



Our goal is to share our experience, professionalism and commitment with our clients by providing them with excellent work in a punctual, personalised and tailored manner.

www.itecla.es



ENGLISH VERSION





itecla
INGENIERIA

Engineering from Córdoba made up of multidisciplinary professionals, with experience spanning over 15 years in the field of transportation and energy transformation and particularly in renewable energies.

We have a staff of engineers, architects and draughtsmen which has now expanded to over 60 individuals and continues growing, as does our business volume and client portfolio. The fruits of our outstanding labours.

We currently have a signed framework agreement with Endesa for engineering work on electrical infrastructures in the regions of Andalusia, Badajoz, Castilla-La Mancha and Levante.

Our goal is to share our experience, professionalism and commitment with our clients by providing them with excellent work in a punctual, personalised and tailored manner.



OUR VALUES

“Let go of burdens, release stress,
don't worry and just enjoy it.
Your work is in great hands.”



COMMITMENT



PUNCTUALITY



EFFICIENCY



EMPATHY



RELIABILITY





INTERNATIONAL PRESENCE

ITECLA Ingeniería is currently undergoing an expansion and has its headquarters in Spain. In addition, it has been carrying out work in other countries including Portugal, Italy, Colombia, Mexico, the USA, Panama, Chile and Peru in recent years.

SPAIN:

1 *Córdoba*
Avda. Cañete de las
Torres, 35. 14850, Baena.

2 *Madrid*
Puerta de Atocha Building, C/ Méndez Álvaro 20,
Oficinas 410 y 445. 28045, Madrid

COUNTRIES IN WHICH WE HAVE WORKED:

● Portugal, Italy, France, Colombia, Mexico, USA (California, New Mexico, Florida, Philadelphia, New York), Dominican Republic, Uruguay, Panama, Chile, Peru and Puerto Rico.

#1

Outsourcing Engineering Work

We provide support for any type of basic, administrative, detailed construction and as-built project.

Design
Simulation
Calculation
Project Management
Technical Direction

#2

Renewable Energies

Our history and relationships with our clients allow us to stand out and remain well positioned and established within this ever-growing sector.

Our designs optimise the available surface and are always at the leading edge of new technology and equipment within the sector.



#3

Substations

With its wealth of experience and expertise, Itecla Ingeniería can offer you comprehensive electrical substation engineering services – from previous studies (environment, topography, etc.) to project development and execution of the necessary procedures for correct handling, supervision and site management.

#4

High Voltage Lines

The development of projects for the transportation and distribution of electrical energy has been one of the fundamental pillars in Itecla's growth as a business within the engineering sector, thereby consolidating itself as a benchmark company within this field.



itecla.
INGENIERIA

*The energy that moves us will earn us your trust, but for now please let us borrow it.
Put your trust in Itecla!*



OUR SERVICES



- HV and MV lines
- Substations
- Solar farms
- Wind farms

FIELDS WE COVER

01

02

OUR SERVICES

- Preliminary engineering
- Administrative projects
- Executive projects
- Detail engineering projects

- ENDESA
- ENEL X
- HANWHA
- STATKRAFT
- GREENFIELD
- GES
- GREENALIA
- SOLARIA
- ENERFÍN

OUR CLIENTS

03

04

SPECIFIC JOBS WE DO

- Resource and solar yield reports
- Technical-economic feasibility reports and HV line trace alternatives conditions
- Account of rights and assets
- Affected. Permanent and temporary. (RBDA in Spain)
- Gradient studies for implementations
- Network code compliance reports
- Studies, short circuits and coordination of protections
- Property audits and supervision
- Protection and control schemes
- Magnetic fields calculation
- Technical assistance

OUR RECENT PROJECTS



Substations

Detail project design, technical direction of execution, and as-built project of a 20 MVA 132/15 kV exterior transformer substation.

- Voltage: 132 kV.
- Location: Pozoblanco (Córdoba).

Detail project design for a mixed shielded transformer substation (business type) for 50 MVA 66/20 kV.

- Voltage: 66 kV.
- Location: Antequera (Málaga)

Detail engineering for the adjustment of the CHDM electrical substation of Indorama.

- Developer: Technip Energies.
- Voltage/output: 6.6/0.4 kV. 1.6 MVA.
- Location: San Roque, Cádiz.

Detail engineering project for the Centaurus electrical substation.

- Developer: Ineltron.
- Voltage/output: 132/30 kV. 50 MVA.
- Location: Palencia, Castile and León.

Project for a 132/30 kV electrical substation Recas.

- Developer: Audax Solar.
- Voltage/output: 132/30 kV. 60 MVA.
- Location: Castile-La Mancha.

Project for a booster substation, S.E. Dintel.

- Developer: Cobra Ins. y Serv.
- Voltage/output: 66/30 kV. 50 MVA.
- Location: Castile and León.



Substations

Project for the collector booster substation La Oliva.

- Developer: Cobra Ins. y Serv.
- Voltage: 400 kV.
- Location: Castile and León.

Design of a project for a collector substation for three solar farms of 125 MW each, at 220 kV.

- Voltage: 220 kV.
- Location: Guillena (Seville).

Project – Las Cabras transformer substation.

- Developer: Naturgy/Segade Saelco.
- Voltage: 132 kV.
- Location: Murcia.

Project for a 66/30 kV mixed transformer substation and a 25 MVA power transformer, for the power evacuation of a solar farm.

- Voltage: 66 kV.
- Location: Lanzarote (Las Palmas).

Extension project for the Zafra transformer substation.

- Developer: Solaria.
- Voltage: 66 kV.
- Location: Badajoz.

Booster transformer substation project.

- Developer: Ata Renewables.
- Voltage: 220 kV.
- Location: Huelva.



Substations

Project for a 132/20 kV mixed transformer substation and 30 MVA power transformer, as well as a private 132 kV high-voltage underground line, for power evacuation on a solar farm.

- Voltage: 132 kV.
- Location: Fuerteventura (Las Palmas).

Project design for a substation with a 132/30 kV and 50 MW line-transformer position for power evacuation on a solar farm.

- Voltage: 132 kV.
- Location: Guadalajara.

Project design for the evacuation line of the collector substation for two solar farms of 125 MW each, at 400 kV.

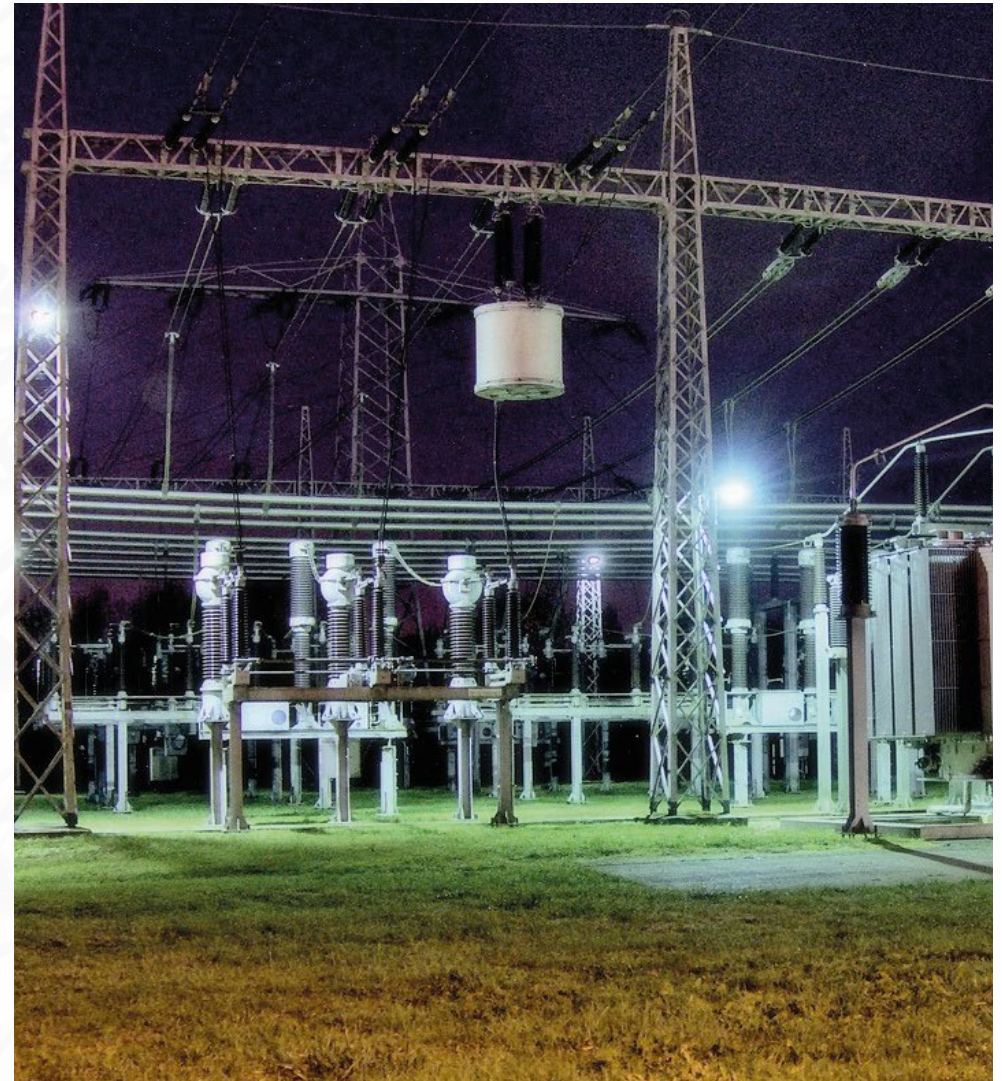
- Voltage: 400 kV.
- Location: Chinchilla (Albacete)

Project design for the evacuation line of the collector substation for two solar farms of 100 MW each, at 220 kV.

- Voltage: 220 kV.
- Location: Villar de Cañas (Cuenca).

Basic engineering and execution project of the 220 kV double-circuit high-voltage overhead line for power evacuation on a wind farm.

- Voltage: 220 kV.
- Location: Baza (Granada).



Substations

Extension project for the El Saucito transformer substation.

- Developer: Iberdrola.
- Voltage/output: 66/20 kVA 30. 40 MVA.
- Location: Alosno (Huelva).

Detail engineering project for the Huerta Sevilla electrical substation.

- Developer: Omexom.
- Voltage: 400/220/30 kV.
- Location: Fuente de Cantos / Badajoz.

Detail engineering project for the Carmona transformer substation.

- Developer: Omexom.
- Voltage: 220/400 kV.
- Location: Carmona / Seville.

Technical administrative project for the Los Pradillos transformer substation.

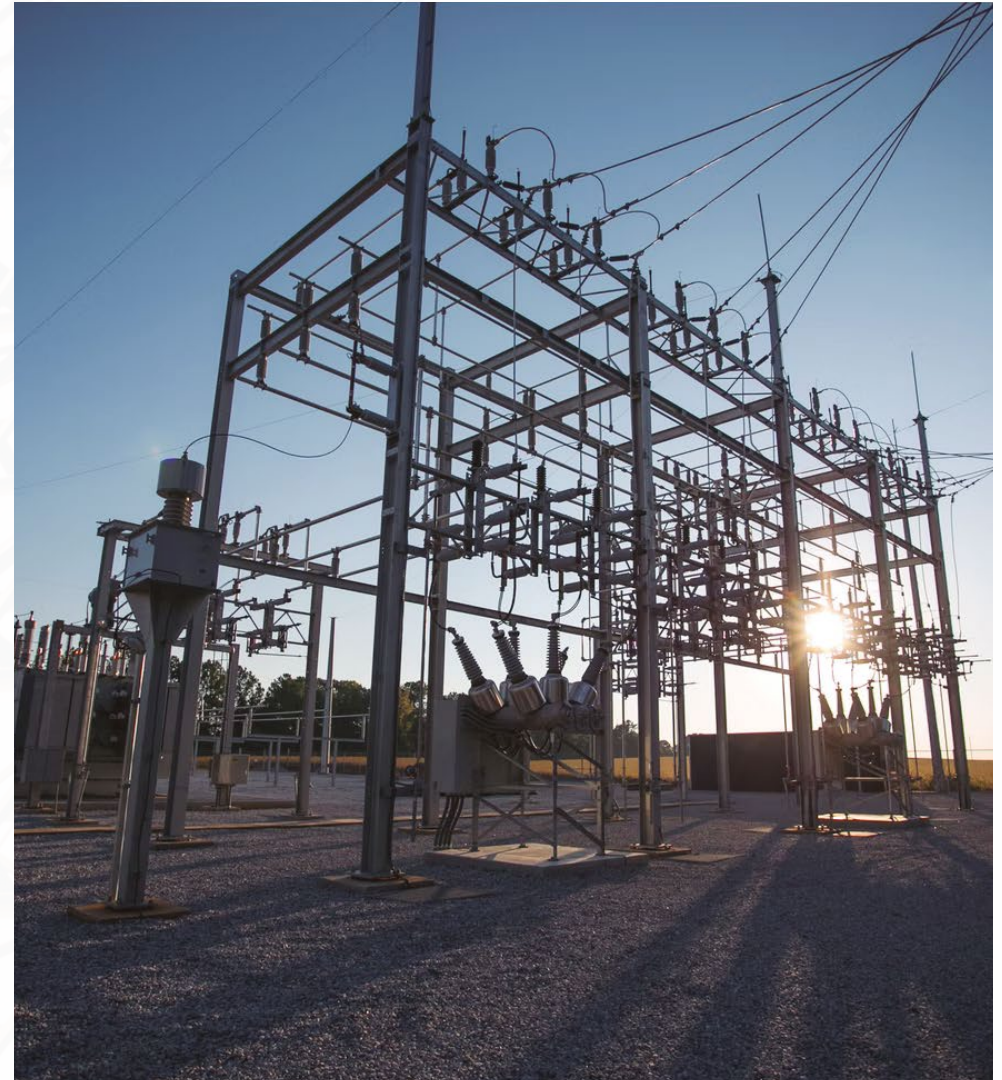
- Developer: Greenfield.
- Voltage: 400/220 kV.
- Location: Madrid.

Project for the GIS Fuencarral substation.

- Developer: Greenfield.
- Voltage/output: 400/220 kV 300 MVA.
- Location: Madrid.

Administrative project for the construction of a 30/66 kV and 50 MVA power transformer substation for power evacuation on the solar farm "Dalias".

- Voltage: 30/66 kV.
- Location: El Ejido (Almería).



Substations

Administrative project for the construction of a 30/66 kV and 50 MVA power transformer substation for power evacuation on the solar farm "Poris".

- Voltage: 30/66 kV.
- Location: Santa Cruz de Tenerife (Canary Islands).

Administrative project for the construction of a 30/66 kV and 50 MVA power transformer substation for power evacuation on the solar farm "S.Bartolome".

- Voltage: 30/66 kV.
- Location: Santa Cruz de Tenerife (Canary Islands).

Detail engineering project for a sectioning substation to hand over 132 kV to a business "Botorrita".

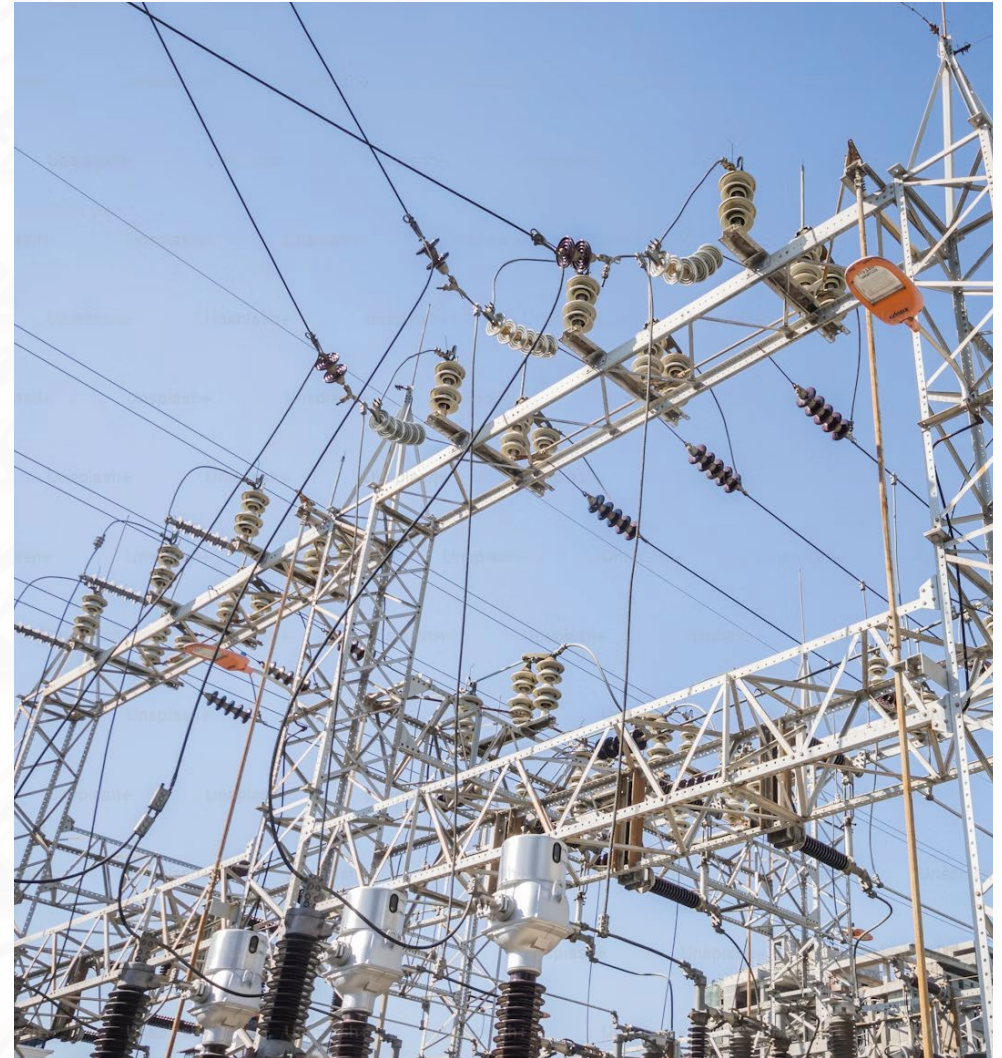
- Voltage: 132 kV.
- Location: Botorrita (Zaragoza).

Detail engineering project for a 30/132 kV and 150 Mw power transformer substation for power evacuation on the solar farm "Vallovar".

- Voltage: 30/132 kV.
- Location: Botorrita (Zaragoza).

Executive project of PSFV Arada Solar and its evacuation infrastructures, 220/30 kV - 139.90 Mw of power.

- Voltage: 30/132 kV.
- Location: Vall de Uxó, Nules, Burriana, Alquerías del Niño Perdido, Villarreal and Bechí (Valencia).



Substations

Executive project of PSFV Los Predios and its evacuation infrastructure,
220/30 kV - 77.0 MW.

- Voltage: 200/30 kV - 77.0 MW.
- Location: Turis, Godelleta, Chiva, Quart de Poblet and Aldaya (C. Valenciana).

Executive project for Los Hierros PSFV and its evacuation infrastructures,
220/30 kV - 77.0 MW.

- Voltage: 200/30 kV - 77.0 MW.
- Location: Turis, Godelleta, Chiva, Quart de Poblet and Aldaya (C. Valenciana).



High-voltage electrical lines

Design of basic project, administrative project, execution project, detail engineering project, technical director for execution, and as-built project for the 132 kV underground line.

- Voltage: 132 kV.
- Location: Pozoblanco (Córdoba).
- Length 1 km.

Design of basic project, administrative project, execution project, detail engineering project, technical director for execution, and as-built project for the 66 kV underground line.

- Voltage: 66 kV.
- Location: Córdoba
- Length 1 km.

Execution and detailed construction project for an overhead and underground high-voltage line for power evacuation on a solar farm.

- Voltage: 220 kV.
- Location: Aranjuez (Madrid).
- Length 14 km.

Execution project for the overhead line for the power evacuation of various wind farms.

- Voltage: 400 kV.
- Location: province of Toledo and Madrid.
- Length 80 km.



High-voltage electrical lines

Administrative project for the construction of a 220 kV single-circuit underground/overhead line "Yepes".

- Voltage: 220 kV -length 15 km.
- Location: Yepes and Añover del Tajo (Toledo).

Administrative project for the construction of a 220 kV double-circuit underground/overhead line "Cedillo".

- Voltage: 220 kV -length 34 km.
- Location: province of Toledo and Madrid.

Administrative project for the construction of a 220 kV double-circuit underground/overhead line "Fuencarral".

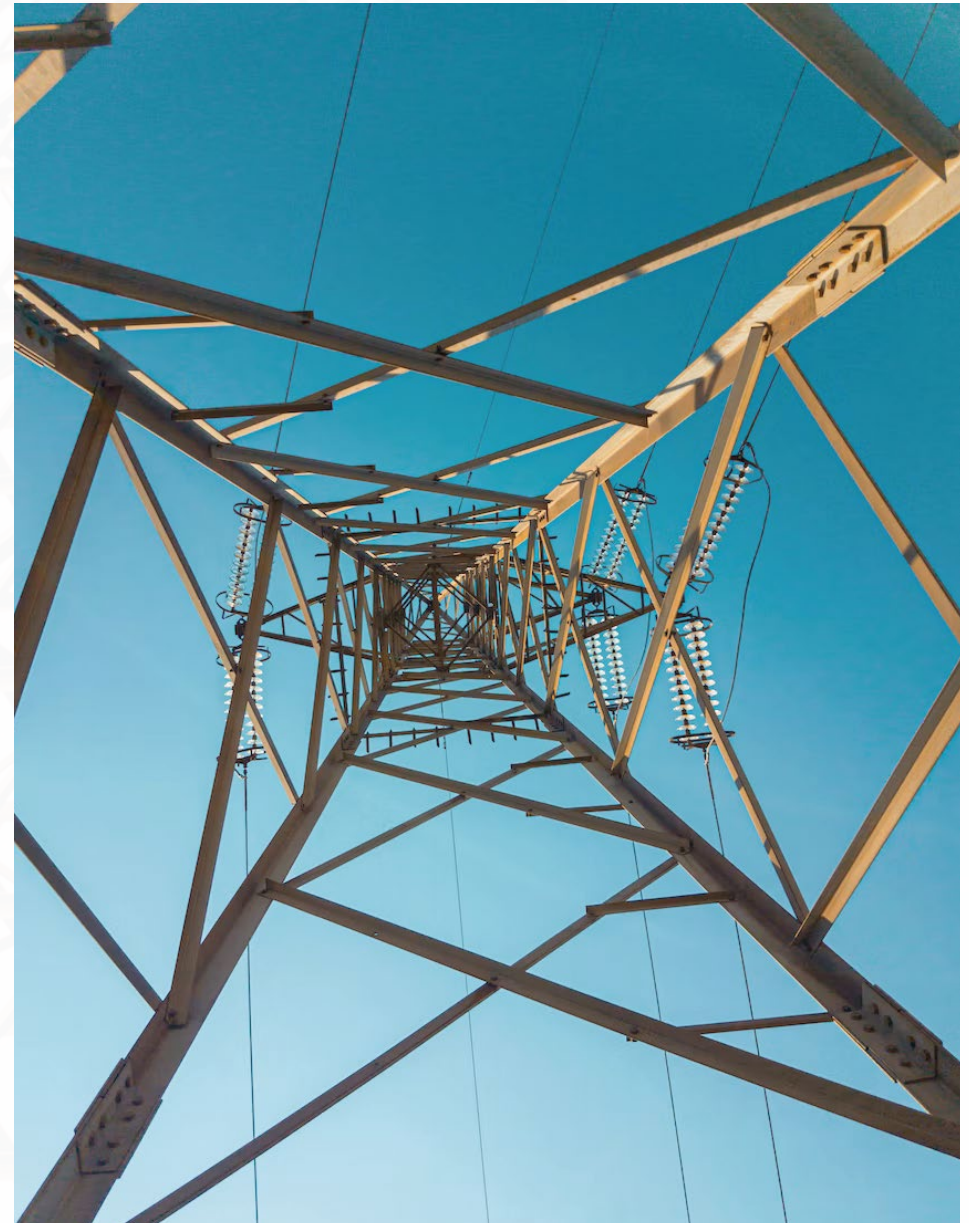
- Voltage: 220 kV.
- Length 101 km.
- Location: province of Toledo and Madrid.

Administrative project for the construction of a 220 kV double-circuit underground/overhead line "Prado".

- Voltage: 220 kV.
- Length 20 km.
- Location: province of Toledo and Madrid.

Administrative project for the construction of a 66 kV single-circuit underground line "Poris".

- Voltage: 66 kV.
- Length 27 km.
- Location: Santa Cruz de Tenerife (Canary Islands).



High-voltage electrical lines

Administrative project for the construction of a 66 kV single-circuit underground line "S.Bartolome".

- Voltage: 66 kV.
- Length 16 km.
- Location: Santa Cruz de Tenerife (Canary Islands).

Administrative project for the construction of a 66 kV single-circuit underground line "Dalias".

- Voltage: 66 kV.
- Length 26 km.
- Length 26 km..

Execution project Yepes.

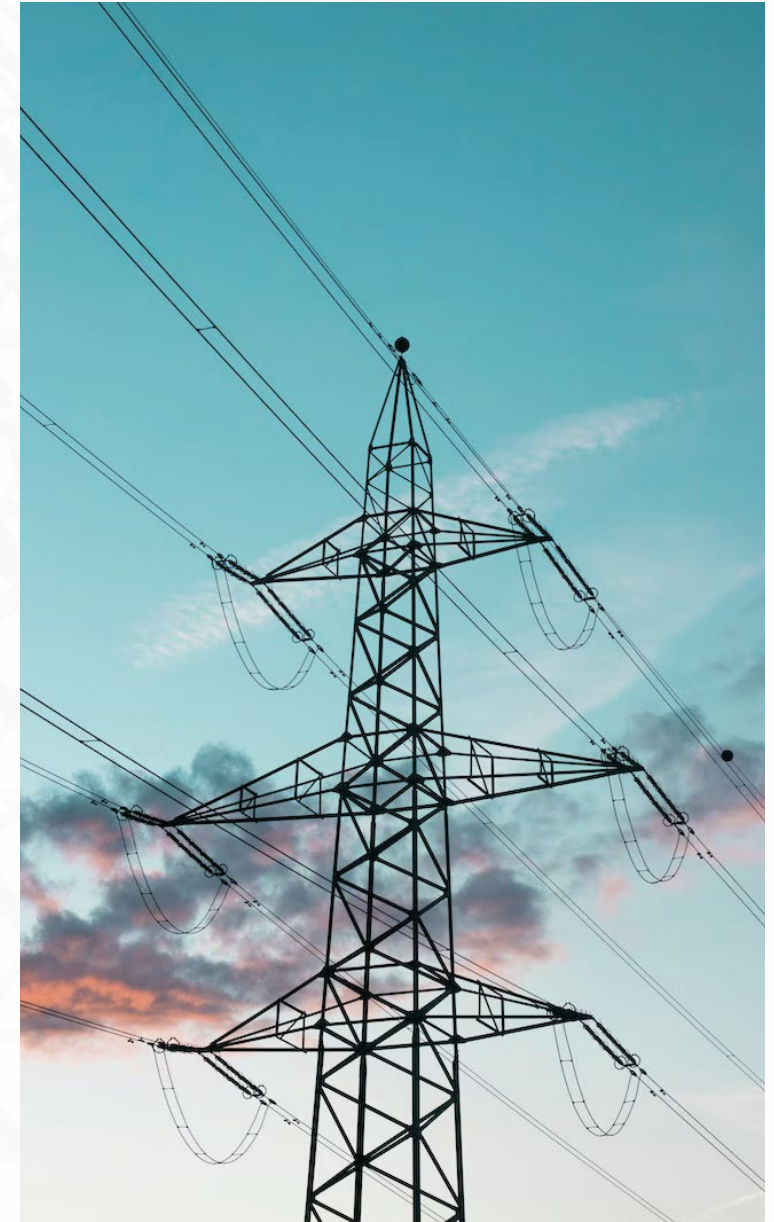
- Developer: Greenfield.
- Voltage: 220 kV.
- Length approx.: 3 km
- Location: Toledo, Madrid.

Project for a 220 kV high-voltage double-circuit line for the power evacuation of several solar farms.

- Developer: Greenfield.
- Voltage: 220 kV.
- Location: Cedillo (Toledo) to Leganés (Madrid).

220 kV high-voltage electrical line for the evacuation infrastructures of the Fuencarral junction photovoltaic solar farms.

- Developer: Greenfield.
- Voltage: 220 kV.
- Length approx.: 101 km.
- Location: Toledo, Madrid.



High-voltage electrical lines

Three (03) high-voltage lines: Ric 1 – Pas, HVOL transformer substation Ric 1 - electrical substation Ric 2 and HVUL transformer substation Ric 1 – REE.

- Developer: Edp Renovables.
- Voltage: 220 kV.
- Length approx.: 5 km
- Location: Castilla y León.

Project for a 220 kV high-voltage double-circuit line for the power evacuation of several solar farms.

- Developer: Greenfield.
- Voltage: 220 kV.
- Length approx.: 36 km
- Location: Castile-La Mancha–Madrid.

220 kV high-voltage overhead line project for power evacuation of solar farm Villanueva Del Rey.

- Developer: Naturgy/Segade Saleco.
- Voltage: 220 kV.
- Length approx.: 6 km
- Location: Seville.



Photovoltaic installations

Solar farms / utility scale

Solar farm project. Output: 125 MW.

- Location: Guillena (Seville).

Solar farm project. Output: 125 MW.

- Location: Chinchilla (Albacete)

Solar farm project. Output: 100 MW.

- Location: Villar de Cañas (Cuenca).

Solar farm project. Output: 50 MW

- Location: Arico (Santa Cruz de Tenerife).

Solar farm project. Output: 50 MW

- Location: Villamanrique (Ciudad Real).

Portfolio property engineering for a total of 64 MW across various solar farms between 3 and 10 MW.

- Developer: Alida.
- Location: the states of California, New Mexico and Florida.

Detail engineering project for the Myrtea solar farm.

- Developer: Eiffage.
- Output: 50 MWp.
- Location: Murcia, Spain

Detail engineering project for the Boidobra solar farm.

- Developer: Lantania.
- Output: 42.87 MWp.
- Location: Castelo Branco, Portugal.

Detail engineering project for the Centaurus Solar solar farm.

- Developer: Solaria.
- Output: 55 MWp.
- Location: Villaumbrales (Palencia).

Executive projects for solar farms Carina Solar 9, 10 and 2 and Mantia 2.

- Developer: Solaria.
- Total output: 325 MWp.
- Location: Toledo.

Detail engineering project for the Poleo solar farm.

- Developer: Ges.
- Output: 50 MWp.
- Location: Guillena (Seville).

Detail engineering and exectuvei project for the Espliego solar farm.

- Developer: Ges.
- Output: 45 MWp.
- Location: Guillena (Seville).

Detail engineering project for the Cornicabra solar farm.

- Developer: Ges.
- Output: 50 MWp.
- Location: Guillena (Seville).



Photovoltaic installations

Solar farms / utility scale

Administrative project for the construction of a 30 MW solar farm "Dalias II".

- Location: Dalias (Almería).

Administrative project for the construction of a 5 MW solar farm "Santo Domingo I".

- Location: Jerez de la Frontera (Cádiz).

Administrative project for the construction of a 5 MW solar farm "Santo Domingo II".

- Location: Jerez de la Frontera (Cádiz).

Administrative project for the construction of a 5 MW solar farm "Dehesa del Inglés II".

- Location: Puerto Real (Cádiz).

Administrative project for the construction of a 5 MW solar farm "Dehesa del Inglés III".

- Location: Puerto Real (Cádiz).

Administrative project for the construction of a 15 MW solar farm "Beato".

- Location: Puerto Real (Cádiz).

Administrative project for the construction of a 5 MW solar farm "San Antonio".

- Location: Huelva (Huelva).

Executive projects for the solar farms Guadame II, III, IV, Marmolejo Solar I, II, Zumajo I and Zumajo II.

- Developer: Greenalia.

- Total output: 348.20 MWp.

- Location: Andalusia.



Photovoltaic installations

Solar farms / utility scale

Detail engineering project for a 55.20 MW Nisibon Photovoltaic Plant; including a Battery Energy Storage System (BESS) with 40 MWh and 40 MW of storage.

- Developer: Elecnor.
- Location: Dominican Republic.

Detail engineering project for the 53.018 MW Eresma Photovoltaic Plant.

- Promoter: Elecnor.
- Location: Segovia.

Detail engineering project for the 170 MW María Alpha Photovoltaic Plant.

- Promoter: Solaria.
- Location: Grañona, Burgos.

Detail engineering project for the construction of a 10 MW Sabaudia Photovoltaic Plant.

- Developer: Enemek.
- Location: Lazio, Italy.



Wind installations

Six wind farm projects with the following characteristics:

- Output: 49.50 MW.
- 9 wind turbines at 5.5 MW each.
- Location: Ejea de los Caballeros (Zaragoza).

Detail engineering project for the Virgen de las Angustias wind farm.

- Output: 15.00 MW.
- 5 wind turbines.
- Location: Albañuelas, Granada.

Detail engineering project for the Parapanda wind farm

- Output: 18.00 MW.
- 6 wind turbines.
- Location: Íllora, Granada.

Detail engineering project for the Acampo Sancho wind farm

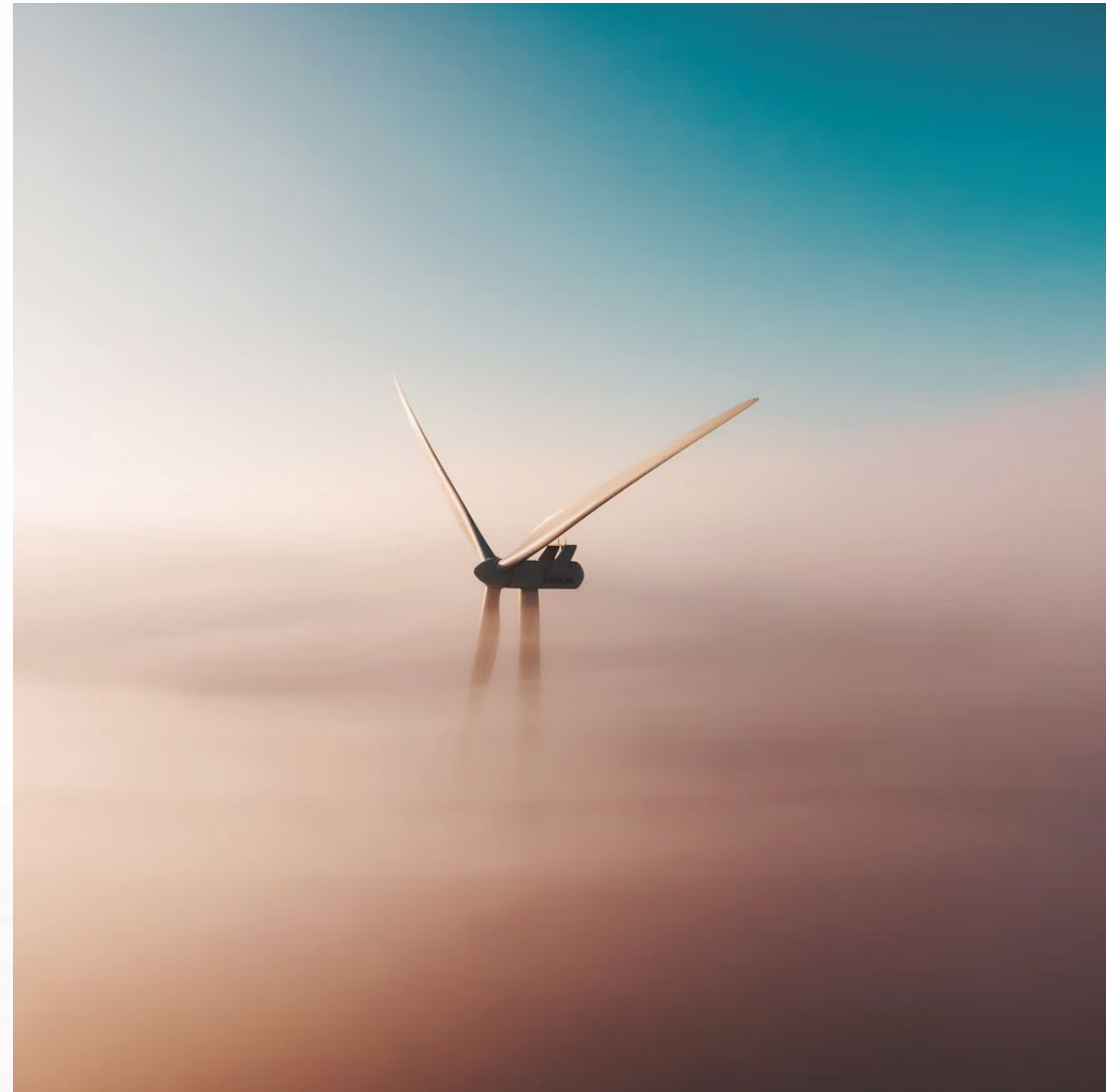
- Output: 36.27 MW.
- 9 wind turbines.
- Location: Zaragoza.

Detail engineering and execution project for a wind farm.

- Output: 97 MW.
- Asynchronous machines at 2.3 MW and synchronous machines at 3.15 MW.
- Location: Republic of Peru.

Detail engineering and execution project for two wind farms.

- Output: 50 MW.
- Gamesa machines (G90), substations and necessary electrical lines.
- Location: Oriental Republic of Uruguay.



Wind installations

Constructive adaptation project Sikitita wind farm.

- Developer: Forestalia.
- Output: 50.00 MW.
- Location: Zaragoza, Aragon.

Constructive adaptation project Arbequina wind farm.

- Developer: Forestalia.
- Output: 49.00 MW.
- Location: Zaragoza, Aragon.

Constructive adaptation project Erla wind farm.

- Developer: Forestalia.
- Output: 4.3 MW.
- Location: Zaragoza, Aragon.

Constructive adaptation project Micromuela wind farm.

- Developer: Forestalia.
- Output: 5 MW.
- Location: Zaragoza, Aragon.

Project for the Lanjarón II farm.

- Developer: Geolisol.
- Output: 18 MW.
- Location: Lanjarón (Granada).

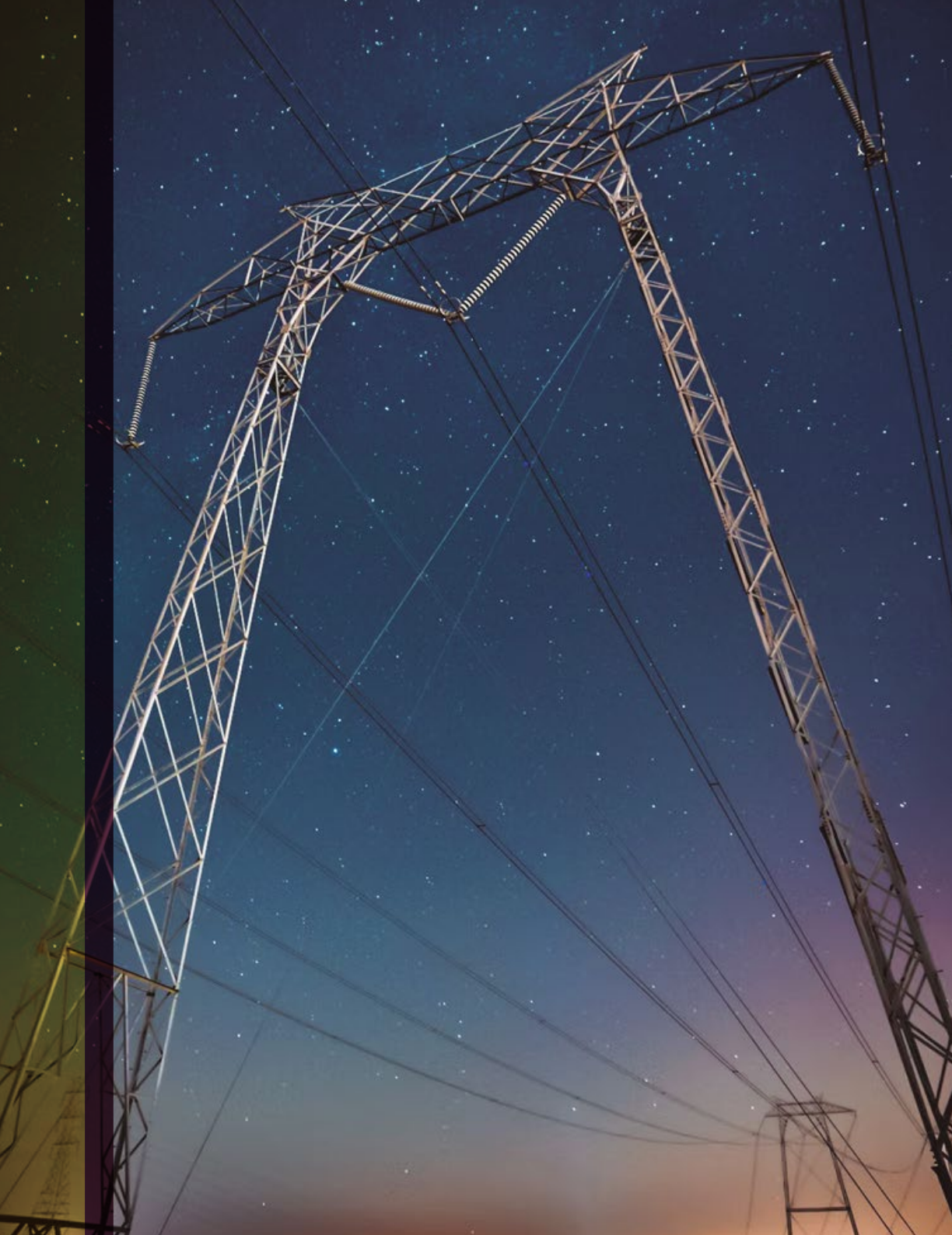
Project to obtain AAP from PE Lagunillas.

- Developer: Statkraft.
- Power: 65.7 MW.
- Location: Antequera, Andalucía.



OUR CLIENTS VOUCH FOR OUR WORK





CÓRDOBA - SPAIN

Avda. Cañete de las Torres, 35 Bajo. 14850, Baena. (Córdoba).
Spain - Phone: +34 957 94 52 36

MADRID - SPAIN

Building: Puerta de Atocha, C/ Méndez Álvaro 20. 28045, Madrid
Spain - Offices 410 and 445.

FRANCISCO LARA - CEO

E-mail: pacolara@itecla.es
Mobile: +34 626 631 916

CARLOS ARANGUREN - COO

E-mail: carlosaranguren@itecla.es
Mobile: +34 636 215 213

www.itecla.es

