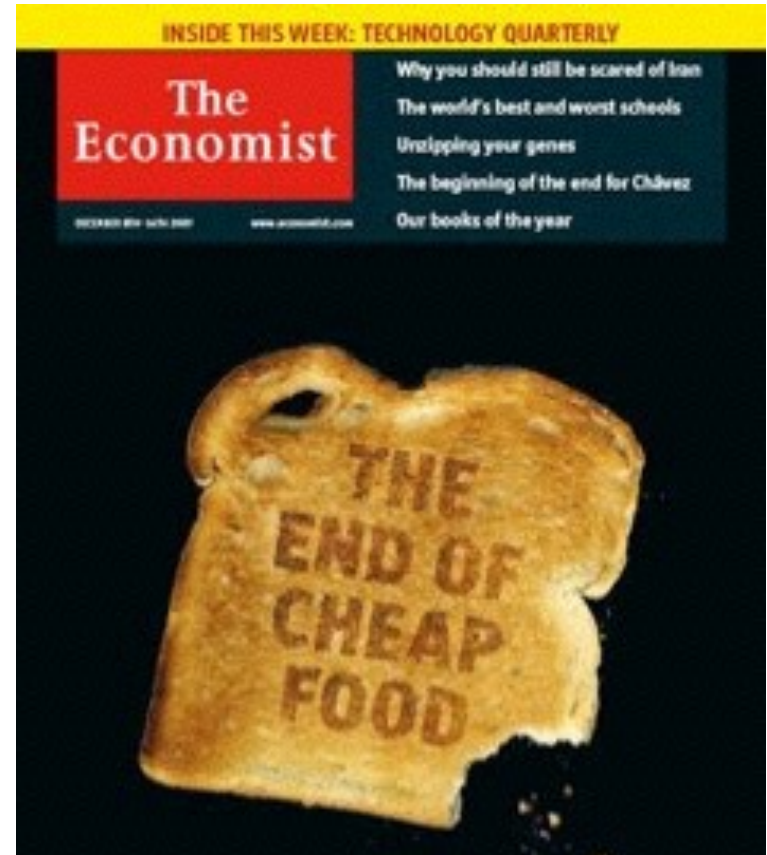


The emerging global metropolises grow out of the periphery and slow growth cities.

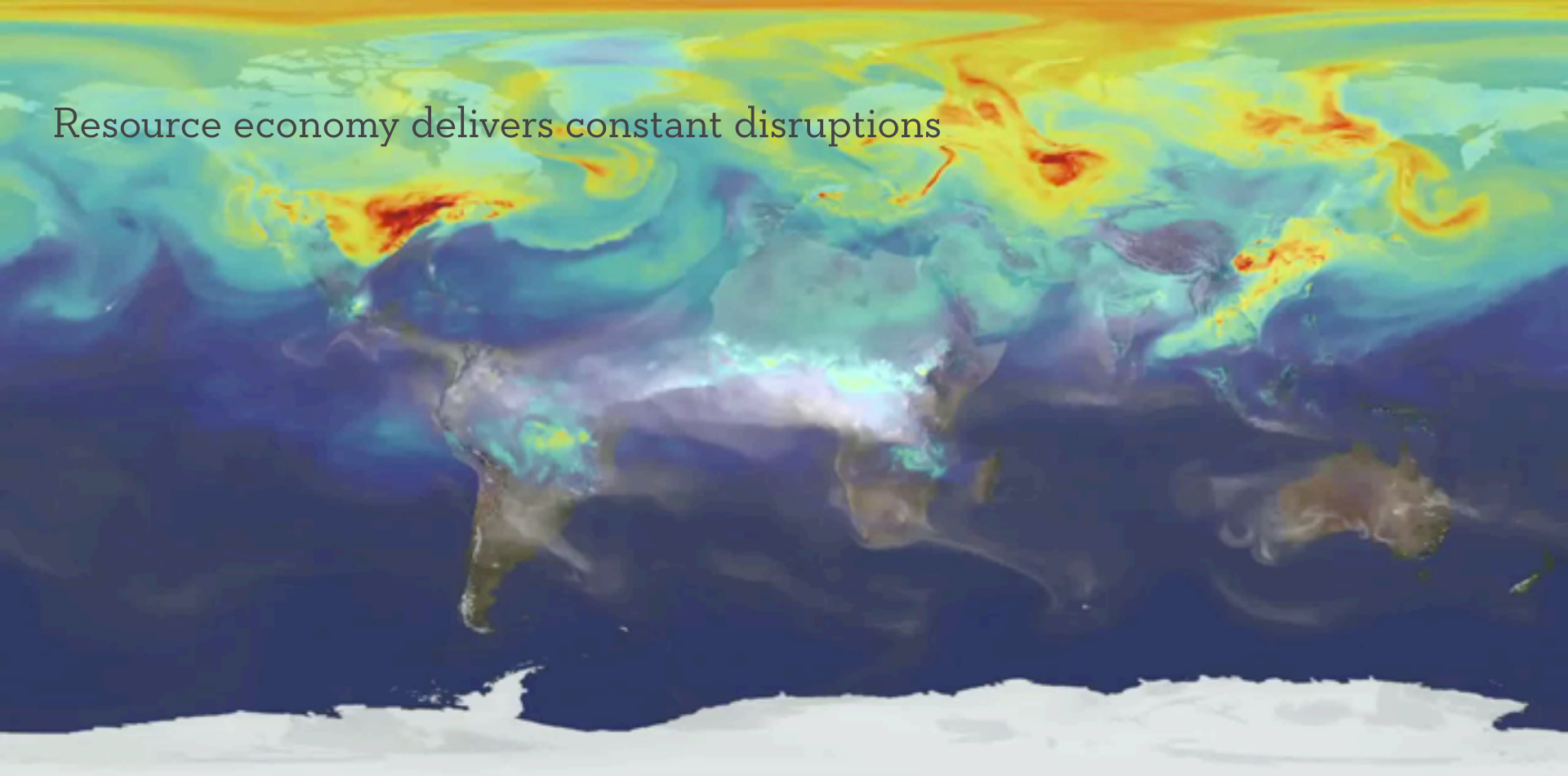


MEGATREND 5

Resource economy delivers constant disruptions in consumption, business and infrastructure. Food, housing, transportation and energy change and become digital services.



Resource economy delivers constant disruptions



2006 / 01 / 01

Global Modeling and Assimilation Office

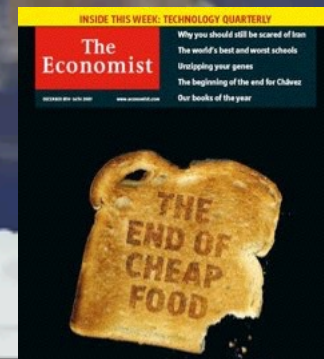
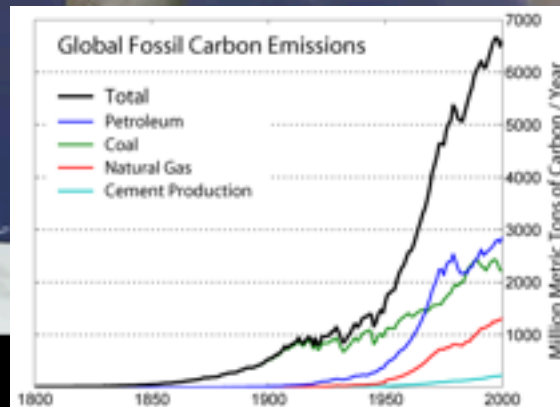
Carbon Monoxide Column Abundance [1.0×10^{18} molec cm^{-2}]



Carbon Dioxide Column Concentration [ppmv]



Resource economy delivers constant disruptions



2006 / 01

Global Modeling and Assimilation Office

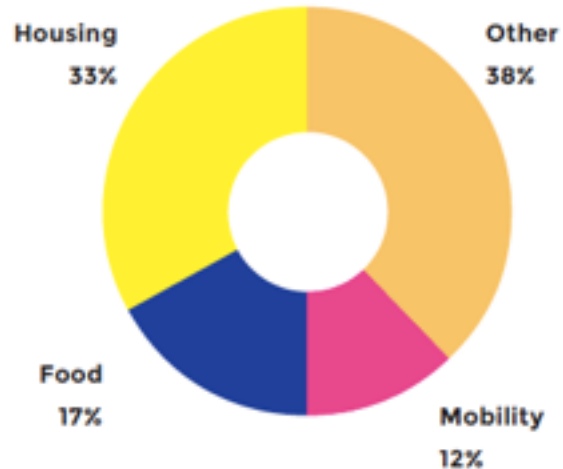
18 molec cm⁻²

Carbon Dioxide Column Concentration [ppmv]

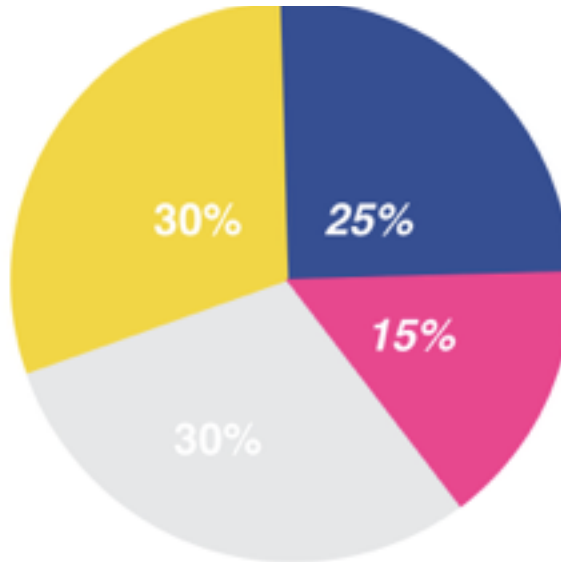
0.0 0.6 1.2 1.8 2.4 3.0 3.6 4.2 4.8 5.4 6.0 377 379 381 383 385 387 389 391 393 395

Resource economy under constant disruptions - mostly in housing, food and transportation.

Share of consumer spend in EU [Eurostat]



Energy consumption per household [Eurostat]



$$\begin{array}{l} \text{house icon} \quad \text{housing} \\ + \quad \text{fork and knife icon} \quad \text{food} \\ + \quad \text{curved arrow icon} \quad \text{mobility} \\ \hline = 70\% \end{array}$$



Regional impact of megatrends

MEGATRENDS BECOME REAL ONLY IN A GIVEN REGION.

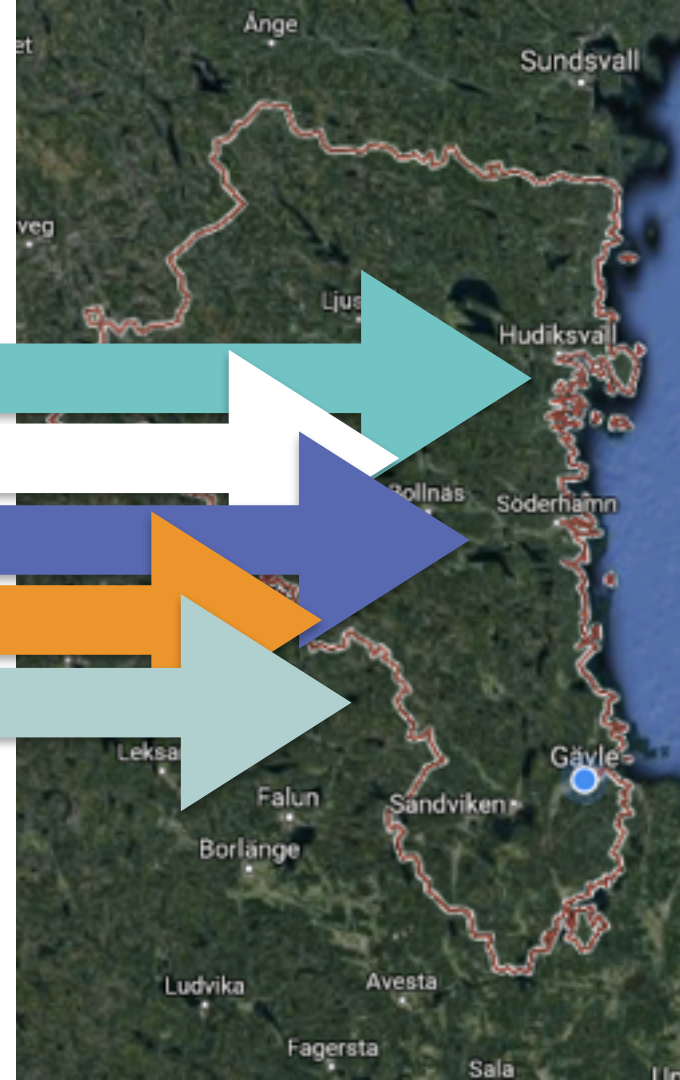
Planetary technology

Population tetris

Individualisation becomes participation

The emerging metropolis

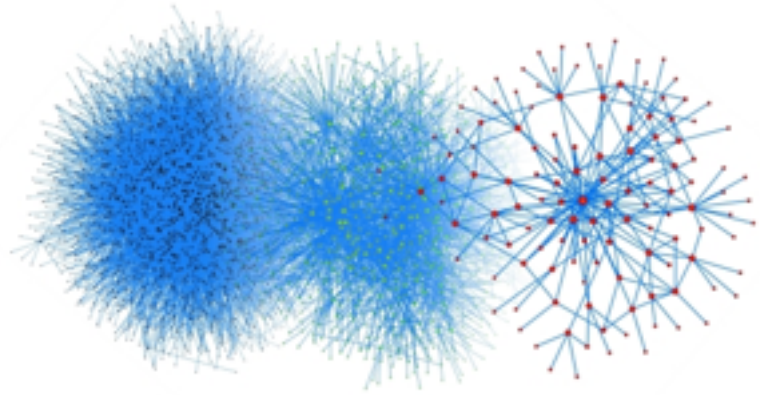
Resource disruptions



Megatrends mean **black swans** and **complexity** for the regional level.



+



Black swans

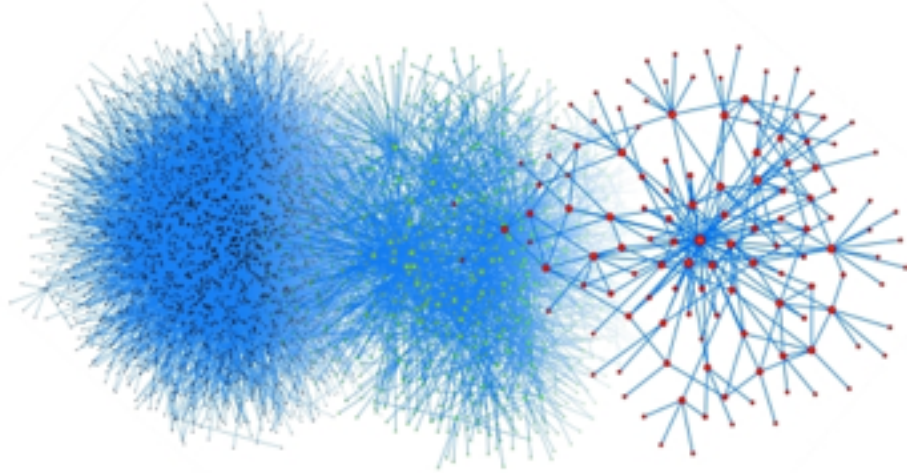
Complexity



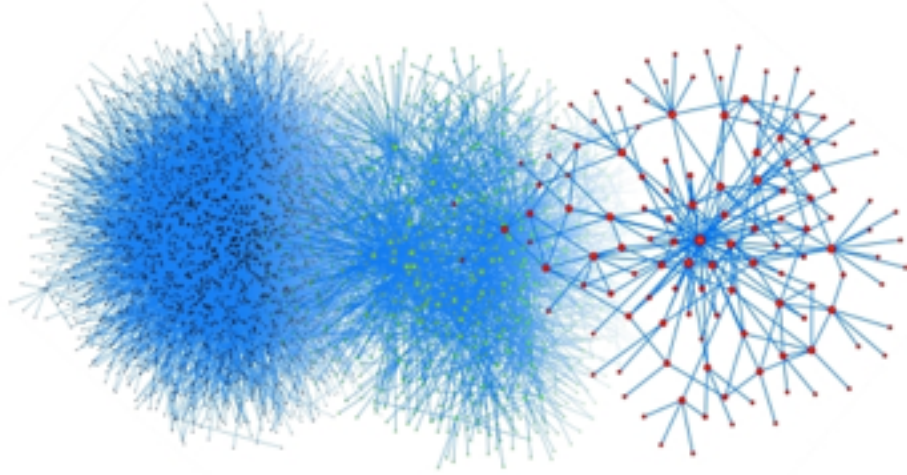
Black swans



**HOW COME WE DID NOT SEE
THIS COMING?**

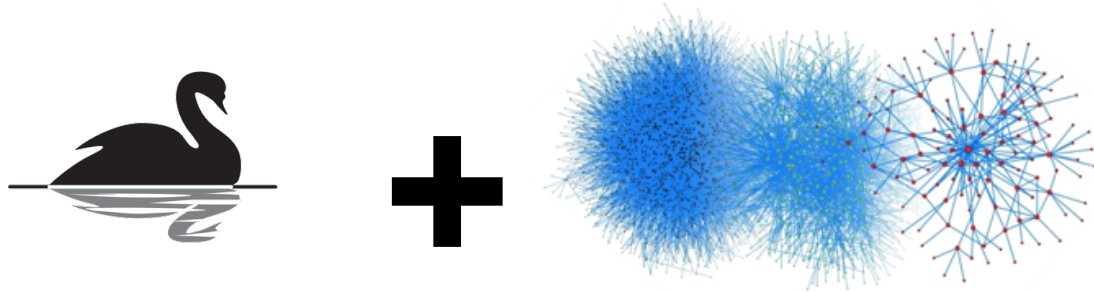


Complexity



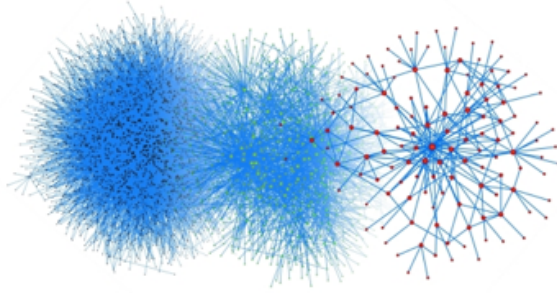
You can not do just one thing for any given action ramifies to a greater or lesser degree throughout the whole ecosystem.

How to plan for the future of black swans and complexity?





+



=

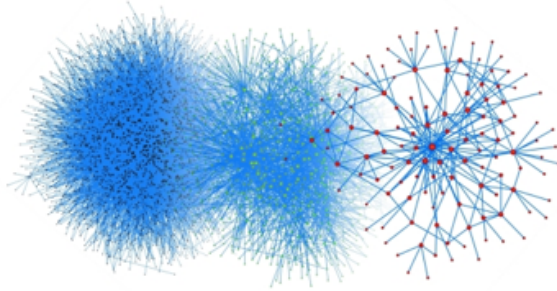
**Experimental
foresight.**

Black swans

Complexity



+



=

**How does
this sound to
you?**

Black swans

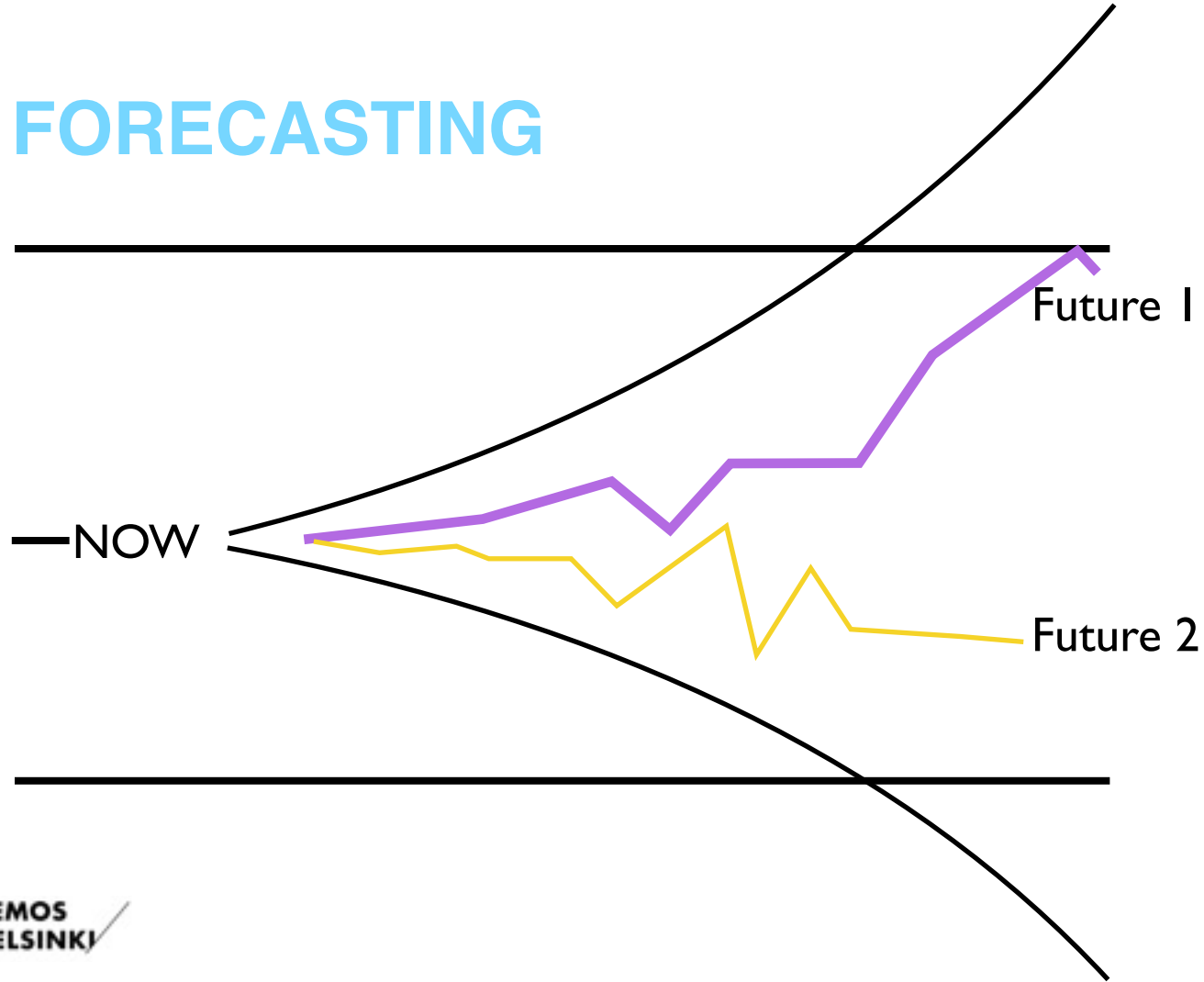
Complexity

**EXPERIMENTAL
FORESIGHT
IS THE NEW
PLANNING.**

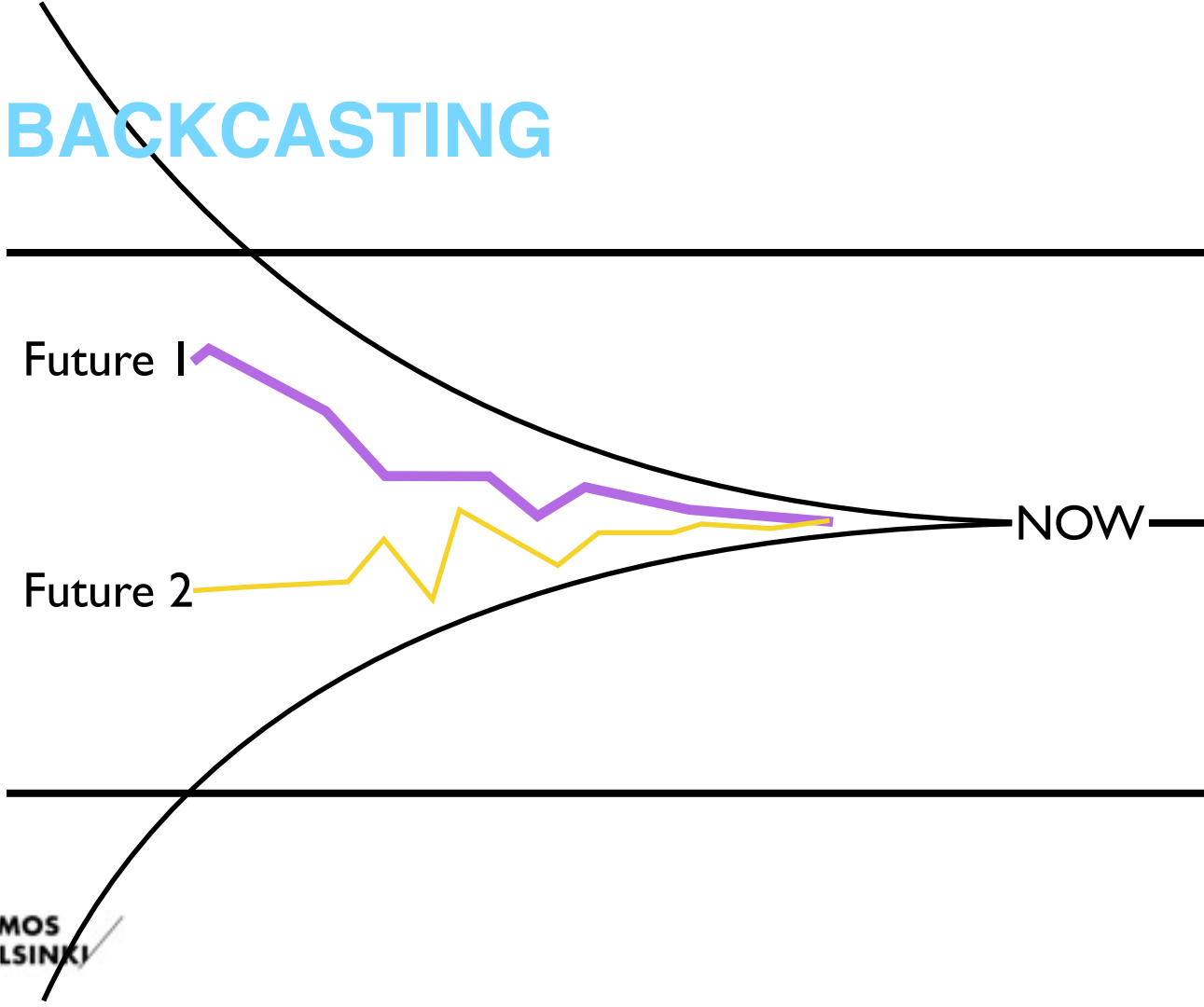


Forecasting vs backcasting

FORECASTING



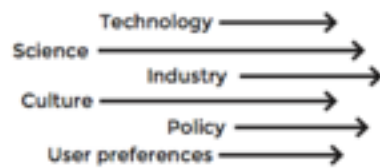
BACKCASTING



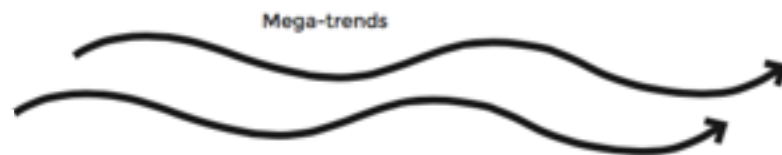


**How to change
the world
(transformation
management)**

Socio-technical
REGIME



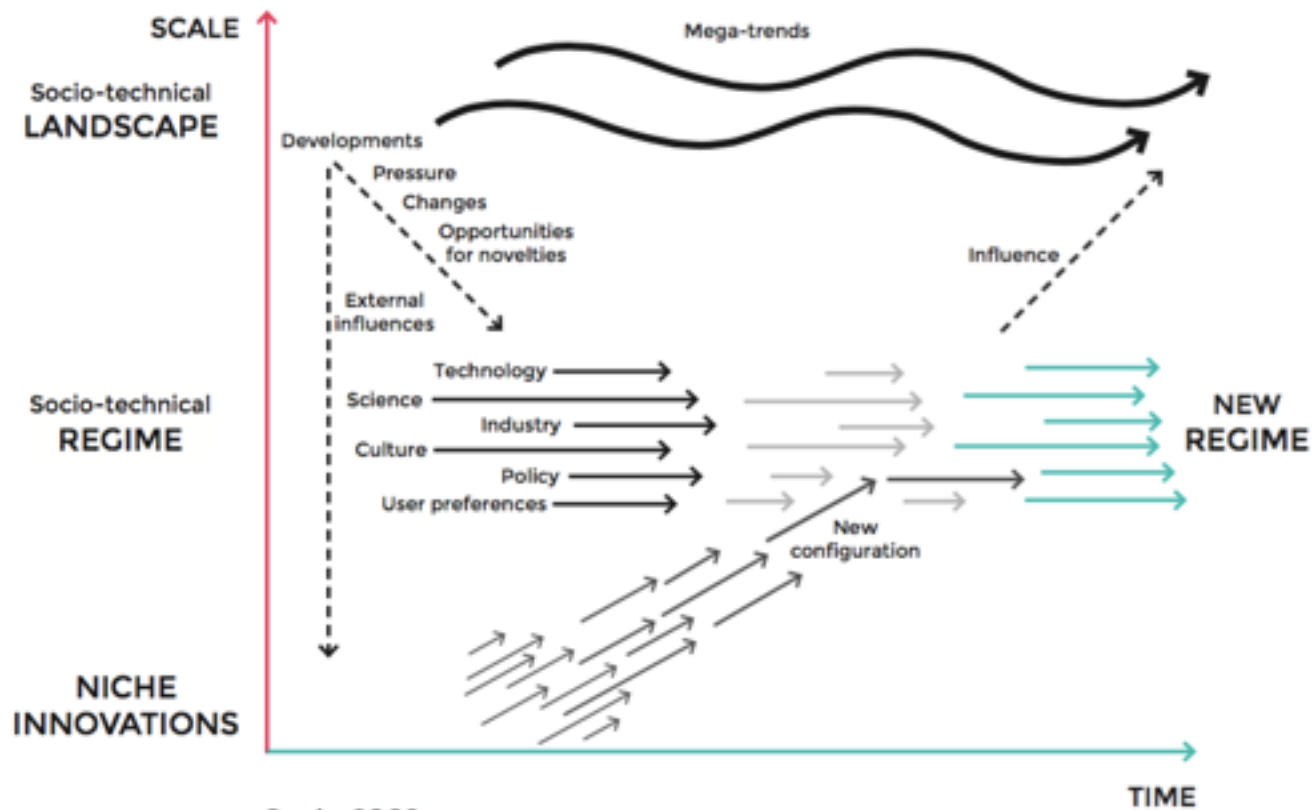
Socio-technical
LANDSCAPE



**NICHE
INNOVATIONS**



Increasing structuration of activities in local practices

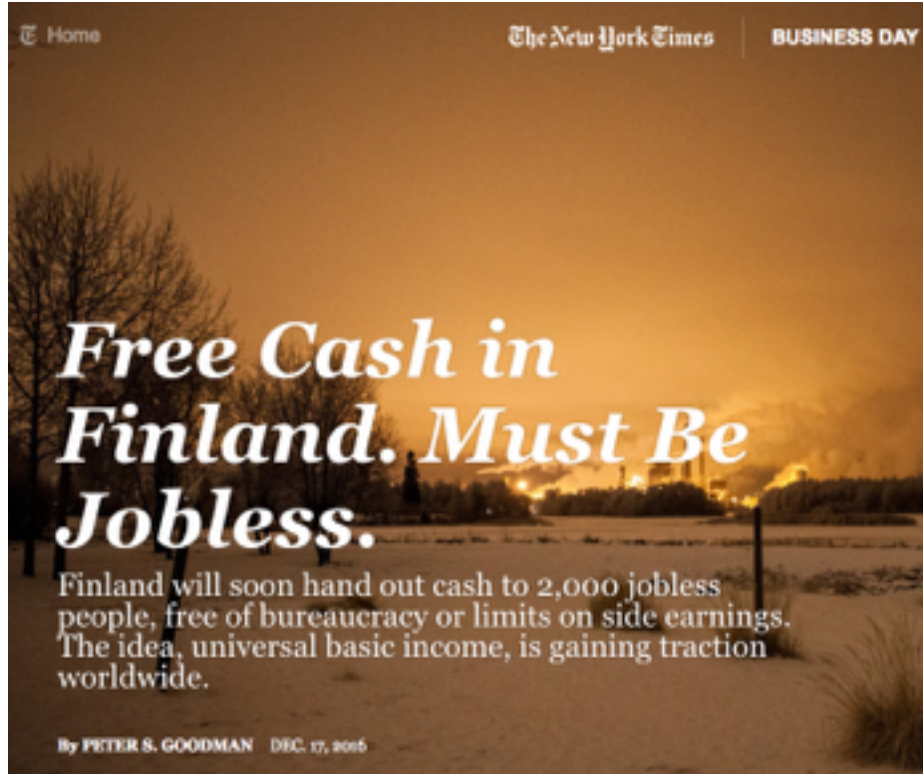


Adapted from Geels, 2002

A photograph of a forest floor with tall, thin trees and green moss. Sunlight filters through the canopy, creating long shadows on the mossy ground.

**Experiments (how
the public sector
can change the
world).**

The world's largest basic income experiment



Finland's experiment in a nutshell:

- Duration 2 years
- Nationwide pilot
- Started on January 1, 2017.
- Covers 2,000 unemployed Finns
- Age between 25 and 58
- Guaranteed sum of \$625 / month, which equals average monthly unemployment benefits in Finland.
- Unemployment benefits were replaced
- Payments take place even if the recipient works or has other income.

The idea of UBI (universal basic income) is over 200 years old



Thomas Paine proposed a basic capital grant for individuals in 1797.

In 1962, economist Milton Friedman advocated a minimum guaranteed income via a “negative income tax.

Mincome was an experimental Canadian guaranteed annual income project that was held in Manitoba, during the 1970s.

From 1968 to 1982, the US and Canadian governments conducted a total of five negative income tax experiments.

Then it was forgotten for decades...

Today, there is much UBI hype, but setting up experiments is a struggle

The City > News Columnists > The Nexus

Y combinator needs to make its universal basic income experiment in Oakland public and transparent

Universal Basic Income: Mark Zuckerberg wants to give you free money for being alive

Switzerland's voters reject basic income plan

5 June 2016 | Europe

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HELSINKI



**EU UNIVERSAL INCOME MUST BE
'SERIOUSLY CONSIDERED' AS RISE OF
ROBOTS THREATENS MASS
UNEMPLOYMENT, SAY MEPS**

How did Finland succeed in launching a nationwide UBI pilot?

Secret Sauce:

Experimentation Unit

- Changes innovation outlook
- Creates experimentation culture
- Located in Prime Minister's Office
- Collects cumulative knowledge of experiments
- Outsources the experiments and oversees them
- Links experiments to relevant government bodies
- Provides feedback loop

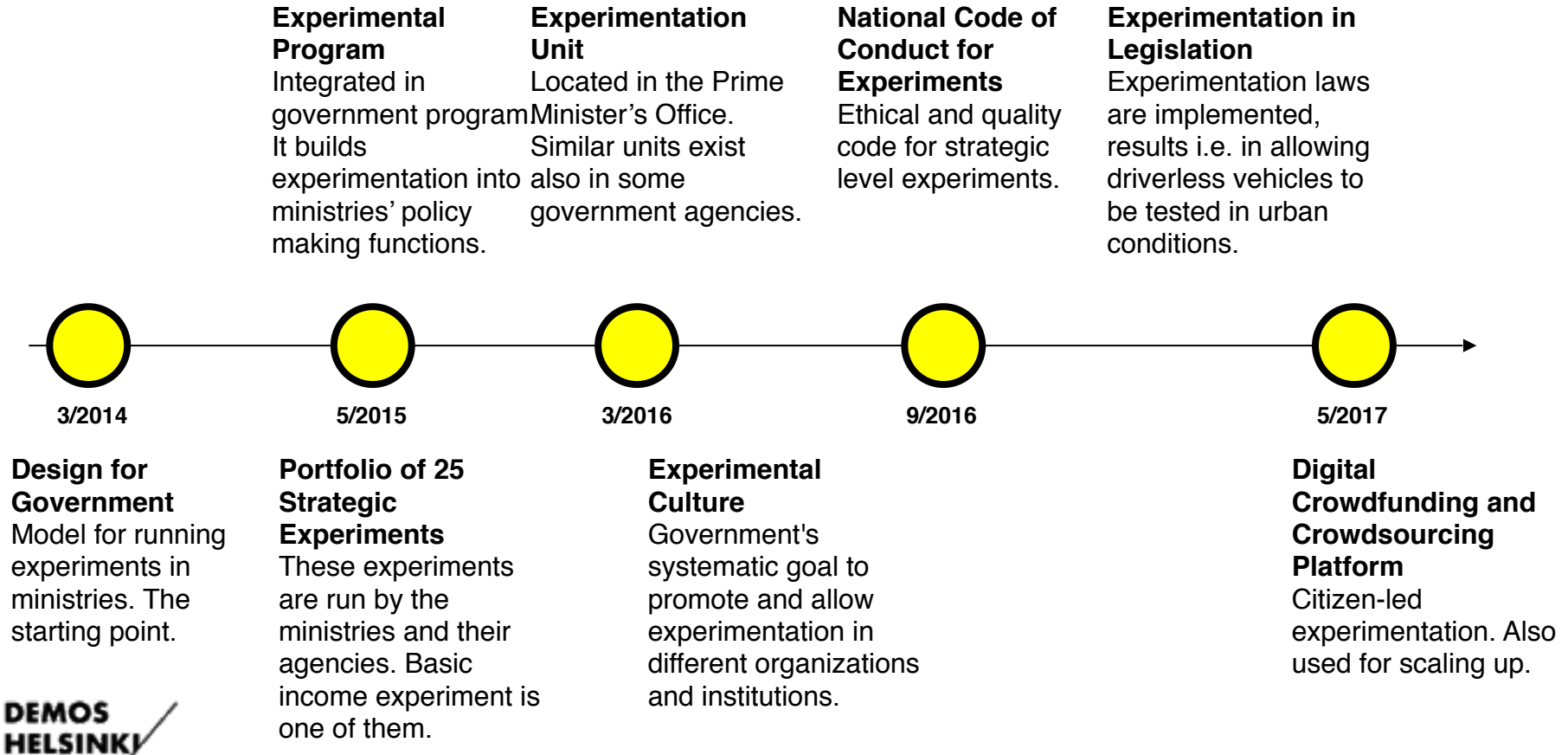


“...The [Experimentation Unit] model includes new and bold practices that support the interaction between the government and the civil society. It constitutes a foundation for future policy making...”

**DEMOS
HELSINKI**

Anu Vehviläinen, Finland's Minister for Local Government and Public Reforms

UBI is only one of 25 strategic pilots in Finland. How was hunger for experiments created?



	<i>Traditional approach</i>	<i>Nudge unit</i>	<i>Experimentation unit</i>
<i>Core of policy design process</i>	<i>Linear, based on assumption of predictability</i>	<i>Single Experiments, non-systemic</i>	<i>Authentic learning in government, knowledge cumulated inside the government</i>
<i>Where improvement takes place</i>	<i>Policy is designed traditionally and linearly</i>	<i>Policy implementation and delivery becomes more efficient</i>	<i>Policy design is collaborative from beginning and experiments gain legitimacy, leading to better policies</i>
<i>Public involvement</i>	<i>Closed and controlled, if any</i>	<i>Closed and controlled</i>	<i>Open and transparent</i>
<i>Methodology</i>	<i>Planning committees, working groups</i>	<i>Behavioral methods</i>	<i>Behavioral and data methods complemented with emancipation and participation</i>
<i>Desired end result</i>	<i>Planning gives birth to a good policy</i>	<i>Experimentation improves policy's efficiency</i>	<i>Collaborative policy design and experimentation make more broadly accepted and tested policies</i>



Fimpa fint-försök fick effekt

Snygga askkoppar minskade nedskräpningen

Nedskräpningen i Göteborg har minskat i stort med undantag av fimpar som ofta sällas på marken.

I ett försök att minska antalet fimpar placerades färgglada och konstnärligt dekorerade askkoppar ut på några utvalda hållplatser väster förbi Göteborgs centrum. Färgglada askkoppar i olika färger och mönster.

• Många 600 genomfördes ett projekt där Göteborgs stad, Trygg, varken stad, i samarbete med A Win Win World och Demos Helsinki använde konstnärliga askkoppar för att minska nedskräpningen, speciellt vid hållplatser där det finns en stor mängd fimpar i Göteborg.

• Skapandet av en metod inom konstnärliga askkoppar och utifrån ett mål som gav någon en viss känsla, en möjlighet, i ett utbud. Genom att sprida askkopparna ville vi se om det kunde påverka folk att fimpa på rätt sätt, säger Katharina Paoli på A Win Win World. Projektet inleddes med en konstutställning där man först utvalde olika konstverk och sedan satte olika sorters askkoppar ut på olika hållplatser.

Vid några hållplatser sattes man upp konstnärligt utrustade askkoppar, en hållplats fick orange askkoppar i samma färg som Göteborgs pojgarbarn och vid några hållplatser sattes väsliga svart askkoppar.

• Över 600 personer i Göteborg intervjuades om fimpar. Många sa att det är det som många fimpar på marken och de fästa upp-

gar inte heller att de inte hade någon som skulle ta hand om dem. Det var för de knöliga askkopparna på marken.

Många personer uttryckte att de inte hade någon som skulle ta hand om dem. Det var för de knöliga askkopparna på marken.

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Katharina Paoli på A Win Win World



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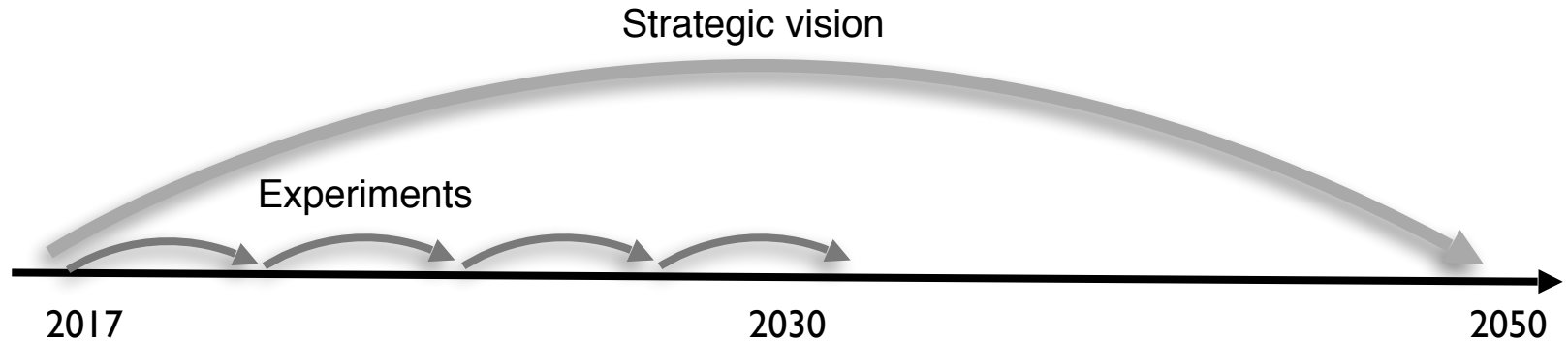
Fimpar och fästa askkoppar minskade nedskräpningen på marken.



A photograph of a forest floor covered in green moss, with long shadows of trees cast across it. The background is filled with tall, thin tree trunks and dense green foliage.

Experimental foresight VS traditional planning

Experimental Foresight



Ekonomi

**Finland testar statlig
medborgarlön**

DN.ekonomi



TRADITIONAL PLANNING

Variants of single trends

0,25-4 year time horizon

Great for managing continuity

Starts with numbers

Predicting the future

Interest in continuities

Medium term resource allocation

EXPERIMENTAL FORESIGHT

Discontinuities of multiple trends interacting

2-50 year time horizon

Great for managing transformation

Finds new numbers

Making with the future

Interested in discontinuities

Long-term vision and short term experiments



LET'S DIVE IN!

KIITOS! Tack!

Roope Mokka
Founder
Demos Helsinki



@mokka



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