URBANISM NEXT EUROPE 2021

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ONLINE CONFERENCE

Mobility Vision Focused on Sustainable Economy and Social Change

a collaboration between Embraer & TU Delft

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PEOPLE

- How and how many will travel
- Infrastructure
- Mobility
- Policies
- Behavior

How to develop a Future Vision for Mobility creatively expressing a desired future

PROSPECTIVE SCENARIOS DESIGN ROADMAPPING

Mobility Issues

- Surveillance Innovation
- Sustainable Cities
- High demand for transport
- Rapid emergency response
- Participatory Design
- …….

Some of the Living Lab Settings….

UAM in Los Angeles

Mobility solutions: car free center

Sustainable manufacturing point in South Africa

Sky ports experience

Waste Management in South Africa

Perception of safety in pandemic times

A Mobility Road Map supported by living lab settings

Embraer, TU Delft, Sustainability Consultant, Ulundi Municipality South Africa, Reutlingen Municipality Germany, Talaria, Dutch Ambulance Service and Dutch Urban Search and Rescue, etc.

How sustainable are future mobility solutions?

POSITIVE IMPACT
improve the lives and livelihoods of billions of people
health
environment
quality of life
help reach carbon neutral goals

NEGATIVE IMPACT
engender gross inequalities
promote fossil fuel use
degrade the environment
deaths from transport-related accidents
air pollution

Sustainable Mobility

Definitions often focus about harmful effects and problems of mobility on humans and environment that need to be avoided

European Commission Green Deal
zero pollution
shift to sustainable and smart mobility
supplying clean
affordable and secure energy

Shaping the Future of Mobility

- Mobility – the movement of people and goods – provides access to jobs, education, healthcare and trade.

- Yet today's mobility systems cannot meet future demand without increasing congestion and pollution.

- How can business leaders partner with policy-makers to develop a global mobility system that is safe, clean and inclusive?

Towards Sustainable Air Transportation

DOMAIN

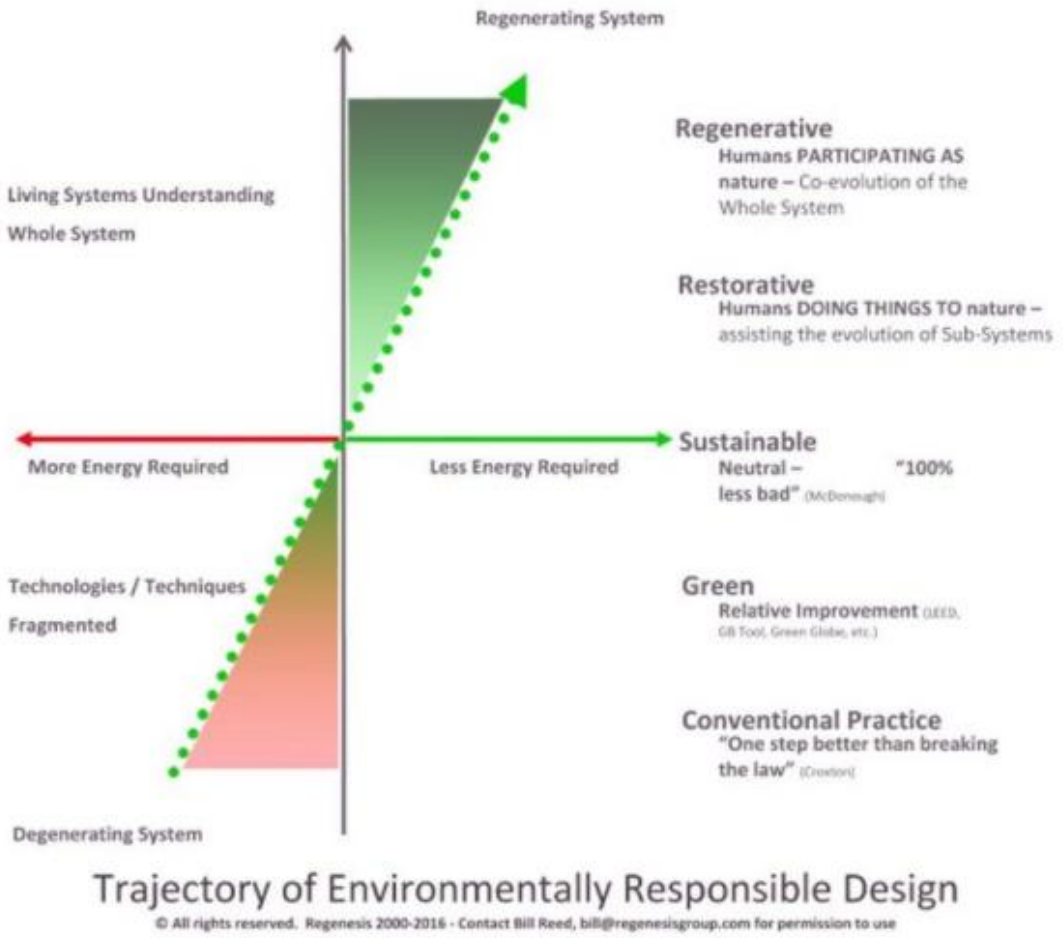
Mobility knowledge and technologies (capabilities): social and environmental impact

Awareness for sustainable economic models

The resource challenge: transition to circular economy

Climate impact monitoring: to make it tangible and communicate mobility solutions footprint

A refinement in the ideas for sustainable mobility



Sustainable Development Goals (SDGs) targets and metrics

What are the metrics?

SDG 12 - Responsible consumption and production

SDG 9 - Industry, innovation and infrastructure

SUSTAINABLE Mobility Road Map

- Select one idea from the Road Map or area in the aviation industry and identify what are the related paradigm market changes when turning to sustainable economics model

- Define measurable metrics for CO2 emissions reductions, health improvements, or other forms of measurable progress toward the SDGs

- Define sustainability indicators

SUSTAINABLE Mobility Road Map

on going

Prospective Scenarios & Design Roadmapping

Mobility issue impact

Living Lab Setting

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Mobility Road Map

Paradigm Market Changes

Metrics for transition to circular economy

addressing the resource challenge

Sustainable economic model

doughnut model or a-growth / degrowth where well-being is placed central rather than profit

Sustainable Mobility Indicators

Metrics for tangible footprint

climate impact monitoring

Next Steps

sustainability indicators

sustainable mobility strategies

capture opportunities from industry disruptions

position industries to succeed in a low-carbon future

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Thank you!

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