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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 2297-2025

Replacing GB/T 2297-1989

Terminology of solar photovoltaic energy system

太阳光伏能源系统术语

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document replaces GB/T 2297-1989 "Terminology for Solar Photovoltaic Energy". Compared with GB/T 2297-1989, the main differences are structural adjustments and revisions.

Aside from the logical changes, the main technical changes are as follows.

- a) 73 new terms and their definitions, including "single-sided photovoltaic module," have been added (see Chapters 3-7, and Chapters 2-6 of the 1989 edition);
- b) 172 terms and their definitions, including "PIN (NIP) amorphous silicon solar cell," have been removed (see Chapters 2-6 of the 1989 edition).
- c) Eighty terms and their definitions, including "solar cell", have been changed (see Chapters 3-7, and Chapters 2-6 of the 1989 edition).

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

This document is under the jurisdiction of the National Technical Committee on

Standardization of Solar Photovoltaic Energy Systems (SAC/TC90).

1 Scope

This document defines the general terminology for solar photovoltaic energy systems, including photovoltaic cells and modules, photovoltaic system components, photovoltaic systems, and measurement.

Terminology related to experiments.

This document applies to solar photovoltaic energy systems and related fields.

2 Normative references

This document has no normative references.

3 General Terms

solar energy

The sun's radiation energy is projected onto the earth in the form of electromagnetic waves.

Photovoltaic effect

The basic physical phenomenon of generating a potential difference through the absorption of photons.

Photovoltaic; PV

The phenomenon of photovoltaic effect or the technology that utilizes photovoltaic effect.

Photogenerated current the current generated by the movement of photogenerated charge carriers.

Photovoltage

The voltage formed by the accumulation of photogenerated charge carriers on both sides of the built-in electric field of a photovoltaic cell.

Spectral response

The short-circuit current density per unit irradiance at various wavelengths is a function of wavelength.

quantum efficiency

The probability of a photon of a certain wavelength generating an electron-hole pair in a photovoltaic cell.

photovoltaic device

A device that uses the photovoltaic effect to convert solar radiation energy into electrical energy.

Note: Photovoltaic devices include photovoltaic cells, photovoltaic modules, photovoltaic arrays, etc.