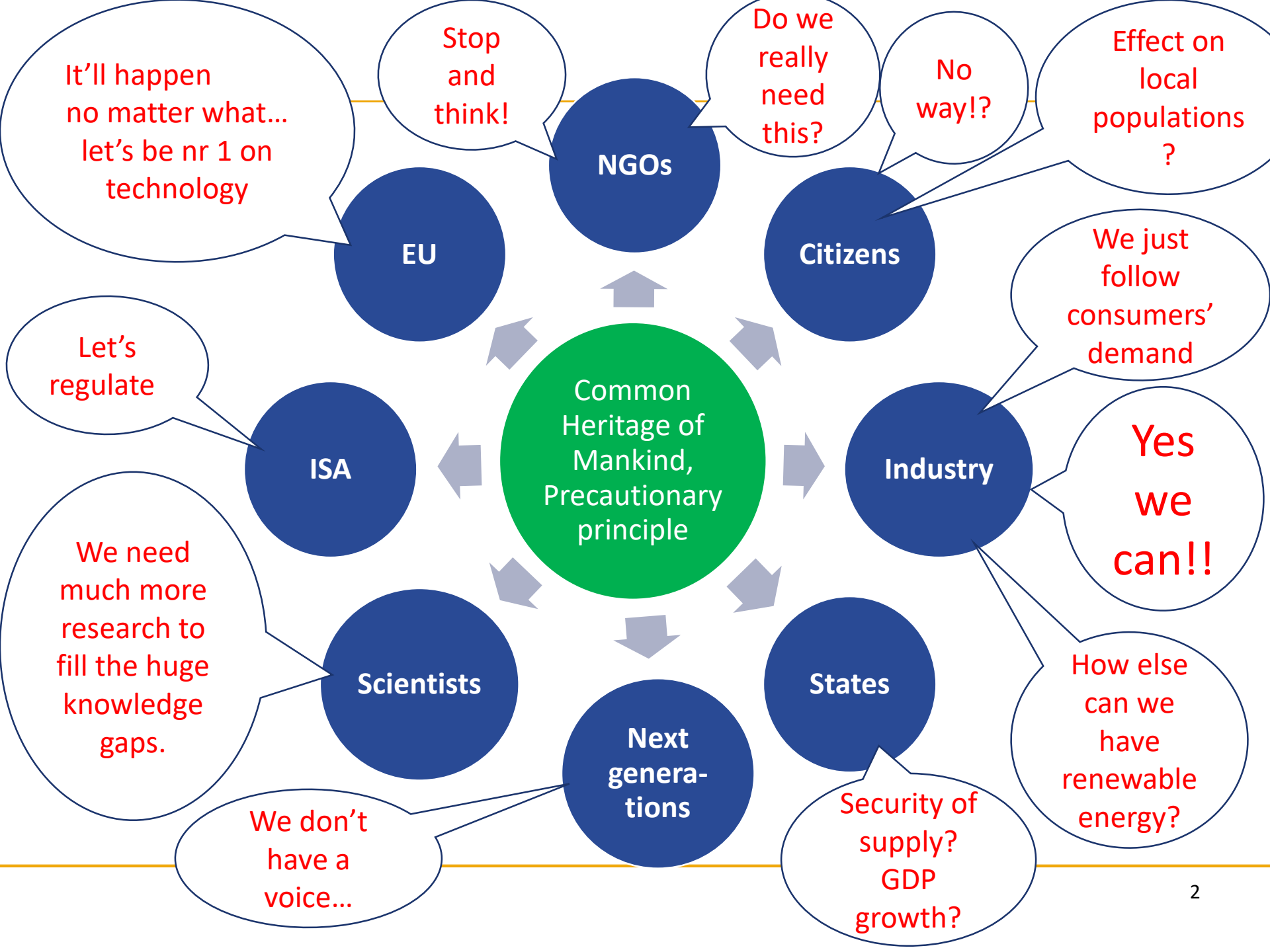
SEAS AT RISK

for the protection and restoration of the marine environment

Deep sea mining – stop and think!

Ann Dom
deputy director

Deep-Sea Mining – What next for Science?
European Parliament, Searica, 17 November 2016

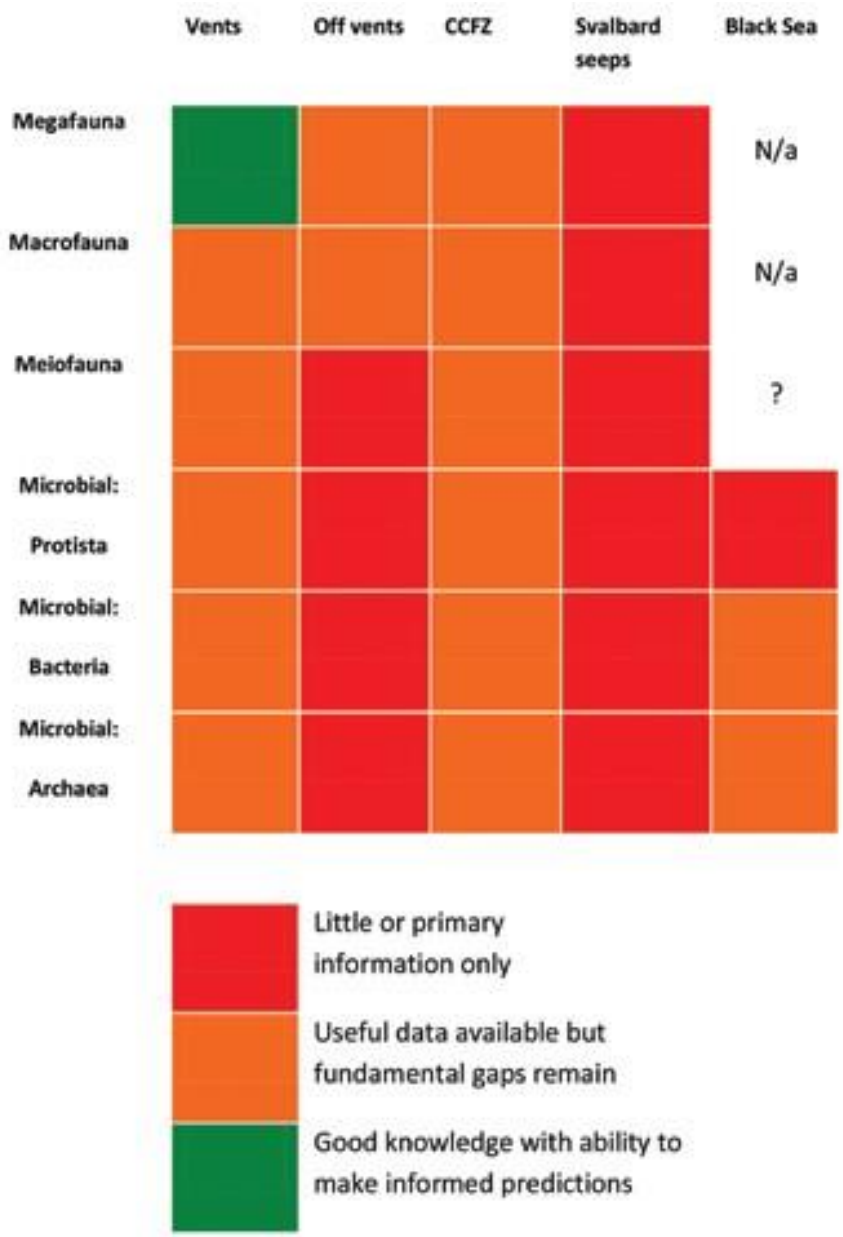

It'll happen no matter what… let's be nr 1 on technology
Stop and think!
Do we really need this?
No way!?
Effect on local populations ?
EU
NGOs
Citizens
Let's regulate
We just follow consumers' demand
ISA
Common Heritage of Mankind, Precautionary principle
Industry
Yes we can!!
We need much more research to fill the huge knowledge gaps.
Scientists
Next genera-tions
States
How else can we have renewable energy?
We don't have a voice…
Security of supply? GDP growth?

"Just give us the scientific thresholds, we will fix our technology to work within those limits."

Industry stakeholder at MIDAS conference


“We’ll be ready to go within 4 years.”
Industry stakeholder at MIDAS conference
©Nautilusminerals


“Once we are down there, there will be no turning back!”
Industry stakeholder at MIDAS conference
©Nautilusminerals



Biogeographic knowledge in deep-sea habitats with mineral or gas hydrate resource potential.

"Our current level of biogeographic knowledge is not sufficient to make accurate predictions of the consequences of mining."

Source: MIDAS research highlights

How does deep sea mining fit in a sustainable future?

"…coherence is also desirable with strategic decisions about management of terrestrial minerals, recycling, reuse, substitution, research and development, and investment in promoting Circular and/or Green Economies. It is time to recognise that the arguments of the form "we should mine because we can do it" or "we should mine because it will happen anyway" are not intellectually robust answers to these pressing questions, which need to be addressed in a thorough, democratic and participatory way."

Source: R. Tich, S. van den Hove – 2016 – MIDAS deliverable 9.5

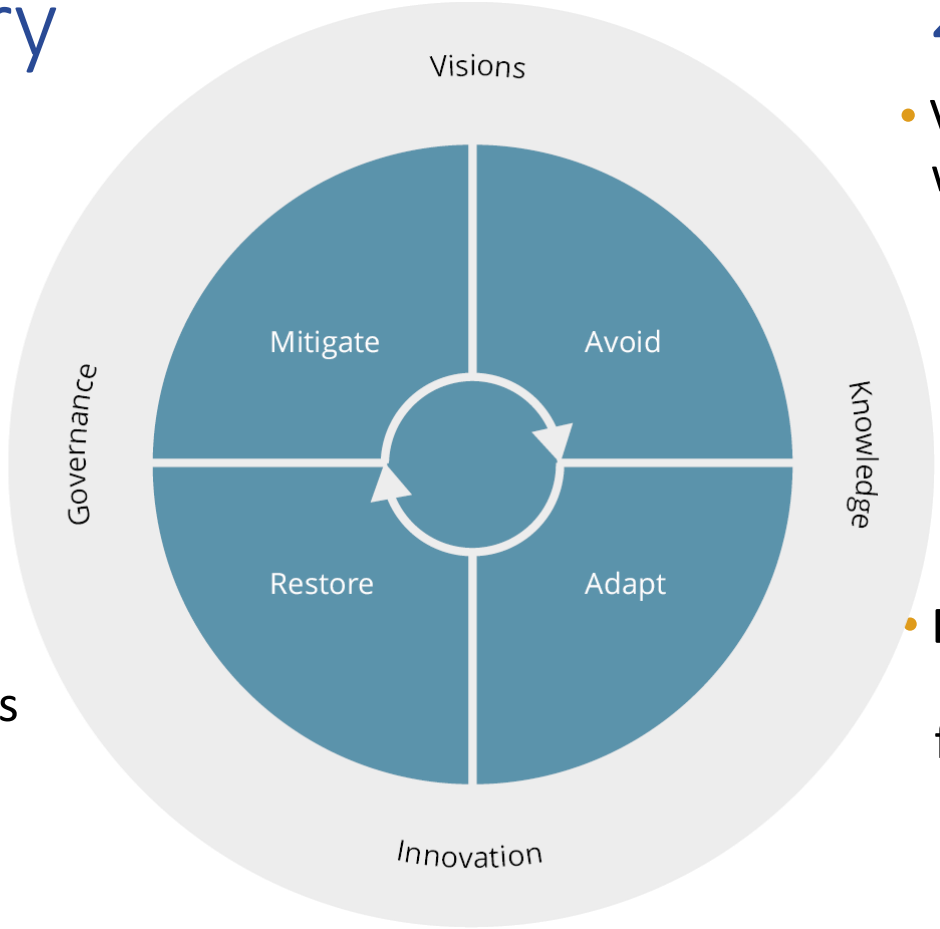
"A transition towards a 100% renewable energy supply – often referred as the "energy revolution" – can take place without deep-sea mining."

"Increasing recycling and continued research and development into alternative technologies that reduce, or completely eliminate, the use of these critical metals are vitally important complementary strategies."

Source: Teske et al 2016

20th century

- Vision = growth, prosperity
- Economy = efficiency, techno-optimism, competitiveness, security, market
- People = consumers, workers
- Planet = free ecosystem services



21st century

- Vision = sustainability, wellbeing within limits of the planet
- Planet = life, home, commons
- People = responsible citizens, society-wide changes
- Economy = sufficiency, efficiency, sharing, fairness, new business models

Transition paths

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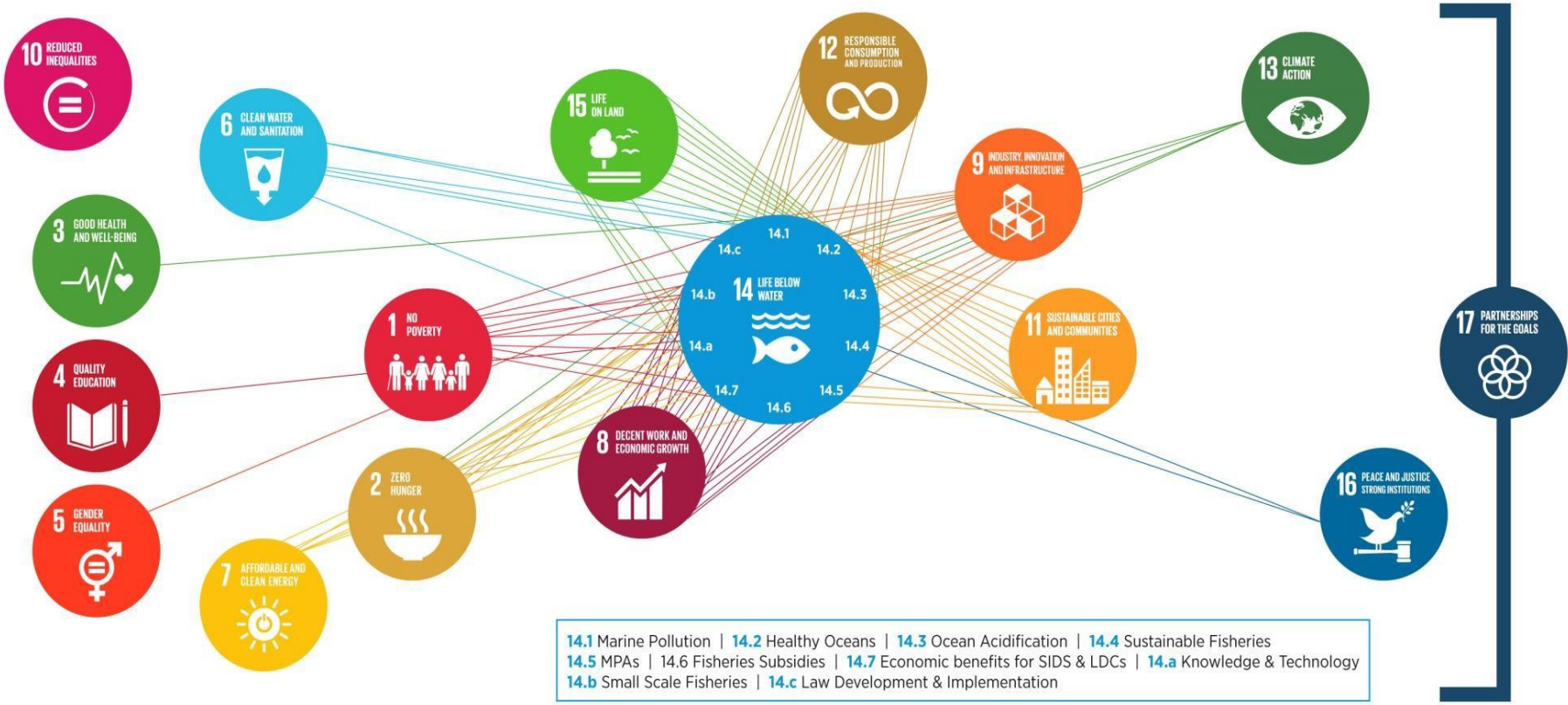
SDGs set the framework!



Source: IASS Potsdam, 2016

We need science to help us to

- Move from silo to system thinking, to shape a holistic vision so we can fully explore more sustainable alternatives – future outlooks under various scenarios (2050-2100)

- Build collaborative stakeholder action, better communication and learning amongst stakeholders, and new ways to incentivise long-term thinking.

- Make better informed decisions, based on enhanced knowledge on deep sea ecosystems, as well as on future societal changes, alternative economic models etc.

- Find 21th century solutions to 21st century challenges – deep sea mining should not divert RTD investments away from more sustainable solutions


Stop and think!
Thank you!
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