

#### **Sustainable Energy Futures:**

Science Centres/Museums Glocally Approaching a Multifaceted Key Challenge

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Speaker: Sarah Kellberg



## Energy Transition(s)

- One of the most pressing global challenges
- Succeeds or fails with society's acceptance and participation
- Complex and intertwined topic
- Multiple dependencies
- Socio-scientific issue
- "wicked problem"

Deutsches Museum invites visitors to "Turn it around"→







#### **Clear structure for a complex content**





## **Knowledge repositories and emotional challenges**









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## How does your energy transition look like?



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## How does your energy transition look like?



Images: © DM



## How does your energy transition look like?



Choose your own measures

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#### How does your energy transition look like?





Get your results!





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## How does your energy transition look like?

Type 1 You believe in the market economy: Your energy transition is driven by price. If the price is right, demand increases automatically. For this to work, the costs for new, energy-efficient technologies and ideas must just be lower than the cost of traditional technologies. And, voila! More people can afford the energy transition.	Type 2 You have a social conscience: The energy transition should work on equal terms in all parts of society and for everyone. For everyone to participate, your focus is on decentralized technologies because if everyone gets involved, there is a greater willingness to identify personally with the processes of the energy transition. If it is to function at all, the energy transition can only be achieved together.	Type 3 You believe in globalization: Your energy transition must be organized globally. The thing to do is to put the individual regions of the world to good use and share technical innovations. Everyone has a part to play, and every technology has an ideal location at which it adds value within the global network.	WHO IS WHO? DISTRIBUTION OF ENERGY-TRAN Type 5: Ecological 223%
Type 4 You believe in science: Your energy transition is coming sooner than you think – as soon as research advances. In any case, there is a solution to every problem, whether technical, social or political. The answer may not yet have been found, but that doesn't mean that there isn't one. New thought patterns and research structures help to master the energy transition.	Type 5 You want to protect the environment: Your energy transition will only work if we all go back to living in harmony with nature. In addition to renewable technologies, the things to change are the existing behavior patterns of energy consumption. All in keeping with the idea of "less is more", everyone must be obligated to work on the success of the energy transition.	Type 6 You want to regulate the world: Your energy transition is a top- down approach. Since the individual is not able to understand the big picture and behave in a way that will shape future actions, the government must pass laws, issue directives and introduce measures. They are meant to make the energy transition possible and help everyone behave accordingly – even if this must be imposed.	

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## **Exhibition research**



- Data collection
- What measures get chosen?









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## PhD

- How is the influence on students`:
  - Socio-scientific reasoning?
  - Willingness to act?
  - Attitudes?



#### How do we use experience for our global network?

Is the concept transferable to other topics or long term exhibitions? How does the exhibition **/game work** internationally?

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