

Renewable-Energy Transformer Configurations



A project-first guide for 6/10 kV collector and grid-connection applications in solar, wind and energy-storage systems.

START WITH THE SYSTEM ROLE

Choose the project path before choosing the series.

Renewable projects use the same oil-immersed and dry-type transformer constructions as other networks. The configuration follows the collection voltage, grid interface, site conditions and documentation requirements.

Solar PV

Collector and grid-connection configurations reviewed for voltage ratio, site arrangement and equipment interface.

Wind Power

Oil-immersed or dry-type configurations considered against installation environment, load profile and transport limits.

Energy Storage

Project configuration reviewed for the conversion system, grid interface, harmonic requirements and operating profile.

CONSTRUCTION PATHS

Two primary constructions for renewable applications

Oil-immersed

A reference path for outdoor collector stations and project nodes. Cooling, tap arrangement, enclosure and final performance series are set to the approved specification.

Cast-resin dry-type

A reference path where an oil-free indoor or enclosed installation is required. Enclosure, cooling, insulation class and auxiliary scope are selected for the site.

CONFIGURATION WORKFLOW

Turn a project brief into a suitable shortlist.

The following sequence keeps early discussion focused while leaving the final configuration to the approved technical specification.

01

Define the electrical position

Confirm collector voltage, grid interface, rated capacity, frequency and the equipment that sits upstream and downstream.

02

Choose the construction path

Review oil-immersed and dry-type options against the installation location, fire and environmental needs, space and maintenance access.

03

Set the performance target

Compare applicable performance series only within the same voltage class, capacity and construction. The quotation loss schedule governs.

04

Confirm the document path

Align drawings, routine-test documentation and agreed compliance evidence with the selected configuration and destination requirements.

REFERENCE COMPARISON

Project factors that shape the configuration

Project factor	Early selection question	Confirmed at project stage
Voltage and capacity	What are the collector and grid-side ratings?	Voltage ratio, rated capacity and connection group
Installation	Outdoor, indoor, containerised or enclosed?	Construction, enclosure, cooling and accessories
Operating profile	Solar, wind, storage or mixed network?	Tap arrangement, impedance, loss schedule and harmonic provisions
Destination documents	What is required for approval and handover?	Drawings, routine-test documents and agreed evidence

Reference guide only. Final performance figures and documentation are confirmed for the selected project configuration.

REQUEST CHECKLIST

Send the essentials. Receive a focused shortlist.

A complete brief reduces rework and lets us return the right product-family options within one business day.

- ✓ Destination country and applicable project requirements

- ✓ HV and LV system voltage, frequency and connection point

- ✓ Rated capacity, load profile and expansion allowance

- ✓ Installation environment: outdoor, indoor, containerised or enclosed

- ✓ Preferred oil-immersed or dry-type path, if already known

- ✓ Required drawings, tests and handover documents

Document path

Public guide: early comparison and selection logic. Quotation-stage datasheet: selected configuration and commercial scope. Project document pack: approved drawings, routine-test documentation and agreed compliance evidence.

Need a renewable-energy transformer shortlist?

Share the project brief with ALBORGRID for a suitable family recommendation.