

From Intelligent Land Use to Sustainable Municipalities

The futures of land use in times of climate crisis

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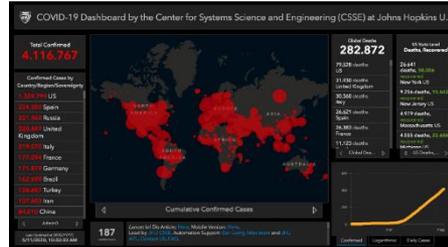
What is meant by sciences of futures?

The "Science of Futures" or "Futurology" is the systematic study of probable, possible, desirable and plausible futures, including the worldviews and myths that underlie every future

Capitalization of previous EUSALP ARPAF project «**ALPJOBS**»
- Anticipate Future Jobs on Alpine Remote Areas (2018-2020)



Why futures?



Unlikely, destructive, catastrophic
events
(wildcards; jolly; discontinuities)

Vision
Future developments

Predictions,
Statistics, Previous
trend

Desired scenario
alternative A

Desired scenario
alternative AA

Probable scenario
(trend)

Desired scenario
alternative B

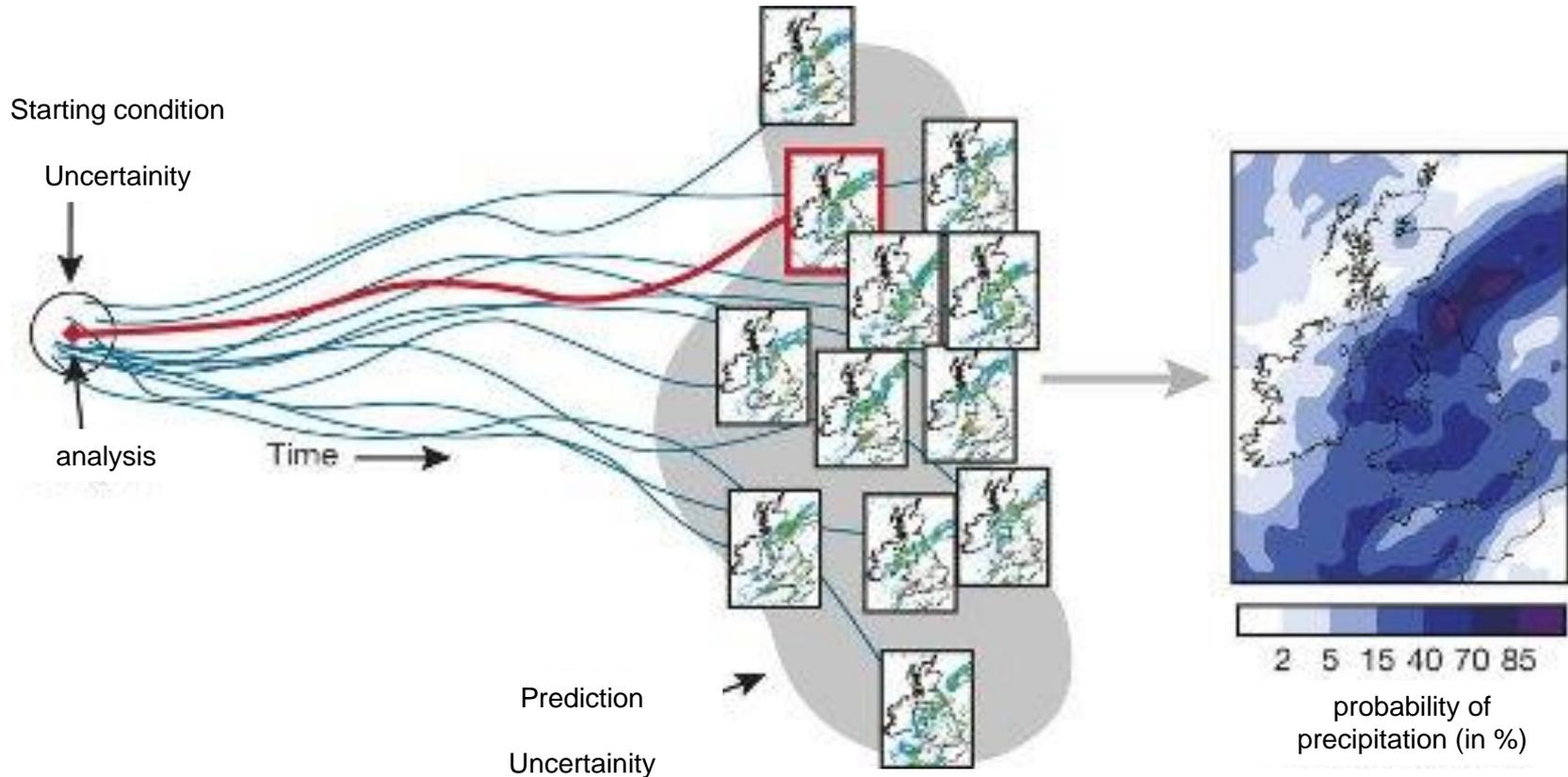


Yesterday

Today

Tomorrow/Future

Scenario is not prediction nor utopia!

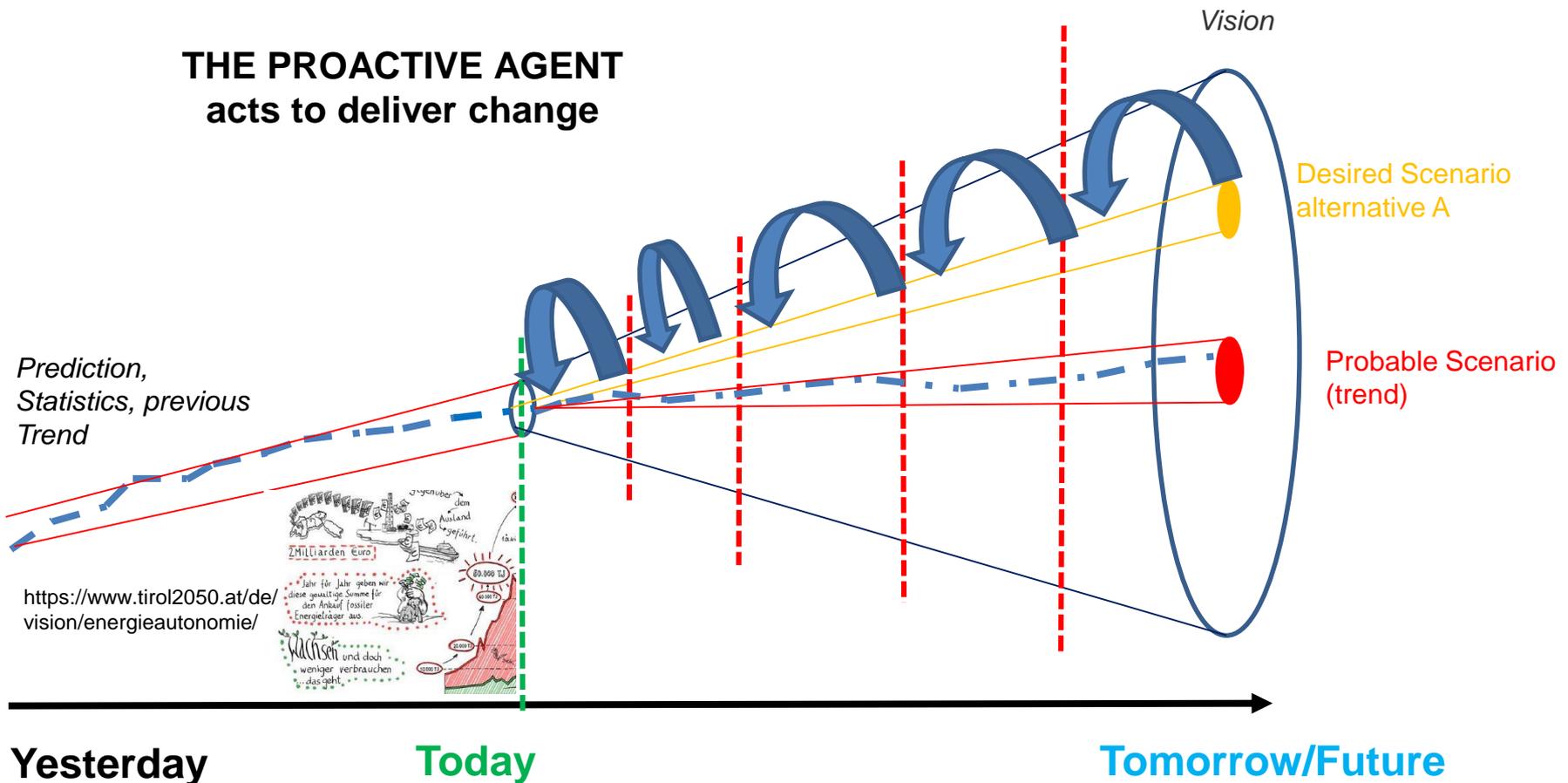


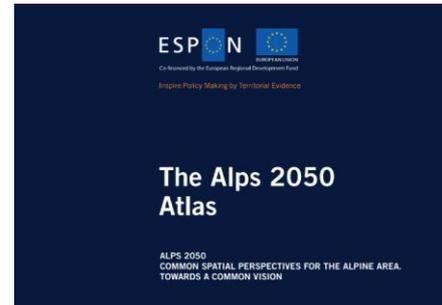
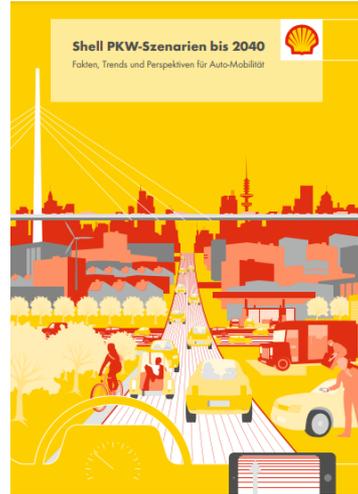
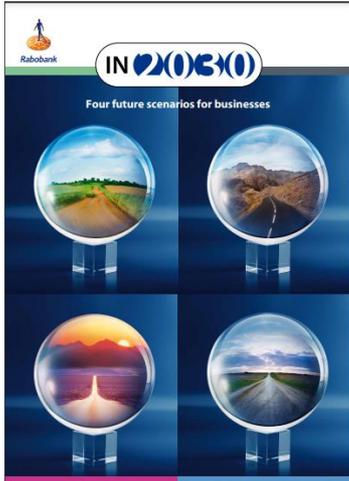
The future is not predetermined or predictable!

So, what is a scenario?

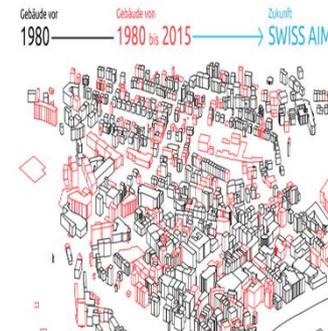
Scenarios are coherent descriptions of possible alternative futures that reflect different perspectives on past, present and future developments and can serve as a basis for action

Strategy: anticipate the desired future





Modeling Future Urban Scenarios for Switzerland



Drivers of Change / Basic Trends

- **Megatrends** : driving forces/far reaching global patterns that define the world today and that of tomorrow. In other words, they are *predicting* a likely/probable future of EU and EUSALP AREA.
- **Local trends** : driving forces/far reaching regional patterns that define the regional today and that of tomorrow. In other words, they are *predicting* a likely/probable future of a specific territory.

MEGA-MESOTRENDS in EU (European Environmental Agency)

The screenshot shows the European Environmental Agency website. The main heading is "Earth 2050 global megatrends". Below this, there are two sections: "Other resources" and "Signals".

Other resources

 A new global order	 Changing patterns of disease	 Economic growth, rather than population growth, will be the core driver of consumption
 Intensified global competition for decreasing stocks of resources	 Pollution — increasing use of chemicals	 Living in an urban world

Signals

- Signals 2019 - Land and soil in Europe
- Signals 2018 - Water is life
- Signals 2017 - Shaping the future of energy in Europe
- Signals 2016 - Towards clean and smart mobility
- Signals 2015 - Living in a changing climate
- Signals 2014 - Well-being and the environment
- Signals 2013 - Every breath we take
- Signals 2012 - Building the future we want
- Signals 2011 - Globalisation, environment and you

Articles

Earth 2050 global megatrends

- A new global order
- Changing patterns of disease
- Economic growth, rather than population growth, will be the core driver of consumption
- Intensified global competition for decreasing stocks of resources



etc.

MEGA-MESOTRENDS for the ALPS

https://www.espon.eu/sites/default/files/attachments/01_alps_2050_FR_main_report.pdf (see par. 3)

The Alps 2050 Atlas

ALPS 2050
COMMON SPATIAL PERSPECTIVES FOR THE ALPINE AREA.
TOWARDS A COMMON VISION

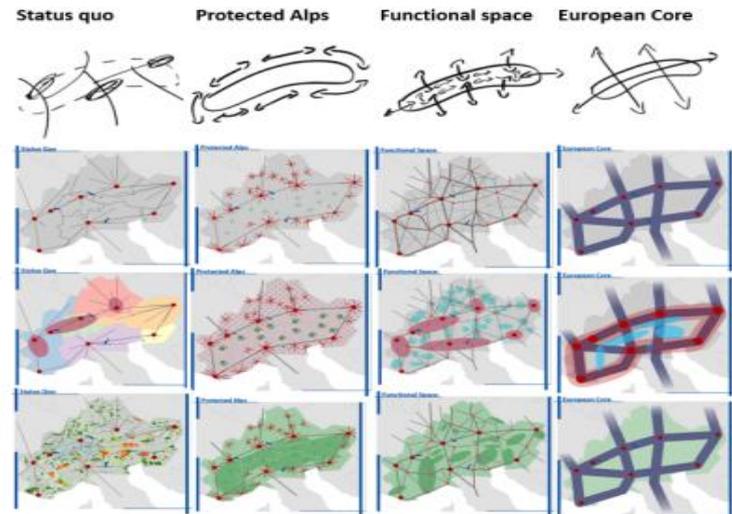
Perspectives

People and territories

Economy

Environment

Scenarios



Map 1

Scenarios and perspectives on the Alpine region

Meaningful trends (for our pilot cases)

SLOVENIA

Indikator	2019	2018
Bevölkerung in %	100	100
Wohnbevölkerung in %	99,4	99,4
Wohnbevölkerung pro km²	21,8	21,8
Wohnbevölkerung in %	100	100
0-14 Jahre	16,0	16,0
15-64 Jahre	66,7	66,7
65 Jahre und mehr	17,3	17,3
Werbliche Beschäftigung in %	44,9	44,9
Arbeitslos in %	10,5	10,5
Wohnbevölkerung in %	100	100
0-14 Jahre	16,0	16,0
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CANTON OF GRISONS

REPUBLIC OF SLOVENIA STATISTICAL OFFICE

THEMES

- Agriculture, Forestry and Fishery
- Construction
- COVID-19
- Culture
- Development and Technology
- Earnings and Labour Cost
- Education
- Energy

PRODUCTS

- Enterprises
- Environment
- Foreign Economic Relations
- GDP and National Accounts
- Industry
- Labour Market
- Population
- Prices and Inflation

MORE

- Quality of Life
- Regional Overview
- Social Protection
- Tourism
- Trade and Services
- Transport
- European data

More than 10,000 beekeepers in Slovenia

In 2019, 10,145 beekeepers in Slovenia were taking care of 208,000 hives. They produced 650 tons of honey. In 2019, the three largest honey producers in the world were China, the European Union and Turkey.

2020

Südtirol in Zahlen

Alto Adige in cifre

Autonomie Provinz Bozen - Südtirol / Provincia Autonoma di Bolzano - Alto Adige

Landesinstitut für Statistik / Istituto provinciale di statistica

SOUTH TYROL

STATISTIK

ServiceTipps

Bevölkerung

Wirtschaft

Arbeitsmarkt

Wohnungsmarkt

Umwelt

Wirtschaft und Soziales

Wohnbevölkerung

Wirtschaft und Soziales

Wohnungsmarkt

Umwelt

Wirtschaft und Soziales

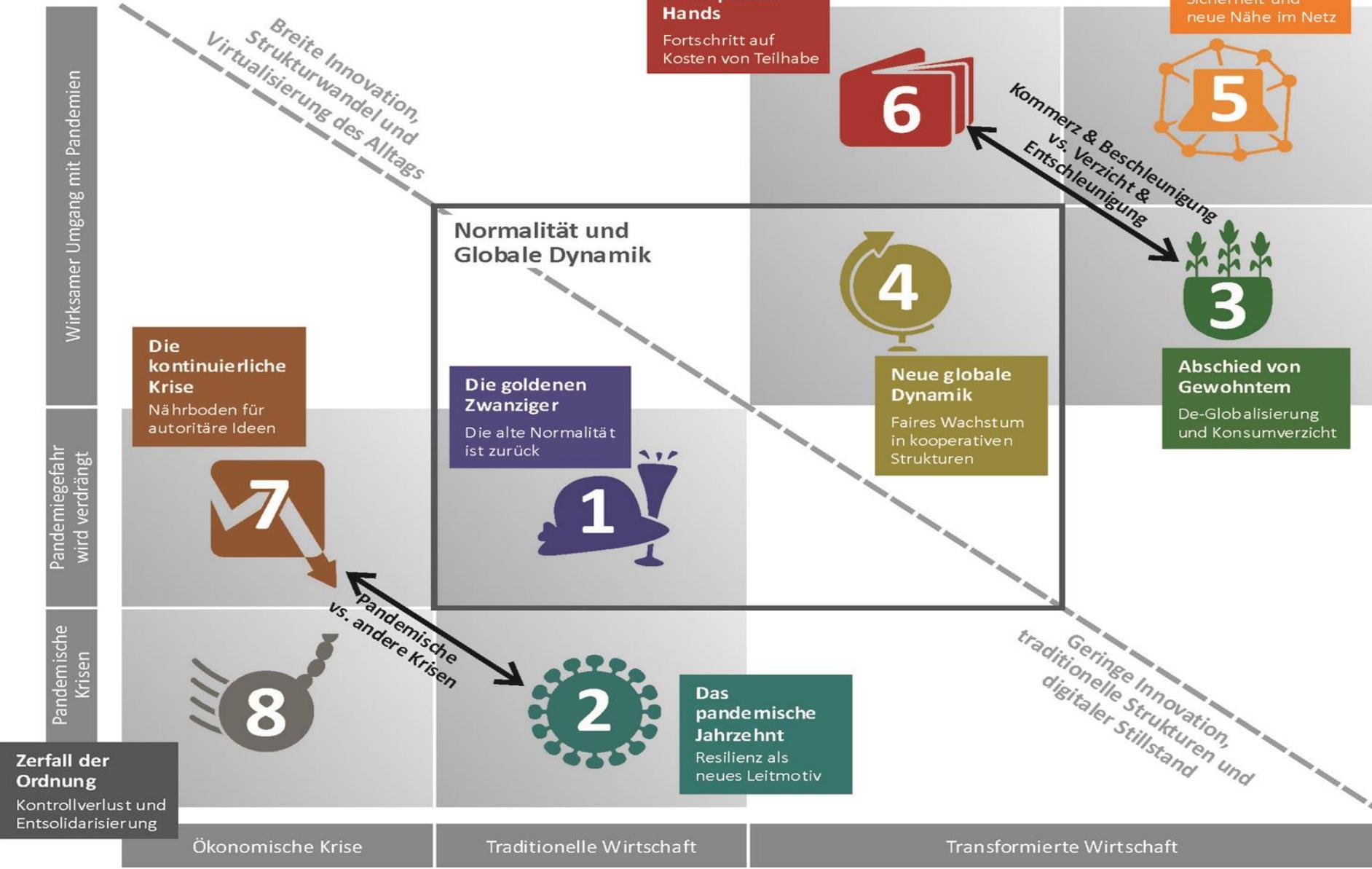
Wohnbevölkerung

Wirtschaft und Soziales

Wohnungsmarkt

Umwelt

Lower AUSTRIA



Anticipation of the future: connection to I4A (inner development)



Anticipation of the future: connection to I4A (peatlands)



<http://www.peatmax.com/en/home/>

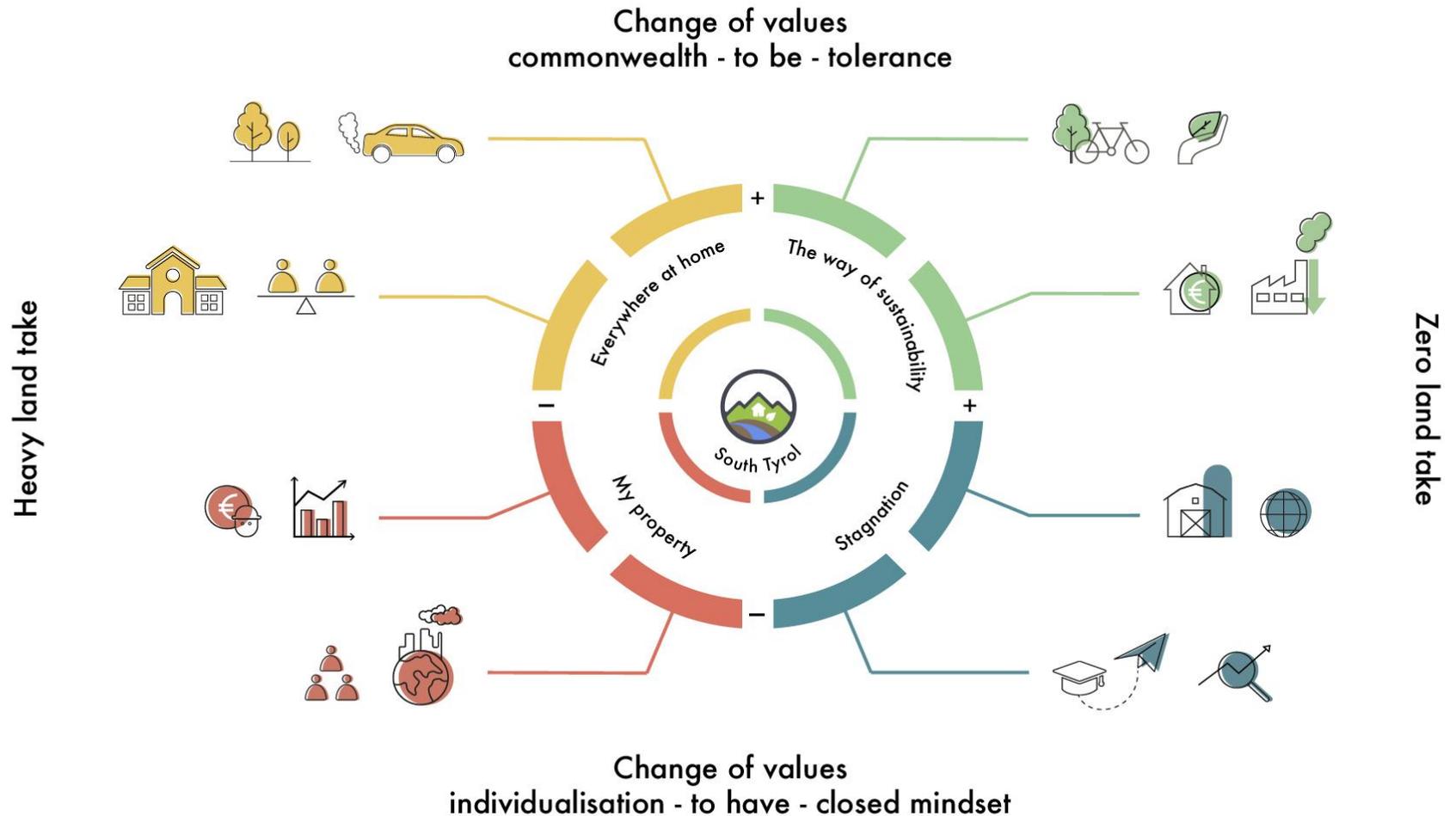


<https://peatlands.org/peatlands/what-are-peatlands>

Activities carried out

1. Definition of the **Key Focal Issues** (done by 4 Pilot Regions)
2. **according to the Climate Change Scenarios worked out for each region (when none, take into account those worked out by IPCC)**, selection of key/most relevant ones **Drivers of Change** (Heavy/Zero land Take as horizontal axis)
3. identification of the **Critical Drivers of Change**
4. building the **Scenario Framework**
5. frame of the **Scenario Characteristics (Narrative)**

A scenario for South Tyrol (pilot case: inner development)



Added value of the Future Scenarios

- a) **Exploratory or knowledge function:** systematize and deepen the knowledge of local trends and “background noises” in progress, as well as of the situations and implications in progress.
- b) **Communication function:** to focus and improve communication processes by contributing to cooperation and networking between different actors.
- c) **Goal setting function:** develop or implement goals and direct attention to the desired future.
- d) **Strategic decision-making co-creation function:**
 - allow a verification of the decisions, measures and strategies undertaken,
 - advise decision makers on how to ensure that their current policies are robust in the long run in the face of future uncertainties

FINAL
CONFERENCE
20/05/2021

IMPULS4ACTiON

Thank you!

Grazie!

Danke!

Hvala!

Merci!

FROM INTELLIGENT
LAND USE TO
SUSTAINABLE
MUNICIPALITIES



THIS PROJECT IS
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IGLOOO TAG TEAM: Stefania Berlanda & Federico Gazza (coordinators),
Emil Larcher, Elena Paolazzi, Alex Zanella, Alice Segà, Rebecca Segata (Crew Lead)



igloo

Trentino
Alta formazione
Grafica