

Nexus approach at work: “Standards for the SDGs”

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Portal launched today on World Standards Day



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UNECE Portal on Standards for the SDGs

Search by

SDG Goal ▼

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Welcome to the UNECE Portal on Standards for the SDGs

This portal offers users: a tool to identify standards that help to realise Sustainable Development Goals and Targets; a collection of case studies of countries, cities and regions that have successfully used standards for sustainability, as well as supporting online training materials.

We hope you will make good use of this portal and contribute to its further development.



STANDARDS

Search by

SDG 7

7.2 - Renewables

Organization

GO

Displaying 37 - 40 of 118 results

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ORGANIZATION
IEC

Title: Photovoltaic concentrators (CPV) Performance testing

Standard Number: [IEC 62670 series](#)

Organization responsible: [IEC TC 82](#)

Goal: [SDG 7 - Affordable and clean energy](#)

Targets: [7.1 - Access to Energy Services](#)
[7.2 - Renewables](#)



ORGANIZATION
IEC

Title: Salt mist corrosion testing of photovoltaic (PV) modules

Standard Number: [IEC 61701](#)

Organization responsible: [IEC TC 82](#)

Goal: [SDG 7 - Affordable and clean energy](#)

Targets: [7.1 - Access to Energy Services](#)
[7.2 - Renewables](#)



ORGANIZATION
IEC

Title: Photovoltaic (PV) modules Ammonia corrosion testing

Standard Number: [IEC 62716](#)

Organization responsible: [IEC TC 82](#)

Goal: [SDG 7 - Affordable and clean energy](#)

Targets: [7.1 - Access to Energy Services](#)
[7.2 - Renewables](#)



ORGANIZATION
IEC

Title: Photovoltaic system performance monitoring Guidelines for measurement, data exchange and analysis

Standard Number: [IEC 61724](#)

Organization responsible: [IEC TC 82](#)

Goal: [SDG 7 - Affordable and clean energy](#)

Targets: [7.1 - Access to Energy Services](#)
[7.2 - Renewables](#)



Database: 1000 Standards and Counting

The database allows users to:

- Cross-reference standards through a dynamic search
- Link standards to SDGs and associated targets (currently, SDG6, SDG7, SDG11 and SDG13)
- Identify standards that support specific policies



2. Case Studies

- **Practical experience of policy makers** using international standards for sustainable development
- Presented by regulatory authorities, governments and administrations, as well as regional groups
- Focused on:
 - **SDG6** – Clean Water and Sanitation
 - **SDG7** – Affordable and Clean Energy
 - **SDG11** – Sustainable Cities and Communities
 - **SDG13** – Climate Action
- Examples ranging from the subnational and national to the global levels, and from all regions

Strategy

Developing an extended version of IEC 61215 is crucial to adapt the tests to different climate-related conditions, and to provide a model that allows to simulate the loss of power and the correlation factors between the accelerated laboratory tests and the actual operation conditions. Likewise, in the test protocols, it seems pivotal to take into account the high levels of UV radiation under real operating conditions in the Atacama Desert area.

Results and Impact

The current IEC standards have been conducive to the greater adoption of solar PV in Chile. This has reached a 5% share of generation in the national energy mix and contributed to an estimated reduction of 2.2 million tonnes of CO₂e in 2017.

It is necessary to advance the development and extension of the current IEC standards, with the aim of ultimately relying on standards, which could guarantee long-term operation and accurately estimate the life time of photovoltaic systems, in different climatic and radiation conditions.

Specific challenges for areas with high solar generation potential, such as the Atacama Desert, present technological questions that need to be taken into account as part of the development of new IEC standards and/or when updating existing ones, so as to avoid the maximum emissions of tCO₂e.

The rise in arid and desert zones, highlights the need for greater sharing of behaviour knowledge and certification of PV systems – under Atacama Desert conditions – to other desert zones. The adoption of zero-emissions PV technologies could mitigate many of the more challenging aspects of life in such desert conditions.

Challenges and Lessons Learned

When satisfied that the demonstrated supplier certifications are sufficient, project developers will seek the option with the lowest invest cost. Whilst some larger companies may purchase the services of supplier who provide extended certifications to achieve greater quality, this is not necessarily an option available to all market actors.

Challenges arose from the lack of awareness of the impact of radiation conditions in the long-term performance and durability of solar modules and systems.

Potential for Replication

As a continental leader in the development of solar PV, Chile's experience can inspire others to develop renewable systems. Further, the standards for photovoltaic systems, which guarantee performance and reliability under specific climatic conditions (e.g. Atacama Desert), would equally serve as a benchmark for replication.

Contact Name: Ana Maria Ruz
Organisation: Chilean Solar Committee – CORFO



Look forward to your cooperation

- Submit a case study: examples of how national or local governments have used standards sustainable development
- Map your standards: Send us a list of standards for consideration and inclusion in standards mapping database or help us review standards in the database
- Co-organize an awareness raising event on standards for SDGs at global or regional level
- Comment on forthcoming in depth reviews of “Standards for SDG 6 – 7 – 11 - 13 ” (will be issued between now and January 2020)



Conclusions

This project will be ongoing for 2 more years

It has already contributed to:

- Increasing knowledge of the role of voluntary standards for policymaking
- Increasing awareness on the 2030 Agenda by standards bodies
- Strengthening partnership with other UNECE divisions and external partners
- Enhancing understanding on the benefits of using international standards for sustainable development



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