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Transforming
Energy
Access

#1 Inclusion in the research system



GEDSI for Next-Gen Solar Energy Research and Innovation

A case study prepared under the Disability Support Service (DSS) for the Transforming Energy Access (TEA) platform.

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Case Study Summary

‘GEDSI for Next-Gen Solar Energy Research and Innovation’ presents a combination of strategies and steps led under DSS, by and for the [TEA@SUNRISE](#) - an international and interdisciplinary network of over 300 members from over 35 countries, including academic institutions and businesses - for identifying and delivering opportunities for next-generation photovoltaics (PV). The DSS engagement aimed to build awareness and capacity among solar energy researchers for adopting disability inclusion and innovation approaches through a combination of six interventions. This covers hosting online knowledge sessions, establishing baseline Gender Equality, Disability, and Social Inclusion (GEDSI) data, and producing knowledge products. The collaboration with GDI Hub has overall enhanced the exposure and confidence of network members in discussing and exploring entry points for disability-inclusive energy research. The strategic set of foundational activities has also uncovered high-impact opportunities for the future.

Featuring:



Disability Support Service (DSS)

Transforming Energy Access (TEA) platform, supported through UK aid from the UK government and led by the Carbon Trust, developed the Disability Support Service (DSS) in partnership with the Global Disability Innovation Hub (GDI Hub) to co-design and deliver disability-inclusive, accessible, and affordable clean energy solutions for equal socio-economic participation of people with disabilities. DSS is a cross-platform delivery service that offers training, innovation support, and technical assistance (TA) and produces practical knowledge outputs for the TEA network by blending expertise in disability inclusion, innovation, assistive and accessible technology (AAT), and inclusive design. The DSS seeks to maximise access and impact for people with disabilities by sharing knowledge and alignment between the TEA platform and GDI Hub's flagship AT2030 programme, also funded by UK Aid.

Key Lessons Learned

1. **A coordinated and consistent effort** between energy researchers and practitioners, disability experts, and gender experts is key to developing and testing bespoke, meaningful GEDSI actions.
2. **A dedicated 'Inclusion or GEDSI Lead'** at a programme level strengthens commitment and provides necessary capacity for delivering targeted actions.
3. While a GEDSI framework encourages and enables partners to consolidate their efforts for inclusive energy access, **targeted and intentional disability inclusion** interventions become crucial to reach persons with diverse disabilities.
4. **Investing in real-world pilots** is paramount to encourage disability-focused research thinking and build case studies that could inspire more researchers and innovators to mainstream GEDSI in their work.

Challenge

Reaching and including people with disabilities in energy access is challenging due to **a lack of or limited exposure to networks, opportunities, tools, and best practices**. This restricts integration of the disability lens in energy access innovation by downstream TEA@SUNRISE network partners. Low disability inclusion awareness and capacity were noted from the preliminary perception survey. In addition, limited disability-disaggregated data on energy access, technology use, and workforce participation “makes it difficult to design targeted interventions or measure progress,” highlighted the TEA@SUNRISE team. DSS Technical Assistance (TA) focused on this.

Approach

Through a series of one-to-one consultations, a two-fold approach to integrating disability inclusion in TEA@SUNRISE programme delivery was developed:

1. **Building awareness and technical capacity** on disability inclusion and innovation among network members.
2. **Integrating a disability lens** through operational mechanisms.

Along with the support availed through the Gender Support Service, delivered by the Value for Women (VfW) team, TEA@SUNRISE's engagement through DSS-TA proactively strengthened a comprehensive GEDSI perspective and explored intersectional approaches to inclusive next-gen solar energy access delivery.

“The **biggest challenge** in integrating a disability inclusion lens across the TEA@SUNRISE programme delivery **is moving from high-level commitment to consistent, operational practices** across diverse partners, geographies, and stages of the solar value chain”.

Dr Carol Maddock, Inclusivity Lead, TEA@SUNRISE

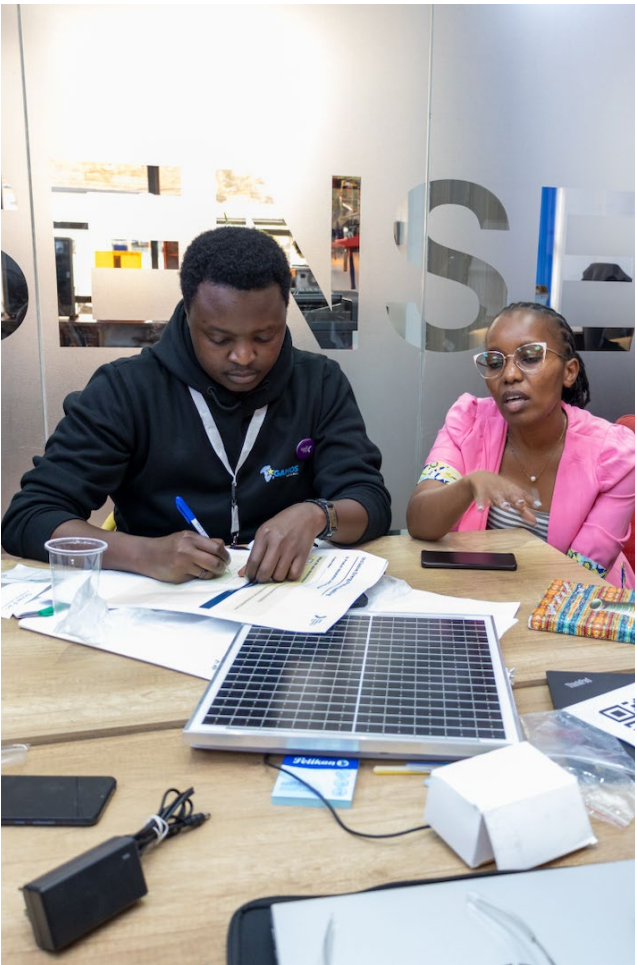
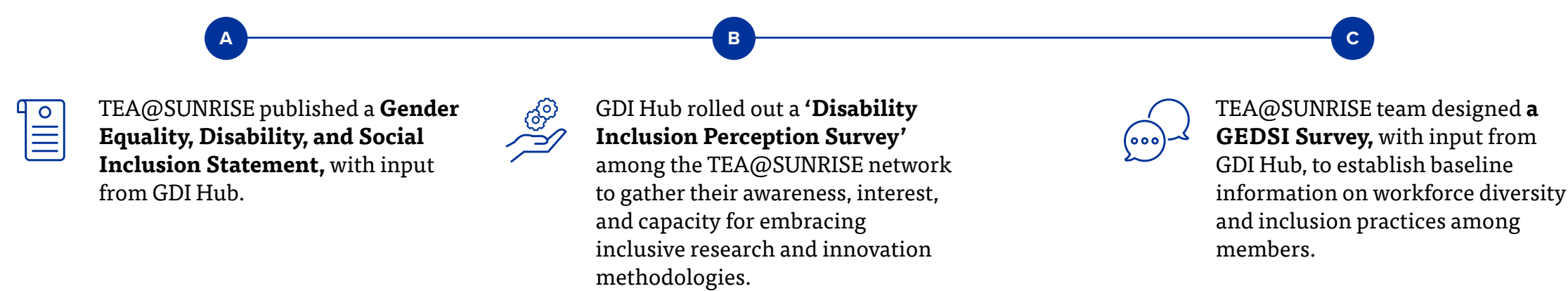
Intervention

Here is an overview of DSS activities jointly led by GDI Hub and TEA@SUNRISE:

01 Building awareness and technical capacity among the TEA@SUNRISE network



02 Integrating a disability lens through strategic operational mechanisms



Source: GDI Hub.

In addition to these completed activities, GDI Hub co-developed a **brief for an inclusive energy access research pilot and provided guidance on the informant remuneration approach** for engaging people with disabilities in the future. Further, TEA@SUNRISE members also participated and contributed across the DSS online training and innovation network activities.

Impact

TEA@SUNRISE is a frontrunner in strategically testing GEDSI approaches within the TEA platform. More specifically, the DSS activities have led to the following impact:

- 01** Over 60 TEA@SUNRISE network members have been exposed to the basics of disability inclusion and innovation and are now equipped to identify relevant entry points or opportunities for integrating inclusion principles within their next-gen solar energy research and delivery.
- 02** Through a combination of three outputs - the GEDSI Statement, the GEDSI Survey, Inclusive Market Research Webinar - **TEA@SUNRISE has established a commitment to inclusive energy access delivery, collected disaggregated data, and exposed network members to the benefits of adopting inclusive methodologies.** This served as a strong nudge for partners to move from compartmentalised approaches to an integrated, intersectional lens, with a targeted focus on disability inclusion.
- 03** TEA@SUNRISE core team observes **increased confidence among the network members**, particularly physical science researchers and engineers, in discussing foundational disability inclusion concepts and opportunities for inclusive innovation. Notably, at the TEA@SUNRISE Symposium 2026, multiple partners were reported to have expressed interest in exploring the application of next-gen solar for assistive devices.

The impact summary highlights ‘what does it take’ to inform and inspire an international network of clean energy access researchers for an immediate uptake of disability inclusion perspectives and long-term sustainability of disability-targeted delivery. However, TEA@SUNRISE, as a network convenor and manager, has limited influence on the operational systems of partners and no disability-targeted work package.

Way forward

28 of 49 invited TEA@SUNRISE partners (57% response rate) completed the GEDSI Survey, representing a mix of academic institutions, businesses, and non-profit entities. More than 80% of the respondents noted that **women and people with disabilities are under-represented in clean energy leadership.** Further, the survey uncovered the following as **potential actions for TEA@SUNRISE to promote GEDSI:** 1) provide mentorship and networking opportunities, 2) provide case studies and best practices, and 3) support training for women and marginalised groups in solar energy. From this background, as the network progresses to its next stage, here are some specific opportunities to continue learning and accelerate impact:

- **GEDSI Action Planning** based on the insights from the GEDSI survey.
- **GEDSI-responsive Recruitment and Procurement** across TEA@SUNRISE delivery packages and country programmes, supported by a consistent framework for collecting and assessing disability-disaggregated data.
- **Disability Innovation Sprint** for TEA@SUNRISE network members to explore application of low-light next-gen solar technologies for expanding access to assistive devices (AT), in partnership with the AT2030 programme.
- **Inclusive Solar Research Pilot** in collaboration with OPDs to map household- and community-level energy needs from a comprehensive GEDSI lens.
- **Disability Inclusion Training and Guidance** for TEA@SUNRISE network members, including checklists and toolkits for co-design activities.



Source: TEA@SUNRISE.

Note

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All self-identifying data or testimonials in this case study were included with explicit permission of concerned individuals or institutions. Information collected from surveys was either anonymised or consolidated.

References

1. [Gender Equality, Disability, and Social Inclusion Statement](#), TEA@SUNRISE
2. Bevan, G. (2025, February 26). [Symposium on exploring international opportunities for addressing energy access](#). SUNRISE Network



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