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Highlights Report Year 1

Lantern

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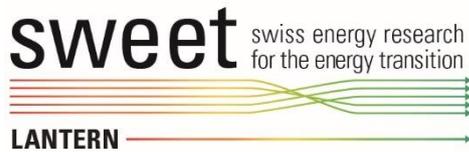
sweet | swiss energy research for the energy transition

LANTERN

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Highlights

The main highlights (results, challenges, learnings, etc.) during the reporting period were the following:

- *In 2022-2023, the international context has put the Swiss energy system under great pressure, forcing the country to prepare for energy shortages and accelerate the transition towards renewables, but also to increase the efforts in demand reduction through sufficiency and efficiency. The growing tensions around energy provision enhances the need for more democratic solutions and collaborative research. By putting energy sufficiency and co-creation methods at the core of its agenda, SWEET Lantern is particularly well positioned to address these challenges.*

- *This large transdisciplinary consortium – a community of 12 academic institutions, over 60 researchers and 40 cooperation partners – is now fully operational. The first months have been dedicated to formalising this collaboration and lay the organisational, communicational and methodological foundations of this 8-year programme.*

- *All researchers have been trained in co-creation methodology together with Living Lab practitioners. The Capacity Building programme was launched in February 2023 hosted by ZHAW in Zurich with collaborative workshops focussed on building a common vision for the Lantern Living labs. This was developed further in Luzern in April 2023 together with Cooperation Partners and supported by learning modules and a capacity building platform.*

- *An integrated impact assessment framework has been developed to support all research work packages to increase and monitor their impact, relying on a common set of indicators and theories of change.*

- *All work packages are running, and research is now being applied to specific sectors and territorial contexts, in close cooperation with public and private partners.*

Faits marquants

Les principaux faits marquants (résultats, défis, apprentissages, etc.) pendant la période de référence ont été les suivants:

- *En 2022-2023, le contexte international a mis le système énergétique suisse sous forte pression, obligeant le pays à se préparer à des pénuries d'énergie et à accélérer la transition vers les énergies renouvelables, mais aussi à redoubler d'efforts pour réduire la demande énergétique par des mesures sobriété et d'efficacité. Les tensions croissantes autour de l'approvisionnement en énergie renforcent le besoin de solutions plus démocratiques et de recherches collaboratives. En plaçant la sobriété énergétique et les méthodes de co-création au cœur de son programme, SWEET Lantern est particulièrement bien placé pour relever ces défis.*

- *Ce large consortium transdisciplinaire - une communauté de 12 institutions académiques, plus de 60 chercheurs et 40 partenaires de coopération - est maintenant pleinement opérationnel. Les premiers mois ont été consacrés à la formalisation de cette collaboration et à la mise en place des bases organisationnelles, communicationnelles et méthodologiques de ce programme de huit ans.*

- *Tous les chercheurs et chercheuses ont été formé·e·s aux méthodes Living Lab avec des praticiens. Le programme de renforcement des capacités a été lancé en février 2023 à la ZHAW*

à Zurich avec des ateliers collaboratifs axés sur la construction d'une vision commune pour les Living labs de SWEET Lantern. Cette initiative a été prolongée à Lucerne en avril 2023 avec les partenaires de coopération et soutenue par des modules d'apprentissage et une plateforme de formation.

- *Un cadre intégré d'évaluation de l'impact a été mis en place pour aider les projets de recherche à accroître et à évaluer leur impact en s'appuyant sur des théories du changement et des indicateurs communs.*

- *Tous les modules de travails sont en cours d'exécution et la recherche est maintenant appliquée sur des secteurs et des contextes territoriaux spécifiques, en étroite collaboration avec les partenaires publics et privés.*

Highlights

Die wichtigsten Highlights (Ergebnisse, Herausforderungen, Lehren usw.) während des Berichtszeitraums waren die folgenden:

- *Im Jahr 2022-2023 hat der internationale Kontext das Schweizer Energiesystem stark unter Druck gesetzt, was das Land dazu zwingt, sich auf Energieknappheiten vorzubereiten und den Übergang zu erneuerbaren Energien zu beschleunigen, aber auch die Bemühungen zur Nachfragereduzierung durch Suffizienz und Effizienz zu erhöhen. Die wachsenden Spannungen rund um die Energieversorgung verstärken den Bedarf an demokratischen Lösungen und gemeinsamer Forschung. Indem SWEET Lantern Energie-Suffizienz und Co-Creation-Methoden in den Mittelpunkt ihrer Agenda stellt, ist sie besonders gut positioniert, um diese Herausforderungen anzugehen.*

- *Dieses große transdisziplinäre Konsortium - eine Gemeinschaft von 12 akademischen Institutionen, über 60 Forschern und 40 Kooperationspartnern - ist jetzt voll einsatzbereit. Die ersten Monate waren der Formalisierung dieser Zusammenarbeit und der Schaffung organisatorischer, kommunikativer und methodischer Grundlagen dieses 8-jährigen Programms gewidmet.*

- *Alle Forscher wurden gemeinsam mit Living Lab Praktiker in der Living Lab-Methodologie geschult. Das Capacity Building-Programm wurde im Februar 2023 von der ZHAW in Zürich gestartet und umfasste gemeinsame Workshops zur Entwicklung einer gemeinsamen Vision für die Lantern Living Labs. Dies wurde im April 2023 in Luzern zusammen mit Kooperationspartnern weiterentwickelt und durch Lernmodule und eine Capacity Building-Plattform unterstützt.*

- *Ein integrierter Wirkungsbeurteilungsrahmen wurde entwickelt, um alle Forschungsarbeitspakete bei der Steigerung und Überwachung ihrer Wirkung zu unterstützen. Dabei wird auf einen gemeinsamen Satz von Indikatoren und Theorien des Wandels zurückgegriffen.*

- *Alle Arbeitspakete laufen, und die Forschung wird nun auf spezifische Sektoren und territoriale Kontexte angewendet, in enger Zusammenarbeit mit öffentlichen und privaten Partnern.*

Punti salienti

I periodo di riferimento è stato caratterizzato dai seguenti punti salienti, tra sfide, risultati ed insegnamenti:

- *Nel 2022-2023, il contesto internazionale ha messo il sistema energetico svizzero sotto grande pressione, costringendo il Paese a prepararsi alla carenza di energia e ad accelerare la transizione verso le energie rinnovabili, ma anche ad aumentare gli sforzi per ridurre la domanda attraverso la sufficienza e l'efficienza. Le crescenti tensioni sulla fornitura di energia rafforzano la necessità di soluzioni più democratiche e di ricerca collaborativa. Ponendo la sufficienza energetica e i metodi di co-creazione al centro della sua agenda, SWEET Lantern è particolarmente ben posizionato per affrontare queste sfide.*

- *Questo grande consorzio transdisciplinare - una comunità di 12 istituzioni accademiche, oltre 60 ricercatori e 40 partner di cooperazione - è ora pienamente operativo. I primi mesi sono stati dedicati a formalizzare questa collaborazione ed a gettare le basi organizzative, comunicative e metodologiche di questo programma di 8 anni.*

- *Tutti i ricercatori sono stati formati alla metodologia della co-creazione insieme ai Living Lab Practitioners. Il programma di Capacity Building è stato lanciato nel febbraio 2023, ospitato dalla ZHAW a Zurigo, con workshop collaborativi incentrati sulla costruzione di una visione comune per i Living Lab di Lantern. Tale visione è stata ulteriormente sviluppata a Lucerna nell'aprile 2023 insieme ai partner di cooperazione e supportata da moduli di apprendimento e da una piattaforma di capacity building basata sul sistema Miro.*

- *È stato sviluppato un quadro integrato di valutazione dell'impatto per supportare tutti i progetti di ricerca del portfolio Lantern a concettualizzare, aumentare e monitorare il loro impatto, basandosi su un insieme comune di indicatori e di teorie del cambiamento da indurre.*

- *Tutti i progetti del portfolio di progetto sono in corso e la ricerca viene ora applicata a settori e contesti territoriali specifici, in stretta collaborazione con partner pubblici e privati.*

1   Highlights of reporting period

- In 2022-2023, the international context has put the Swiss energy system under great pressure, forcing the country to prepare for energy shortages and accelerate the transition towards renewables, but also to increase the efforts in demand reduction through sufficiency and efficiency. The growing tensions around energy provision enhances the need for more democratic solutions and collaborative research. By putting energy sufficiency and co-creation methods at the core of its agenda, SWEET Lantern is particularly well positioned to address these challenges.

- This large transdisciplinary consortium – a community of 12 academic institutions, over 60 researchers and 40 cooperation partners – is now fully operational. Following a successful kick off event on June 12th 2022 at the University of Bern, the first months have been dedicated to formalising this collaboration and lay the organisational, communicational and methodological foundations of this 8-year programme. Key documents (subsidy contract, consortium agreement, data protection policy and the detailed work plan) have been produced to help structuring the work of the consortium, ensuring transparency and efficiency.

- Preparation started immediately on the first deliverable for the Coordination by co-developing and issuing the Quality and Project Management Manual. This manual defines levels, procedures and standards for quality assurance and project management, to support, facilitate and ensure proper project implementation. Following the delivery of this manual, the set up and implementation of the Teamwork project management system was initiated to support the automation of deliverable notification and coordination. Ongoing challenges with consistent use of the Microsoft Teams system for communication exist in the consortium, however the online consortium meetings have been very well attended and the ongoing feedback is very positive particularly about the community feeling as well as good coordination and management.

- All researchers have been trained in Living Lab methodology together with Living Lab practitioners. The Capacity Building Programme was launched in February 2023 hosted by ZHAW in Zurich with collaborative workshops focussed on building a common vision for the Lantern Living labs. This was developed further in Luzern in April 2023 together with Cooperation Partners and supported by learning modules and a capacity building platform in Miro.

  o Key learnings are that collaborative workshops are very well received to exchange in multidisciplinary groups, the learning modules should be shorter and more concise, a variety of learning media is required, an onboarding process is necessary for newcomers, use of tools and templates in Miro should be integrated.

  o WP2 – Set Up and Scale Up of the Living Labs focussed on strengthening relationships within the stakeholder ecosystem, aligning the Living Labs and cooperation partners. Key learnings are that Cooperation partners need to be integrated very early on and discussions about the business model and P&Ds are necessary. The definitions of a Living Lab, Pre-Living Lab/testbed are important and often confused.

  o WP3 – Living Lab Methodology identified and mapped the methods and tools proposed by the researchers throughout the Living Lab Integrative Process. Key learnings are that the variety of co-creation methods and tools proposed by researchers are limited, more focus is needed on identifying barriers to action, and use cases are important in inspiring actors.

- o The paper on 'How to build consensus between multidisciplinary teams on methods and tools for co-designing interventions in the energy transition through Living Labs' was accepted as a paper in progress at the ENoLL oPEN Living Lab Days Conference in September 2023.

- o The paper 'Conceptualising Living Labs in Sustainable Transitions Research: a review through multiple perspectives' was accepted for the International Sustainable Transitions (IST) Conference in August 2023.

- An integrated impact assessment framework has been developed within WP10 to support all research work packages to increase and monitor their impact, relying on a common set of indicators and theories of change. The conceptual framework was co-designed with the researchers. It offers a reflexive impact assessment that is valuable to i) scale up and translate the high-impact solutions in broader socio-technical transition processes ii) improve the design of development of project, programmes, or policies, iii) compare different interventions, projects, or programmes and iv) inform sustainability transitions and national policy making.

  - o During the first year of its activities, WP10 has focused on the development of a comprehensive methodology for an integrated impact assessment for the interventions that will be implemented as part of the R&D and P&D work package of the SWEET Lantern. More specifically, research has been carried out towards the specific goal of completing the first deliverable, i.e. " A review of impact indicators, impact assessment techniques and methodologies, co-designing and communication of the conceptual framework with WP leaders, LL coordinators and the PIs of the Work Packages for indicator refinement" (D10.1), due in September 2023.

  - o A "Glossary of terms" was produced to ensure the consistent and high-quality translation of key terms in your 'impact assessments' among diverse scientists.

  - o Two conference abstracts were accepted for presentation. The integrated conceptual framework will also be presented at two international conferences in Wageningen (SCORAI - ERSCP, 5-8th of July 2023) and Barcelona (OLLD, 22-24th September 2023).

- All work packages are running, and research is now being applied to specific sectors and territorial contexts, in close cooperation with public and private partners. In coherence with the transdisciplinary approach, a specific care has been attached to stakeholders' engagement in the early stages of the research design of each WP.

- The Website and Communications Kit, including the partners presentation were launched in January 2023.

2 Outputs of the reporting period

During 2022, no peer-reviewed publications of the sole SWEET Lantern took place but the collaboration with the Swiss community was reinforced. In connection with other SWEET projects and the broader SSH Energy Research community, activities were conducted in 2022 that led to submission, approval and publication of the following item, which explicitly acknowledge support from SWEET Lantern:

Peer-reviewed Open Access publications

Author(s), title, journal name, year	doi
Brückmann G, Berger S, Caviola H, Hahnel UJJ, Piana V, Sahakian M, Stadelmann-Steffen, I. (2023). Towards more impactful energy research: The salient role of social sciences and humanities. PLOS Clim 2(2): e0000132.	*10.1371/journal.pclm.0000132*

Other non-peer-reviewed publications (working papers, press articles, etc.)

Author(s), title, channel or type of publication, year
*Irene Bättig, Energy Research in Real Life, interview with SWEET Lantern and SWICE Coordinators, **https://energeiaplus.com/2022/11/24/energy-research-in-real-life/** , November 2022.*
*Joëlle Mastelic, SWEET Lantern, Travailler sur les changements de pratiques sociales dans le domaine de l'énergie, p. 62-24, in SAGW/ASSH Bulletin 1/23 : Implementation, May 2023, Open access, available at **https://www.sagw.ch/sagw/aktuell/publikationen/details/news/bulletin-1-23-implementation https://www.sagw.ch/fileadmin/redaktion_sagw/dokumente/Publikationen/Bulletin/23_1_Implementation/SAGW_Bulletin_1_23_Sweet_Lantern.pdf***

Invited talks (scientific or broad audience)

Presenter(s), title, name of the event and location, year
Valentino Piana, The role of Living Labs in supporting innovative economic policies for climate change mitigation & ENoLL's model of citizen-centric policymaking (SDG 13 Climate change), Science Summit @ United Nations General Assembly, New York, 29th September 2022.