Trust in SolStore technologies

Louisa Estadieu¹,³, Julius Fenn¹,², Michael Gorki¹,², Andrea Kiesel¹,²

¹ Cluster of Excellence livMatS, University of Freiburg, ² Institute of Psychology, University of Freiburg, ³ Faculty of Philosophy, University of Freiburg

Concept(s) of trust

Trust according to Mayer et al. (1995)

• “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party.”

Trust in emerging technologies

• 3 dimensions of trust: (1) trust in the information received about the emerging technology, (2) trust in the institutions or people developing the emerging technology, = (3) trust and/or reliance in/on the emerging technology

Factors influencing trust in renewable technologies

Measuring trust in renewable technologies

Fig. 2: Trust model adapted from Mayer et al. (1995) & Schlicker et al. (2024)

Measuring trust in SolStore technologies

Research Questions

• What are the key determinants that influence public trust in SolStore technologies, including perceived risks and benefits, sociodemographic variables, and levels of trust in scientific and industrial?
• How do different stakeholder perceptions (e.g., local communities, scientists, and industry experts) vary regarding the trustworthiness and acceptance of SolStore technologies?
• Which communication strategies can enhance public trust and acceptance of SolStore technologies?

Study Design:

1. CAM-Study: Based on scenario texts, we will ask participants to draw Cognitive-Affective Maps (CAMs) to identify key factors influencing the trustworthiness of SolStore technologies. Additionally, participants will complete Likert scale questions on trust in renewable technologies.
2. Surveying Experts: We will gather insights from livMatS members and industry professionals on how to design and frame renewable technologies, such as SolStore technologies, to enhance their trustworthiness.

Fig. 3: Cognitive-Affective Map

References


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Contact

Louisa Estadieu, Dr.
E-Mail: louisa.estadieu@livmats.uni-freiburg.de
Phone: +49 761 203 95141