

Campus Pocitos, Universidad ORT Uruguay.

7 AFFORDABLE AND CLEAN ENERGY

SUSTAINABLE DEVELOPMENT GOAL 7

Affordable and Clean Energy

In a country whose electricity is largely renewable, ORT contributes to the next stage of the energy transition: storage, efficient use and clean energy from waste, and the training of engineers and architects able to design it.

18 months
ANII-funded project on second-life batteries for fast chargers

25
courses mapped to SDG 7

1 of 15
journalists selected worldwide for the Berlin Energy Transition Dialogue fellowship

TEACHING & LEARNING

Engineering the energy system

Renewable Generation and Smart Grids, Energy Economics, Power Electronics, Electrical Installations and Electricity Transmission in the Electrical, Electronic and Telecommunications Engineering degrees.

Designing low-energy buildings

Renewable Energy (solar, wind, biomass and geothermal design) in Architecture; Architecture and Climate, Light, Air and Envelopes and Renewable Energy in the Diploma in Sustainable Architecture.

Inside the national grid

Engineering students visited the National Load Dispatch Centre of the national power utility UTE. fi.ort.edu.uy/novedades/visita-al-despacho-nacional-de-cargas-de-ute

RESEARCH & INNOVATION

Second-life batteries for electric-vehicle chargers

With ANII and the company Ingener, Dr. Andrés Ferragut leads the development of a smart charger with a battery bank for electric-vehicle fast chargers, using second-life batteries as a sustainable and cost-effective energy-management solution.

Solar panels and firms

Nicolás D'Agosti and Facundo Danza presented research on the impact of solar panel installation on firms' electricity consumption and production at the Annual Economics Conference, the VII Workshop on Environmental Economics and Climate Change and the XXII RIDGE Forum.

Energy from organic waste

Exogas, a venture supported by the CIE, produces clean energy from organic waste. fi.ort.edu.uy/novedades/exogas-energia-limpia-a-partir-de-residuos-...

Biofuels

Nanobiotechnology includes a module on nanobiomaterials for biofuel synthesis; the secondary-school contest Innová con Biotecnología challenged students to design bioethanol production from organic waste.

COMMUNITY & PARTNERSHIPS

Communicating the transition

Journalism graduate Tatiana Scherz, a reporter at El País, was one of 15 journalists from 12 countries, chosen from more than 1,000 applicants, for the Berlin Energy Transition Dialogue (BETD) Media Fellowship, covering solar energy, battery storage and green hydrogen. fc.ort.edu.uy/novedades/joven-periodista-participa-en-el-berlin-ene...

25 course offerings linked to SDG 7 in 2025

- Energías Renovables (Architecture)
- Gen c/renovables y redes int. (Engineering)
- Economía de la energía (Engineering)
- Transporte energía eléctrica (Engineering)
- CERTIFICACIONES ENERGÉTICAS EN EDIFCIOS (Architecture)
- Circuitos y disp. eléctricos 1 (Engineering)
- Circuitos y disp eléct. 2 (Engineering)
- Electrónica de potencia (Engineering)
- LUZ AIRE Y ENVOLVENTES (Architecture)

Storage and efficiency: the next stage of the energy transition



Piso 25 at Sinergia Faro, Uruguay's first LEED Platinum building, an interior project by the studio of ORT faculty and graduates VAMO.uy, featured by ArchDaily.

Uruguay generates most of its electricity from renewable sources; the challenge now is to store and manage it efficiently. With funding from ANII and the company Ingener, Dr. Andrés Ferragut leads an 18-month project to develop a smart charger with a battery bank for electric-vehicle fast chargers. Using second-life batteries as stationary storage offers a sustainable and cost-effective way to manage energy demand.

Economic research examines the transition from the demand side. Nicolás D'Agosti and Facundo Danza studied the impact of solar panel installation on firms' electricity consumption and production, presenting their work at the Annual Economics Conference in Montevideo, the VII Workshop on Environmental Economics and Climate Change in Buenos Aires and the XXII RIDGE Forum. Francisco Rosas published in Energy Economics a general-equilibrium assessment of climate change policies for Uruguay.

Engineering students learn the energy system end to end, from Renewable Generation and Smart Grids and Power Electronics to Energy Economics, and visited the National Load Dispatch Centre of the national utility UTE. In Architecture, Renewable Energy and the Diploma in Sustainable Architecture teach solar, wind, biomass and geothermal design and building energy certification.

The CIE-supported venture Exogas produces clean energy from organic waste, and journalism graduate Tatiana Scherz covered solar power, storage and green hydrogen as a Berlin Energy Transition Dialogue fellow.

SELECTED 2025 PUBLICATIONS AND PRESENTATIONS BY ORT FACULTY

1. D'Agosti, N., & Danza, F. (2025, 28 de octubre). The impact of solar panel installation on electricity consumption and production: A firm´s perspective. [Presentación de artículo]. VII Workshop sobre Economía del Medio Ambiente y Cambio Climático, Buenos Aires, Argentina.
2. Rosas, F. (2025). The assessment of climate change policies through a general equilibrium model: An application to Uruguay. Energy Economics, 142, 12 p.
3. Núñez Laguna, I., Gambetta, N., & García Benau, M. A. (2025). Knowledge in the diversity-efficiency nexus: How board composition shapes sustainable resource use in emerging markets. Journal of Innovation & Knowledge, 11, 13 p.