



AALBORG UNIVERSITY
COPENHAGEN

THE LOST DECADE? PLANNING THE FUTURE

28th February - 1st March 2019

Aalborg University Copenhagen

More info can be found on www.greentransition.aau.dk

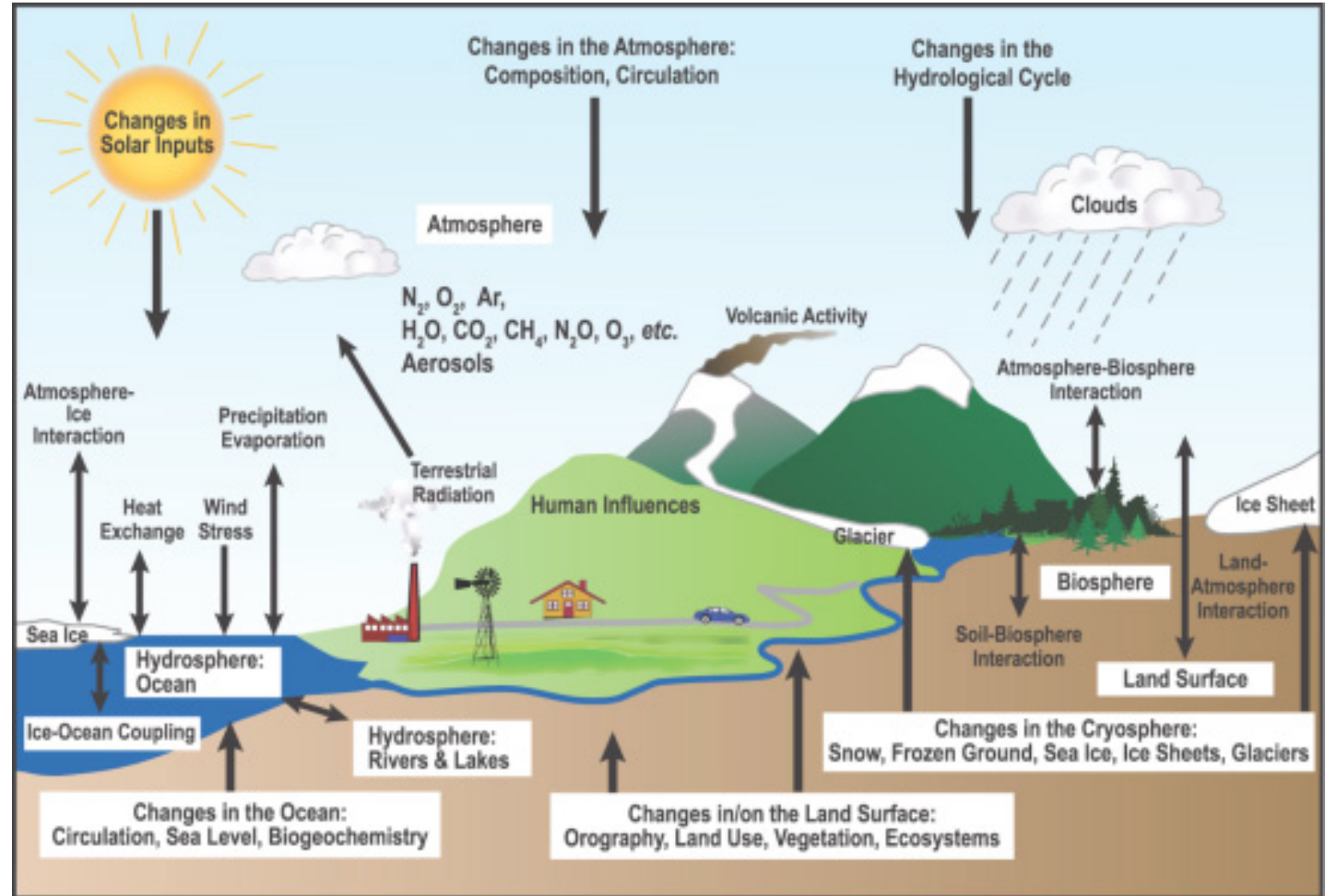
CONNECTING THE DOTS

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RESEARCH QUESTION:
WHY DO DEMOCRATIC
CLIMATE POLITICS FAIL?

WHY DO WE FAIL?

- AS DEMOCRATS
- AS SCIENTISTS
- AS ACTIVISTS

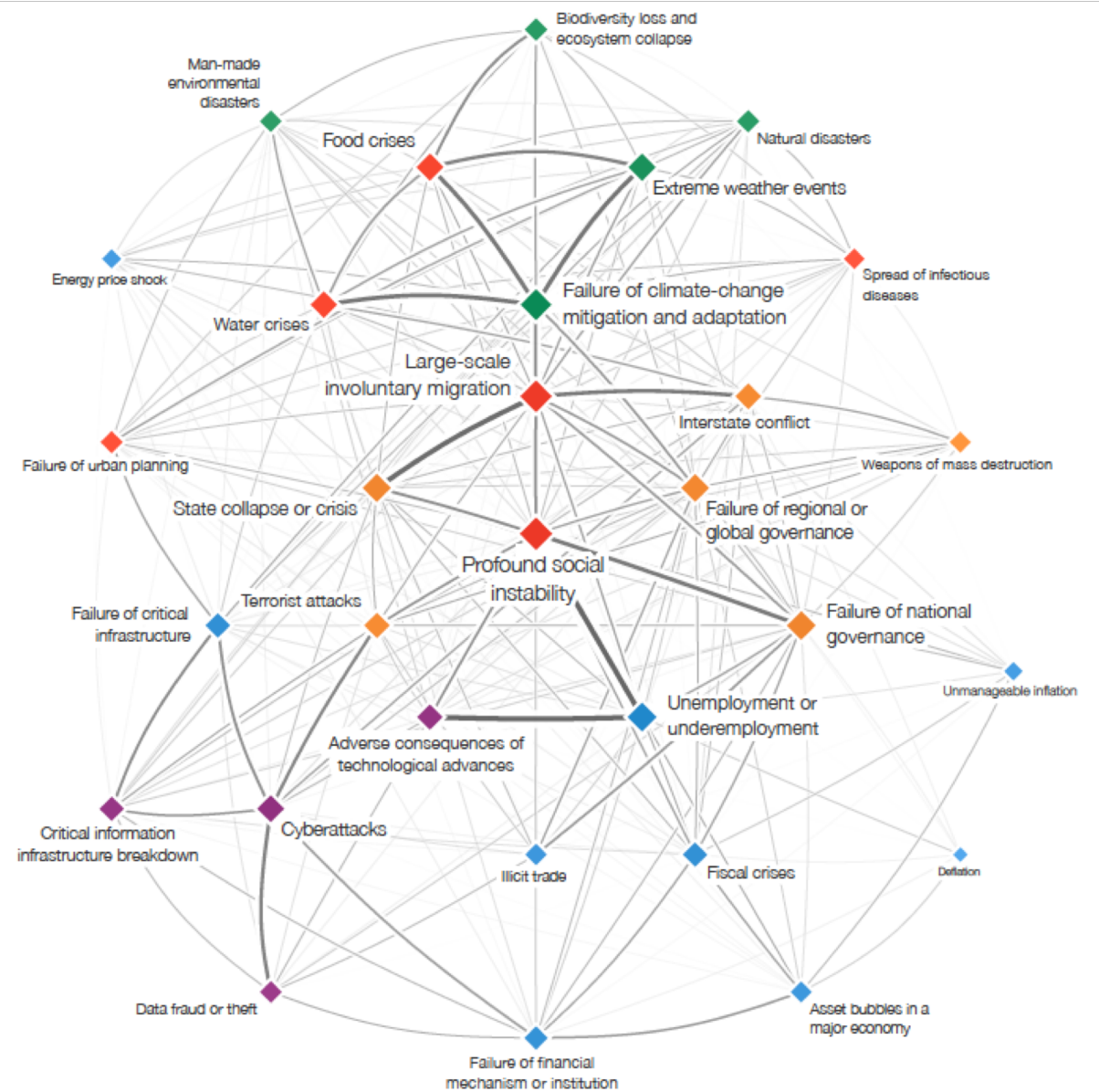


COMPLEXITY OF THE PROBLEMS



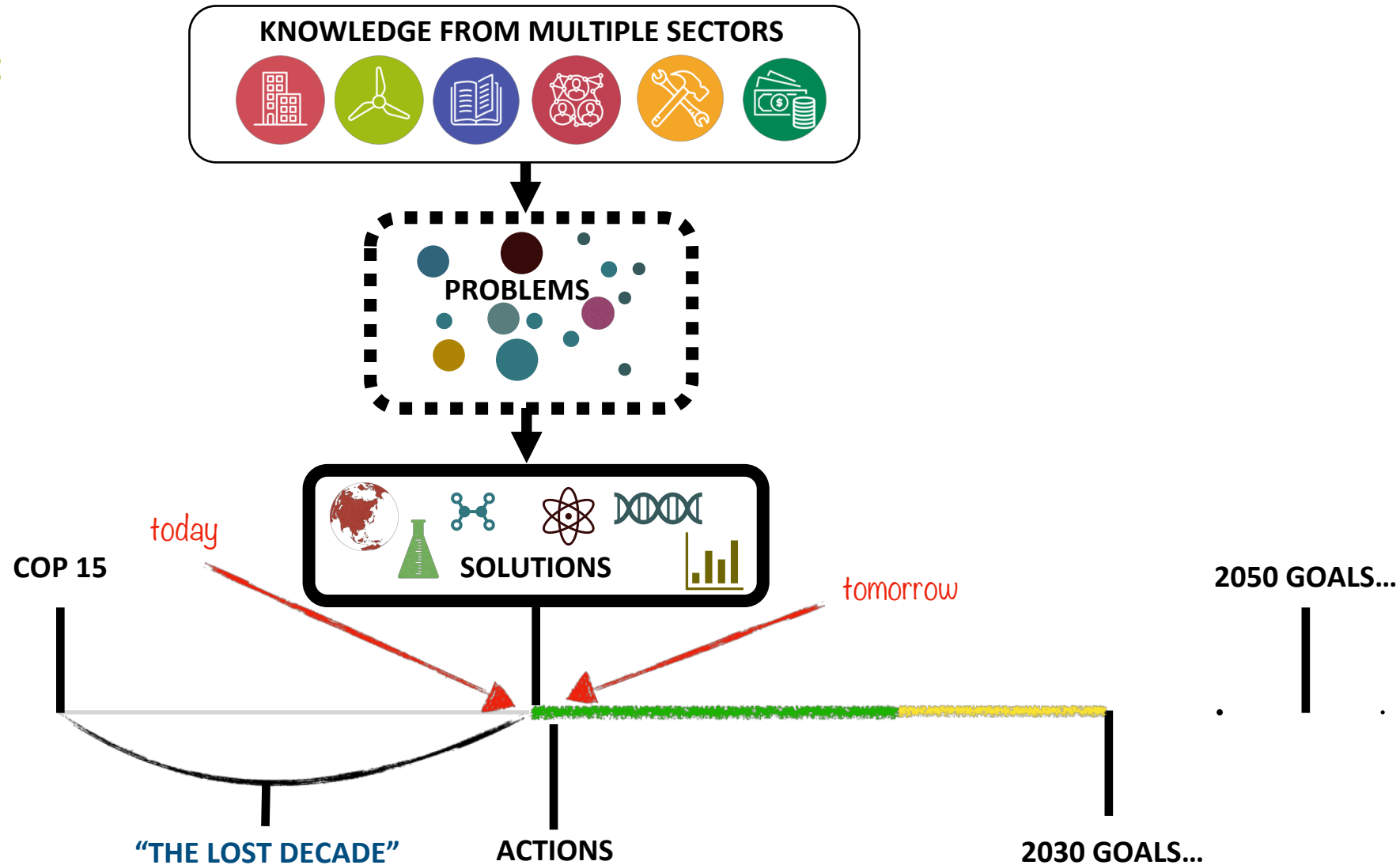
INTERCONNECTED PROBLEMS

(WORLD ECONOMIC FORUM: GLOBAL RISK ANALYSIS 2018)



AIM OF CONFERENCE

FROM SOLUTIONS TO
PROBLEM DISCUSSIONS:
WHAT ARE THE
CAUSES OF INACTION?

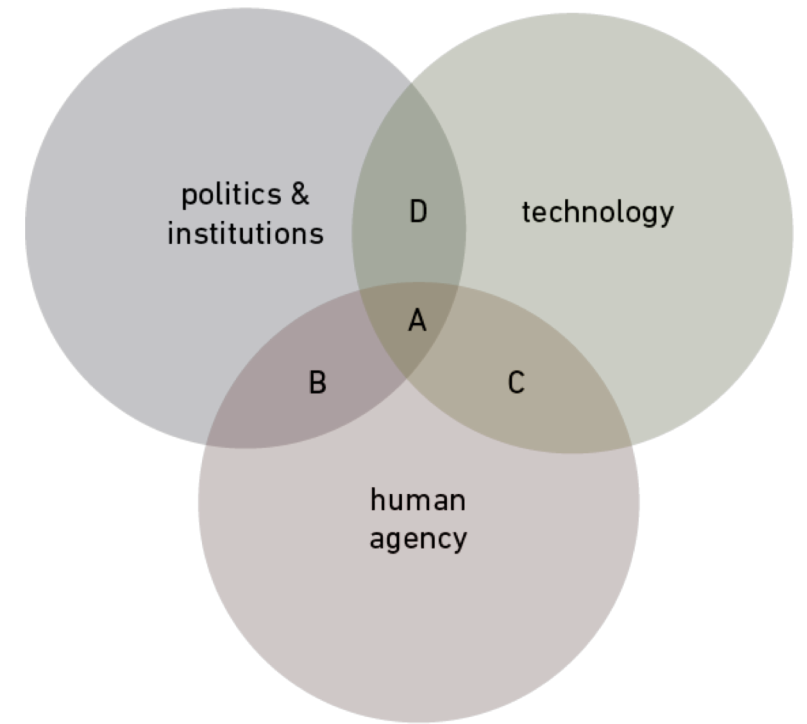


METHOD:

- INTERDISCIPLINARY APPROACH
- CHALLENGE ACADEMIC ORTODOXY
- SECTOR APPROACH TO GREEN TRANSITION

CONFERENCE:

300 GUESTS
10 KEYNOTES
21 PANELS



OUTPUT | GREEN TRANSITION PLAN

PANEL:

PROBLEM:

SOLUTIONS:

KEY TARGET AREAS:

PANEL:

District heating and waste incineration:

Breaking the lock-in in an era of circular economy and decarbonization

PROBLEM:

A two-fold challenge of **decarbonizing energy supply** and **increasing resource efficiency**.

Organization of waste handling and district heating planning is characterized by a lock-in of "easy" waste handling by incineration

SOLUTIONS:

District heating has several supply options available in addition to waste incineration.

District heating is not dependent on waste incineration.

Efficient use of resources should be promoted => circular economy =>

Enable material flows away from incineration and towards longer product life time, sharing economy, and increased recycling of components and materials.

KEY TARGET AREAS:

Local and national planning of energy and resource management

Enabling materials to flow in new ways => new regulation, market design, and responsibilities for businesses, civil society and municipalities

PANEL: POLITICS OF SUSTAINABLE AND RESPONSIBLE TECHNOLOGY

PROBLEM: HOW CAN TECHNOLOGY CONTRIBUTE TO SUSTAINABLE AND RESPONSIBLE ETHO-POLITICAL SENSE- AND DECISION-MAKING?
TECHNOLOGIES ARE ETHO-POLITICAL PLAYERS/ACTORS INTERTWINED WITH HUMANS.

SOLUTIONS: WE SHOULD CREATE TOGETHER WITH TECHNOLOGIES PLATFORMS/SCAFFOLDS/MODELS FOR MEANINGFUL AND SENSE-MAKING ACTION THAT EMBRACES BOTH THE INDIVIDUAL ON A MICRO-LEVEL AND ORGANIZATIONS/INSTITUTIONS ON A MESO-LEVEL.
PROBLEMS SHOULD FIRST BE ADRESSED ON A MICRO-LEVEL, WHICH SUBSEQUENTLY WILL LEAD TO APPROPRIATE CREATION OF 'PLACES' AND 'SPACES' FOR PLANNING ON A MESO- AND MACRO LEVEL.

KEY TARGET AREAS: **HUMAN-TECHNOLOGY-WORLD** RELATIONS, HUMAN-TECHNOLOGY INTERDEPENDENCY, **ETHO-POLITICAL DIMENSIONS OF TECHNOLOGY**.

PANEL:

Climate and finance – also a lost decade?

PROBLEM:

There has never been more capital/credit in this world, but at the same time, not enough investments in the green transition. Green finance should not be a peripheral activity, it should be put at the core of global finance. Looking at both public and private green finance, the majority of investments are directed into mitigation, whereas only a small fraction is put into adaptation.

SOLUTIONS:

In general, the solution is to **redirect more of global capital into green purposes** and reduce expectations for return on investment/equity. Development partners should live up to their pledges to compensate least developed countries for the harm done to the climate and for narrowing their choice of development paths. To guide more private finance towards green transition in LDCs, new models for risk-sharing should be developed and scaled up. A definancialization and a redirection of finance back into the real economy.

KEY TARGET AREAS:

European regulatory authorities – regulation should incentivize green activities, not discourage them.
The financial sector in the western world – a change of business models, less short termism.

OUTPUT | GREEN TRANSITION PLAN

PANEL:

Bæredygtigt hverdagsliv i bæredygtige byer

PROBLEM:

For dårlige rammer til de nødvendige handlinger. Alt skal innoveres fra bunden.

SOLUTIONS:

Finde koblinger mellem forandringsagenter på tværs af "niveauer" – fx borgere, virksomheder og kommune i fællesskab

Mere proaktiv statslig satsning – sikre rammer for bæredygtig udvikling i kommuner og lokalt

KEY TARGET AREAS:

Byer og bæredygtig udvikling

PANEL:

Tourism and climate change – where to next?

PROBLEM:

Growing carbon-driven travel-related mobility and consumption (lodging, food, shopping)

Deregulation and **price lowering**

Emerging markets and mobility ‘glamorization’

Policy, sector and consumer inertia/growth orientation - Lack of advocacy

SOLUTIONS:

Global and national collaboration on policies that also take into account ‘mobility justice’.

Locally embedded, cross-sectoral solutions.

Travelling less, slower, less far

KEY TARGET AREAS:

Transport & infrastructure (aviation/cruise), regulation with teeth, cultural mobility imaginaries, technological innovation ?

OUTPUT | GREEN TRANSITION PLAN

PANEL: ENERGY CONSUMPTION OF GROWING INTERNET (WITH REPS FROM DTU, DANSK ENERGI, TELIA, GREEPEACE, HUAWEI)

PROBLEM:

THE INTERNET USES A CONSIDERABLE AMOUNT OF ENERGY, AND **THE INTERNET TRAFFIC IS GROWING EXPONENTIALLY. CAN WE KEEP IMPROVING EFFICIENCY** OF ICT, SO THE TOTAL ENERGY CONSUMPTION DOESN'T EXPLODE

SOLUTIONS:

THE PANEL AGREED ON:

- ENERGY EFFICIENCY IN ICT IS VERY IMPORTANT – AND RELEVANT FOR POLICY MAKERS TO ADDRESS.
- POLICY MAKERS SHOULD INTRODUCE AN ENERGY-EFFICIENCY CRITERION ON ALL NEW ICT EQUIPMENT, BEFORE DEPLOYMENT IS ALLOWED, AND INSIST ON PHASING OUT OLD INEFFICIENT EQUIPMENT AND NETWORKS. EXISTING PARALLEL NETWORK INFRASTRUCTURE SHOULD ALSO BE QUESTIONED.
- REGULATE ICT-ENERGY-CONSUMPTION BY THE PRICE ON ELECTRICITY – COMPANIES SHOULD PAY THE FULL COST OF ENERGY PRODUCTION AS A MINIMUM
- PUBLIC INSTITUTIONS SHOULD ONLY USE GREEN ICT SOLUTIONS, SUCH AS ONLY USE GREEN CLOUD SOLUTIONS (GREEN DATA CENTRES)
- RESEARCH AND DEVELOPMENT IN THE AREA OF ENERGY-EFFICIENT ICT SHOULD BE STRONGLY SUPPORTED

KEY TARGET AREAS: RESEARCH&DEVELOPMENT, ENERGY REGULATIONS, REPLACEMENT OF OUTDATED INFRASTRUCTURE

PANEL: Når markeder hverken er naturlige eller perfekte, men regel-baserede arenaer for konkurrence, hvor der er kamp både på banen og kamp uden for om flytning af kridtstreger/regler der former spillet

PROBLEM:

Neoklassisk økonomisk ekspertise har ophøjet markeder til naturlige og effektive selv-regulerende størrelser og dermed skabt en dominerende forståelse af markeder, som delegitimerer politisk intervention i markeder for at rette op på deres negative klimaeffekter.

Den falske modsætning mellem 'rene markeder' og 'regulerede markeder' forhindrer en reel stillingtagen til den politiske økonomi og behovet for 'kollektive beslutninger', som markedet ikke selv kan tage uden en hjælpende regulerende hånd. Den usynlige hånd metafor for markeders samfundsnyttighed forudsætter at 'synlige hænder' kridter banen op en spilleplade med samfundets målsætninger

SOLUTIONS:

Bryd fortællingen om 'markeders ophøjethed, men anerkend deres generative kraft. Tag 'markedet' tilbage, dvs. forstå **markeder som historisk konkrete arenaer for konkurrence**, som følger regler der skaber handle- og indtjeningsmuligheder for aktører, teknologier og brændsler.

Naviger politisk trods balladen, når klimapolitikken udfordrer de rettigheder og vaner til forbrug og indtjening som eksisterende markedsregler tillader. Det er ikke naturlige men historisk kulturelle rettigheder.

KEY TARGET AREAS:

For at markeder skal tjene klimapolitikken og omstillingen skal markeder og samfundsøkonomi gen-politiseres, hvor klimafjendtlige handlinger vedligeholdes: CO2-priser, den interne rente i samf.øk analyser, fortsat støtte til fossile brændsler, afgifter på el-og fossilbiler, afgifter på flyrejser og oksekød, afgifter på biomasse og ikke på el mm.

OUTPUT | GREEN TRANSITION PLAN

PANEL:

The potential of new renewable energy technologies

PROBLEM:

- Getting to “fossil free” energy for Denmark (2050) – and for the World (20xx)
- Most energy grids can handle 25% wind/PV, getting (far) beyond that is the technical problem.
- We must get to *negative* carbon emission before 2050. CCS?

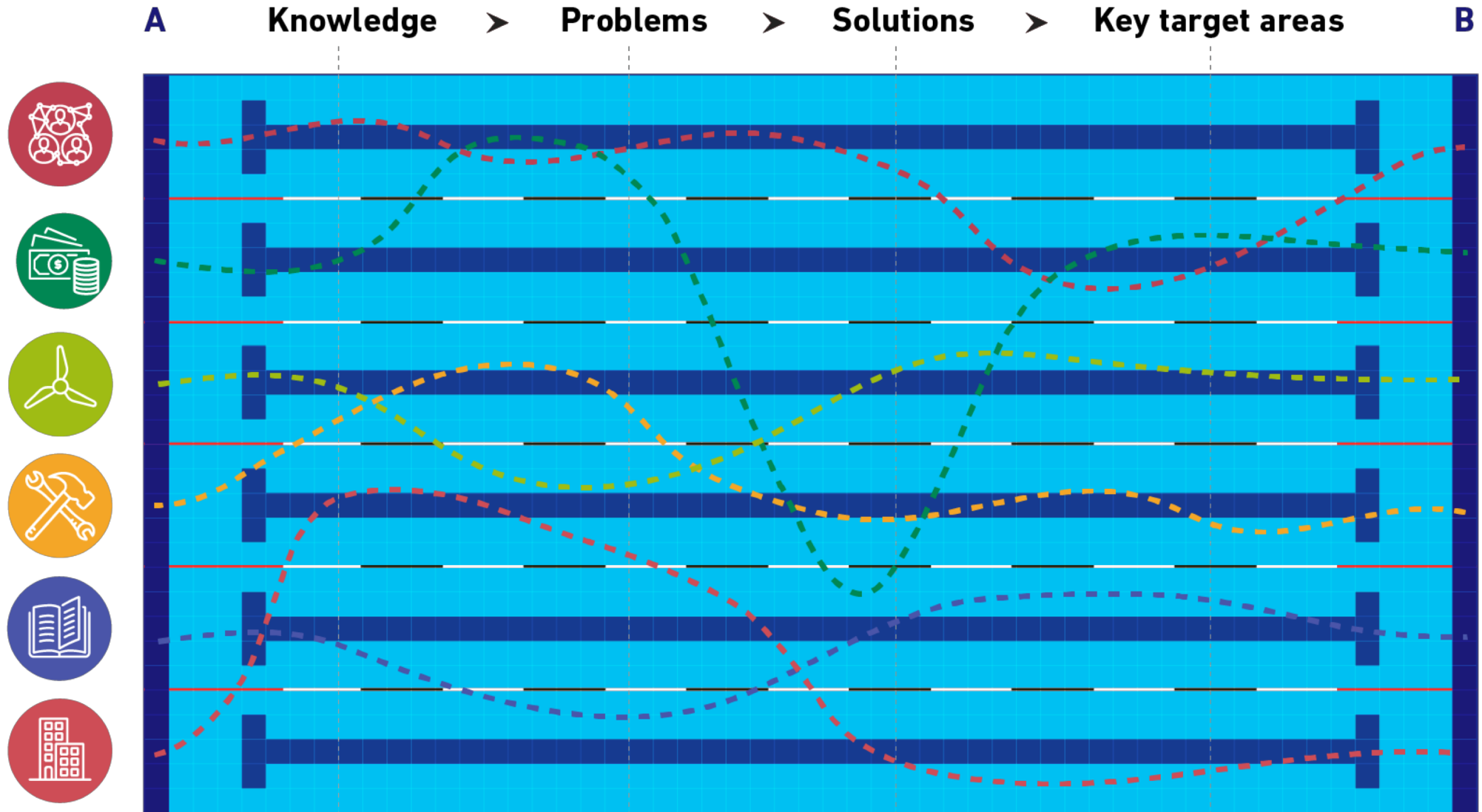
SOLUTIONS:

- Focus on **massive electrification of heating** (heat pumps), transportation (EVs) – and everything!
- We need to well beyond 100% renewable electricity – because we need renewable fuels too! Electrolysis.
- Perhaps we can bury in the ground – e.g. under the North Sea seafloor.
- Better individual choices.

KEY TARGET AREAS:

- Legislative framework and taxation schemes must be aligned with long-term goals.
- The energy systems (electricity, gas, liquid fuels, district heating) need to be handled holistically.
- A support framework for nascent technologies is needed (e.g. wave power).
- There is “low hanging fruit” in efficiency improvements (buildings, industrial waste heat, etc.)!

NEXT STEPS



PLANNING:

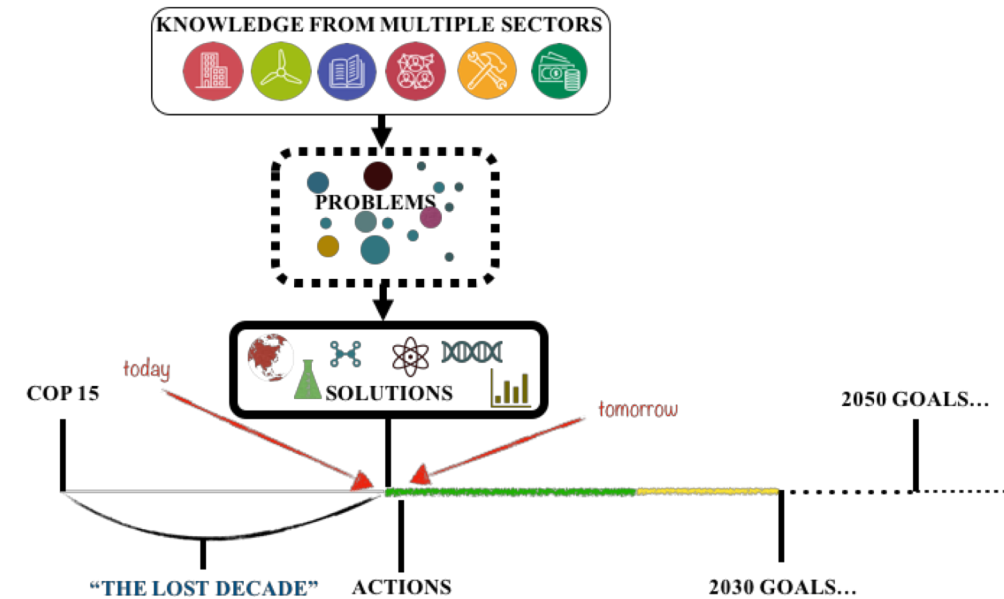
- COSTS > < CO-BENEFITS
- GOALS > < PLANS
- SOLUTIONS > < PROBLEMS
- PERFECT IDEAS > < CLUMSINESS
- IDEALS/VISIONS/AMBITIONS > < ACTIONS

ETHICS

- MORAL DIASTER > < GREEN TRANSITION

SOCIETY/PUBLIC DISCOURSE

- CLIMATE POLITICS > < SECTOR-BASED APPROACH
- POLLUTER PAYS PARADIGM > < CARBON POLLUTION APPROACH
- NATURAL SCIENCE > < SOCIO-TECHICAL SYSTEM APPROACH



WHAT IS GREEN TRANSITION?



WHAT ARE THE CHALLENGES?



WHAT ARE THE TARGET AREAS?



THANKS YOU TO CONFERENCE TEAM



THANK YOU!



CONNECTING THE DOTS

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