INSTITUTE OF TECHNOLOGY ASSESSMENT

Into Grey Skies – Citizens‘ Visions as a Leitbild for Governing Science, Technology and Innovation

1st International Conference on Anticipation
Session: The Making of Visions II

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ÖAW AUSTRIAN ACADEMY OF SCIENCES

Futures, science and society

- Results of futures studies are often controversial, divergent or even contradictory, and thus become contested (Grunwald 2014)
- Expert anticipation beyond short-term prediction is highly arbitrary (e.g. Goldstein&Gigarenzer 2009; Makridakis&Taleb 2009)
- Experts dilemma (Grunwald 2002)
- Promise of technological progress: Socio-technical imaginaries may prescribe a future that seems attainable to the ones involved in the visioning process (Jasanoff/Kim 2009)
- Other possible futures may become less likely and shaping them could become more difficult

→ Need for broadening the debate on socio-technological development

- "'Science' and 'society' are by no means clearly delimited or predefined entities. They are fluid and take shape in heterogeneous, context specific forms. Engagement and governance therefore represent locations (or spaces) where values and norms and thus power relations are negotiated" (Felt et al. 2013)

Public Engagement

- RRI and upstream engagement: demand for early involvement of stakeholders and general public in the innovation process (e.g. Hagendijk and Irwin 2006, Escobar 2013, Owen et al. 2012)
- Criticism: lack of a meaningful transfer of PE results to the policy arena (e.g. Rask 2013) and the lateness of dialogue.
- Dilemma: If too late, development closed – if earlier, knowledge about a respective technology and its consequences limited
  → therefore societal dialogue is hardly possible or extremely vague (Collingridge 1980).

Participatory foresight as an answer?

- Engaging citizens, experts and stakeholders: combining different types of knowledge to build desirable, socially robust futures.
  - Cognitive, experiential and value-based knowledge (Glicken 2000)

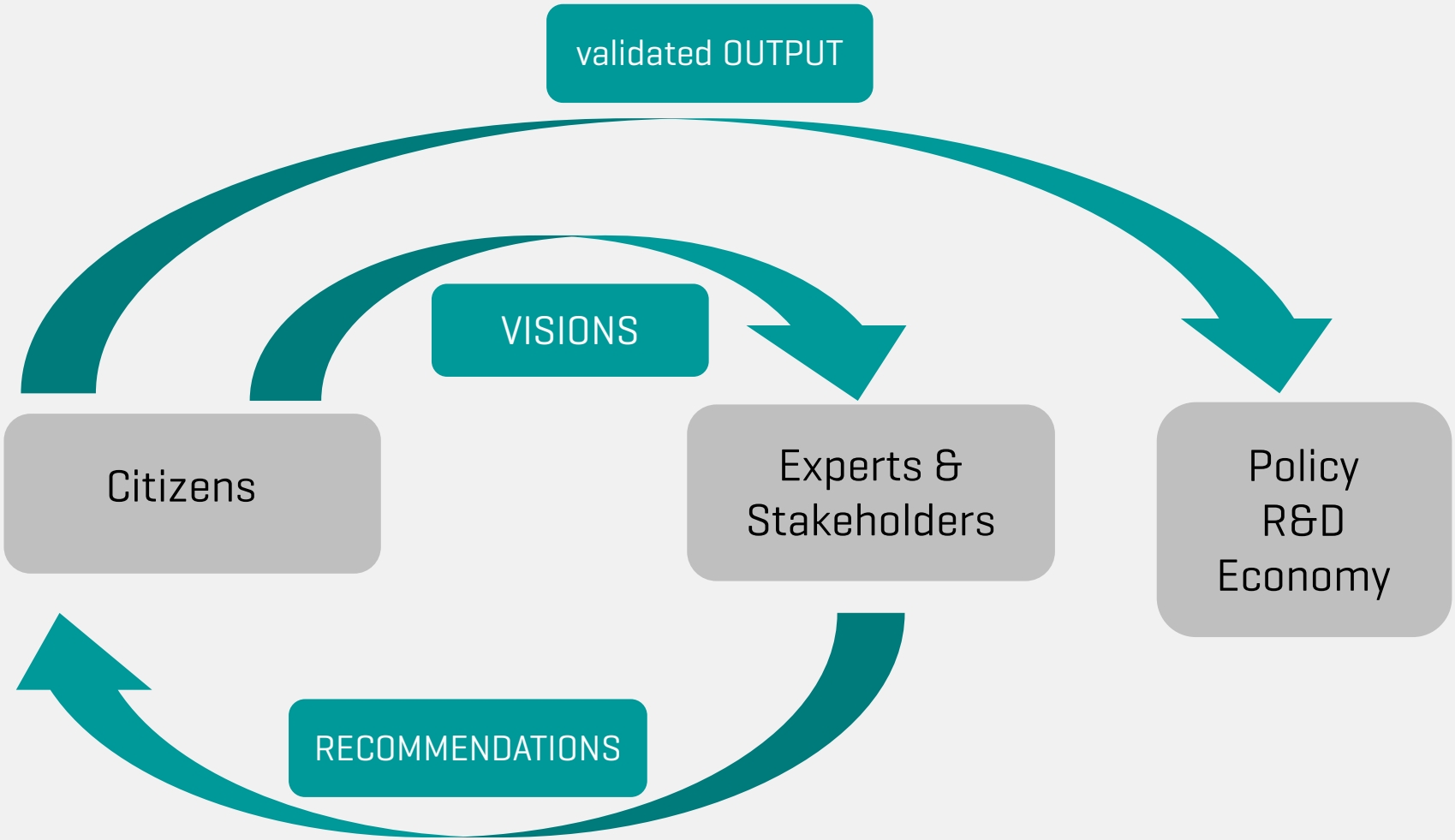
- Aim: Support a continuous policy learning process (Warnke & Heimericks 2007)

- CIVISTI-method: transdisciplinary, qualitative demand-side approach:
  - Identifying societal needs and demands for futures
  - Asking how the future *should* look like, instead how the future will be

"*The CIVISTI method is based upon the idea that the process of defining relevant and forward-looking research and innovation agendas could, in many respects, be improved by including consultations with citizens in their development. The method uses citizens' concerns about societal development as a stepping stone for developing priorities in research programmes." (Engage2020, 2015)*

Visions in CIVISTI

- *A vision is a picture or an imagination of a desirable future. A vision can be based upon hopes and dreams – but also upon concerns and fears in relation to problems or imagined threats that we do not want to become reality. These visions describe a future 30 to 40 years from now.*
- If close to technical development: may serve as *Leitbild* - for political and public debates on short- or midterm developments (Dierkes et al. 1992)
- If more open and speculative, including broader time horizons, utopian as well as feasible aspects, such pictures of futures may serve as guiding visions for mid- and longterm developments.


validated OUTPUT
VISIONS
Citizens
Experts & Stakeholders
Policy R&D Economy
RECOMMENDATIONS

Case studies

- CIVISTI: Citizens‘ Visions on Science, Technology and Innovation. 2008-2011, FP7, www.civisti.org, lead DBT
- CIVISTI-AAL: Leben 2050 – Autonomous Living of Older Adults, 2013-2014, City of Vienna (ZIT), www.leben2050.at,
- Future Foods 4 men and women, 2013-2016, BMVIT, FFG, http://www.ages.at/ages/futurefoods/ Austrian Agency for Health and Food Safety
- CASI - Common Framework for Assessment and Management of Sustainable Innovation, 2014-2017, EU FP7, www.casi2020.eu/
- CIMULACT - Citizen and Multi-Actor Engagement on Horizon 2020; 2015-2018, EU-Horizon 2020, www.cimulact.eu


Tisch 4
Wohnen
MEHR GELD für PFLEGE
Finanzielle Unabhängigkeit
Öffis
Verkehr Mobilität
Auto
AUTARKES LEBEN
PFLEGE im ALTER KOSTEN?

Future Foods: Nutrition education of the future (1st)

- *Emma and Emil celebrate the birthday of her aunt in a big family reunion. Her cousin, Anna, won the Innovation Award of the Ministry of Education with her graduation project ‘nutrition is the future’. She and her schoolmate Tom made an important contribution to the responsible use of food and resources.*
- *Developing the project, they drew on their school experiences. Since the first grade, Anna and Tom had been regularly trained in holistic health promotion – mental and physical –, dietetics and nutritional resource planning. In their generation, consumers are fully aware of nutrition and holistic health behavior (stress reduction, sports, etc.) and consciously take informed decisions on healthier lifestyles.*
- *Anna's mother is talking with a few people at a party. They all support the new nutrition course that is mandatory for new parents in the ‘parent-child pass’. Anna's mother thinks back to the time, in which their daughter came home thrilled with practical nutrition and food-related exercises. Regularly, her daughter met with other students in project groups. They playfully acquired knowledge on complex issues such as seasonal, regional production and food safety themselves. In a growing and harvesting experiment at school, farmers from the neighboring village engaged voluntarily. Anna's mother happily supports this local farmer by buying seasonally there.*

Future Foods: Land-use planning for a healthy Austria (2nd)

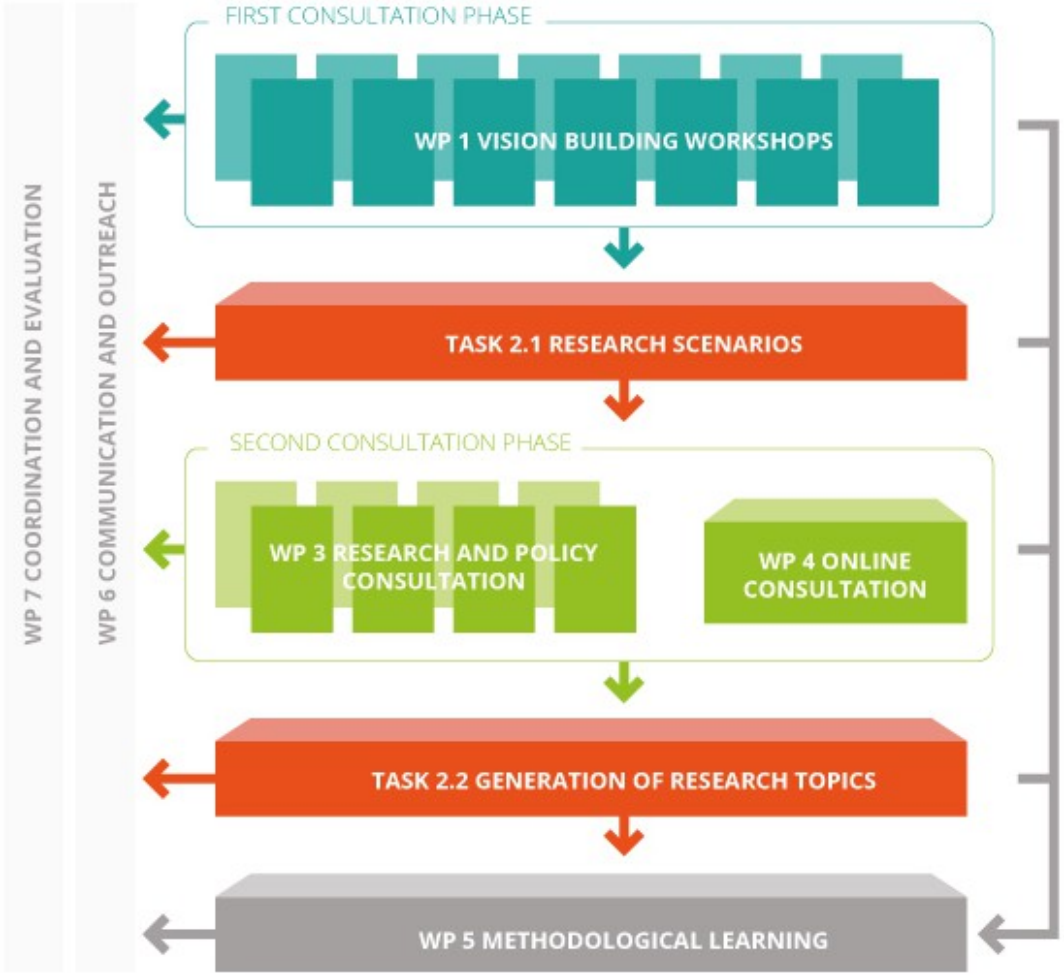
- *The 2015 still accelerating trend of soil sealing and thus the destruction of arable land was counteracted completely by 2050. There is well-coordinated settlement planning for entire Austria, which pays attention to the preservation of regional food security.*
- *On the weekend, Emil likes visiting a village which he still knows from when he was a child. He is pleased, that the plan for building a large industrial zone including a shopping center on the most fertile land of the region was prevented a few years ago. The reason is also political rethinking of regional planning in Austria. In order to help with his own contribution to environmental protection, Emil travels mainly by train. He does not want to support private transport and thus air pollution.*

CIMULACT- WORKPLAN 2015-2018

- **Citizen visions:** first consultation phase -1000 Citizens in 30 European countries develop around 180 visions on desirable futures; Scope: Grand Challenges
- **Research programmes scenarios:** co-created by citizens, stakeholders, researchers and policy-makers based on the aggregated visions and overarching social needs identified
- **Validation and enrichment:** second consultation phase: validating, enriching and prioritizing research programme scenarios in face-to-face consultations in all 30 countries and an online consultation
- **Prioritised actions for Horizon2020:** Workshop for stakeholders, researchers and policymakers transforms results of the second consultation phase into policy options, possible research topics and recommendations for Horizon2020
- **Dissemination** to key target groups in research, innovation and public policy, such as EC officials, national research councils, scientific networks, etc.

CIMULACT WORKPACKAGE STRUCTURE

This diagram shows the internal relation between project Work Packages



CIMULACT: Engaging all of Europe in shaping a desirable and sustainable future

Citizens to provide concrete and unique input to the European Union's research and innovation agenda

CIMULACT stands for 'Citizen and Multi-Actor Consultation on Horizon 2020'. The project engages more than 1000 citizens in 30 countries in Europe, along with a variety of other actors, in shaping a desirable sustainable future. In a highly participatory process, the project will provide a unique contribution to European research and innovation policies and topics, create dialogue and shared understanding among the actors, and build strong capacities in citizen engagement, thereby enhancing responsible research and innovation (RRI) in the EU.

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Thank you for your attention!

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