



Kalyon Holding

Presentation



Overview



Group Overview



Kalyon was founded in 1974.

Kalyon, established as a sole construction company, has gone through a major transformation over the years to become one of the **leading conglomerates of Turkey**.

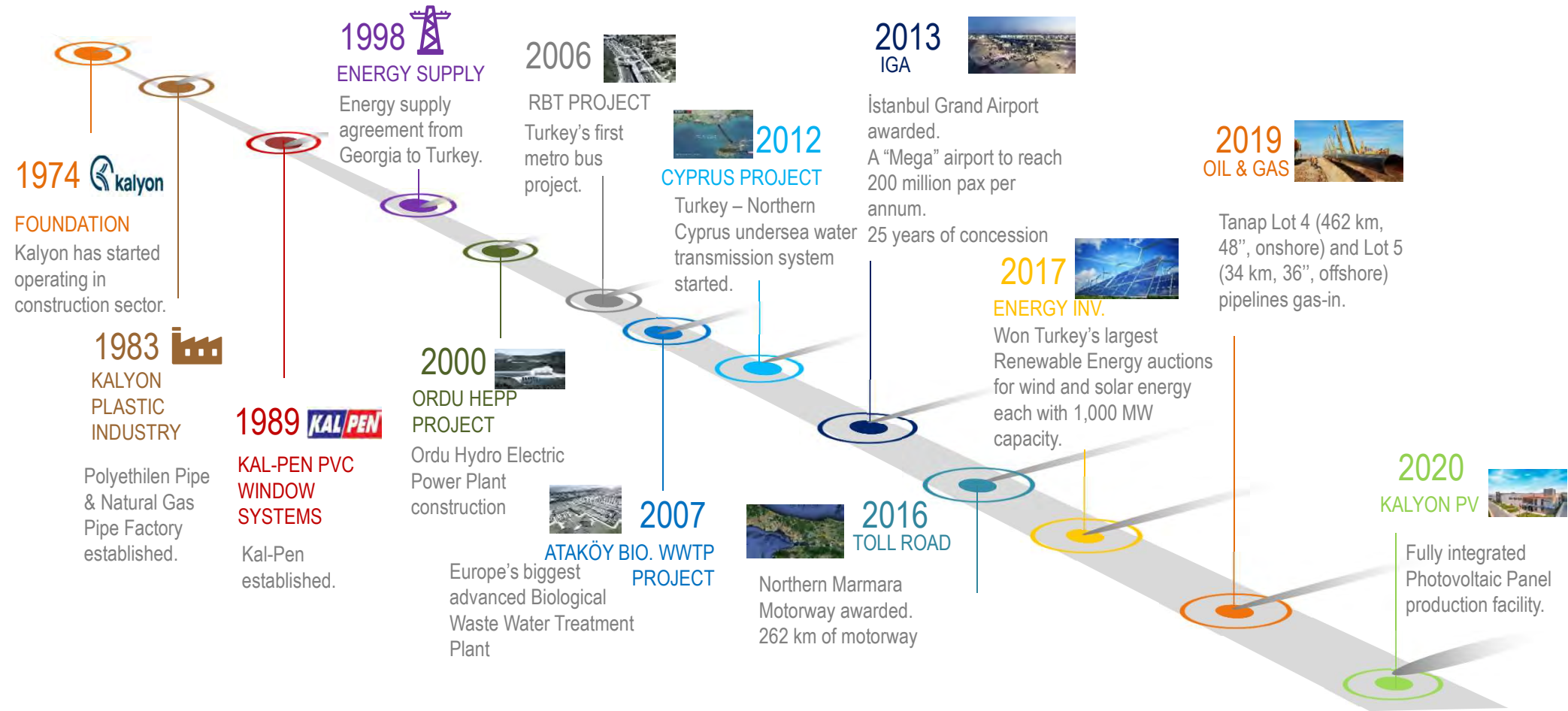
Kalyon is now a multi-billion dollar group operating both as an EPC Contractor and Concessionaire in a variety of sectors and business lines.



Main Business Lines

Construction		Concession & PPA's*		
Infrastructure	Superstructure	Energy	Aviation	Toll Road
<ul style="list-style-type: none"> • Airports • Energy Facilities • Railways & Metros • Highways/ Tunnels / Bridges • Water & Waste Water(Transmission Lines, Treatment Facilities, etc.) • Onshore / Offshore Gas Pipelines 	<ul style="list-style-type: none"> • Real Estate Investment & Development • High Rise Buildings • Residential Complexes • Mixed Used Complexes • Healthcare Facilities • Stadiums • Universities 	<ul style="list-style-type: none"> • Solar • Wind • Hydro • Thermal • LNG Terminal 	<ul style="list-style-type: none"> • Airport Operations including catering, fuel farm, associated facilities, etc. 	<ul style="list-style-type: none"> • Toll Road Operations

Timeline (1974 ~ 2020)



Mission & Corporate Values



1



Sustainable growth dedicated to Quality, Environment and Health & Safety

2



Dynamic organization with focus on speed, effective management and timely completion

3



A Global Brand working on mega projects, yet devoted to adding value to national economy

4



Awareness of Social Responsibilities and contributing to Global Society while observing national values

Backlog



EPC Projects


2
Aviation
Projects



6
Metro & Rail
Projects



3
Water
Transmission
Line Projects




7
Motorway &
Highway
Projects



2
Oil & Gas
Projects



6
Other
Projects



Total EPC Value

USD
14.160 billion



Concessions & PPA's


1
Aviation
Project



2
Motorway
Projects



3
Energy
Projects



Total Concession & PPA Value

USD
40.820 billion



2

Aviation



Kalyon at a Glance

Aviation Value Chain




Construction

Airport Operation

Airport Construction

42 months construction period
10.25 billion € Investment Value (1st Phase)
 Land Area: **7.594 hectare**
 Capacity: **90 million pax** to be increased to **200 million pax**





Terminal Operations

Kalyon, as part of the consortium is managing the **terminal operations**




Fuel Operations

Kalyon, as part of the consortium is managing the **fuel operations**




F&B Operations

Kalyon, as part of the consortium is managing the **F&B operations**



Security Operations

Kalyon, as part of the consortium is managing the **security operations**





Kalyon at a Glance

Ground Handling Operations

Performed by 3rd Party

Real Estate Operations

Kalyon, as part of the consortium is managing the **Airport City operations**



Duty Free Operations

Performed by 3rd Party



New Istanbul Airport



1st Phase is completed with a record construction duration of **42 months** from site hand over (greenfield) with the capacity of **90 million** pax per annum.

The capacity will increase up to **200 million** pax per annum.

Concession Duration	: 25 years
Investment Value	: € 10.25 billion
Land Area	: 7.594 hectare
Main Terminal	: 1,370,000 m²



Kalyon at a Glance

New İstanbul Airport



Area Comparison

Atatürk Airport



Beijing Airport



Frankfurt Airport



Schiphol Airport



Airport	Area	PAX
Istanbul Airport	76 million m² Phase 1: 41.5 million m ²	150 MPPA (up to 200 MPPA) Phase 1: 90 MPPA
Atlanta	19 million m ²	104 MPPA
Beijing	23 million m ²	96 MPPA
London Heathrow	12 million m ²	78 MPPA
Amsterdam Schiphol	20 million m ²	68 MPPA
Frankfurt	21 million m ²	64 MPPA
Istanbul Atatürk	12 million m ²	68 MPPA

New Istanbul Airport



Construction Facts



MAIN TERMINAL FLOOR AREA **1.370.000 M²**



= **X 5** Empire State Building Floor Area
(257,000 m²)

STEEL (Structural + Reinforcement) **645.000 TONS**



= **X 80** Eiffel Tower Metal Structure
(7,300 tons)

CONCRETE
(1.250 Apron, 5.450 structural) **6.700.000 M³**



= **X 2** Hoover Dam
(3,330,000 m³)

TERMINAL ROOF **450.000 M²**



= **X 18** Rome Coliseum Area
(24,000 m²)



3

Construction

3.1

Case Studies



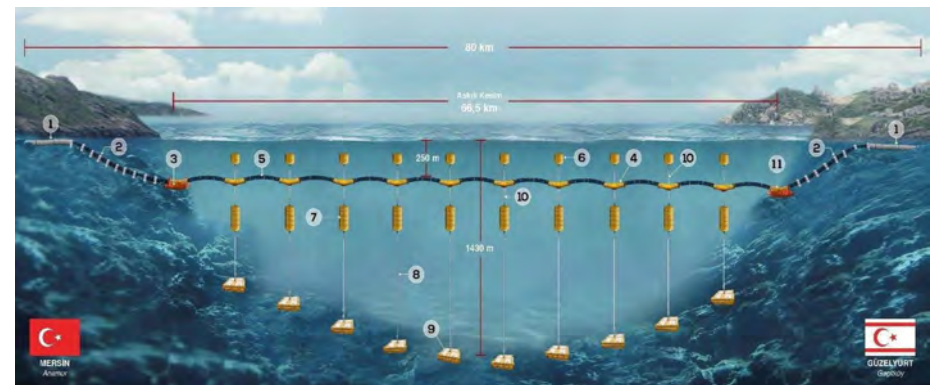
Northern Cyprus Water Supply Prj.



Being the **first of its kind** in the **World**, the Project supplies drinking and irrigation water from **Turkey** to **Northern Cyprus**

Duration of the Project : **39 months**
(June 2012 – October 2015)
Project Value : **\$ 160 million**

Water Supply Capacity : **75 million m³/year**
Offshore Pipeline Length : **80 km**
Suspended Sec. Length : **66.5 km**
Pipeline Depth : **250 meters**
Pipe Diameter : **1600 mm.**



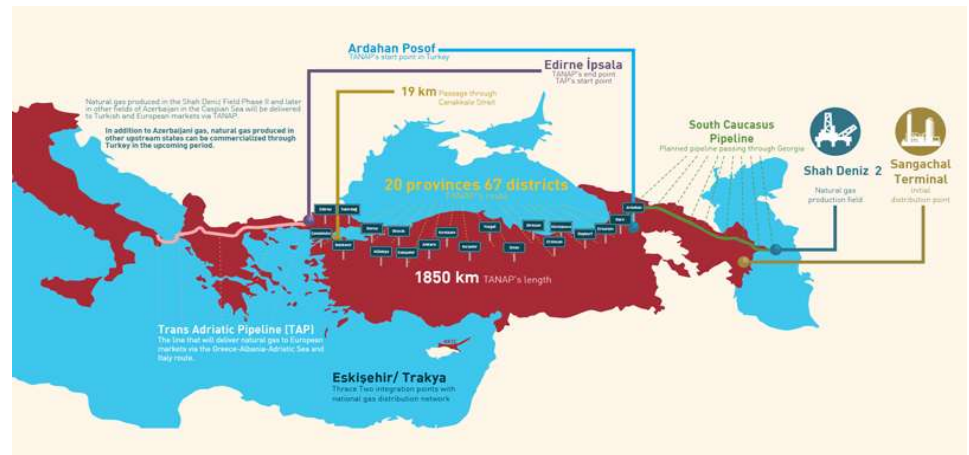
Tanap Natural Gas Pipeline



TANAP Project is carrying the natural gas of Caspian Sea, Azerbaijan all along Anatolia in Turkey and to Europe.

With 19 km (totally 34 km) running under the Sea of Marmara, the main pipeline within Turkey reach a total of 1,850 km, along with off-take stations, compressor stations and other above ground installations.

Kalyon constructed **34 km** of 36" offshore and **462 km** of 48" onshore pipeline within the Project.



Istanbul Bus Rapid Transit Project



Implemented for the **first time** in Turkey.

42 km of dedicated metrobus lane is constructed.

1st Phase with the length of **11.8 km** is completed with a record duration of **77 days** only.



Capacity : **1 million pax / day**

Structures : **34 stations**

15 bridges

Underpasses



Kartal Training & Research Hospital



1,105 bed capacity **seismic isolator protected** hospital capable of providing services like hemodialysis, hyperbaric oxygen therapy, organ transplant, intensive care, surgical medicine, internal medicine, pediatrics, pedagogy, anesthesiology and reanimation, family medicine, etc. and also includes a wound and burn center and a stroke center.





3.2

Ongoing EPC's

Aviation Projects



Sabiha Gökçen Airport 2nd Runway Construction Project

Contract Value : \$ 483 million
Location : İstanbul, Turkey



New İstanbul Airport Turkish Airlines Facilities

Contract Value : \$ 1.35 billion
Location : İstanbul, Turkey



Metro & Rail Projects



Gayrettepe - New Istanbul Airport Metro Project

Contract Value : \$ 900 million
Location : İstanbul, Turkey



Halkalı - New Istanbul Airport Metro Project

Contract Value : \$ 922 million
Location : İstanbul, Turkey



Metro & Rail Projects



Dudullu – Bostancı Metro Project

Contract Value : \$ 475 million
Location : İstanbul, Turkey



Antalya Expo 3rd Phase Railway Project

Contract Value : \$ 172 million
Location : Antalya, Turkey



Metro & Rail Projects



Gaziray Railway Project Phase 2

Contract Value : \$ 200 million
Location : Gaziantep, Turkey



Bandırma – Bursa Osmaneli High Standard Railway Project

Contract Value : \$ 1.257 billion
Location : Bursa/Eskişehir, Turkey



Water Transmission Projects



Gaziantep Düzbağ Water Transmission Line Project

Contract Value : \$ 254.3 million
Location : Gaziantep, Turkey



Europe Region Potable Water Tunnel Project

Contract Value : \$ 179.5 million
Location : İstanbul, Turkey



Water Transmission Projects



Trabzon Potable Water Transmission Line Project

Contract Value : \$ 50.2 million
Location : Trabzon, Turkey



Motorway & Highway Projects



Northern Marmara Motorway Project

Contract Value : \$ 4.844 billion
Location : İstanbul, Turkey



Kandira Highway Project

Contract Value : \$ 101.5 million
Location : İzmit, Turkey



Motorway & Highway Projects



Çanakkale Ayvacık Küçükkuyu Highway Project

Contract Value : \$ 405.3 million
Location : Çanakkale, Turkey



Kadıköy Fikirtepe Combined Infrastructure & Road Project

Contract Value : \$ 78.7 million
Location : İstanbul, Turkey



Motorway & Highway Projects



Şile – Ağva Highway Project

Contract Value : \$ 325 million
Location : İstanbul, Turkey



Artvin – Erzurum Highway Project

Contract Value : \$ 72 million
Location : Artvin, Turkey



Motorway & Highway Projects



Ahmedbeyli – Horadiz – Mincivan – Agbend Highway Project

Contract Value : \$ 176.4 million
Location : Karabakh, Azerbaijan



Oil & Gas Projects



Northern Marmara Natural Gas Storage Facility

Contract Value : \$ 464.8 million
Location : İstanbul, Turkey



Black Sea Podisor Natural Gas Pipeline

Contract Value : \$ 345.3 million
Location : BS / Podișor, Romania



Building Projects



Ziraat Bank Towers Project

Contract Value : \$ 384.7 million
Location : İstanbul, Turkey



Üsküdar Nevbahar Real Estate Project

Contract Value : \$ 284 million
Location : İstanbul, Turkey



Building Projects



Ankara Balgat Project

Contract Value : \$ 149.1 million
Location : Ankara, Turkey



Trabzon City Hospital Project

Contract Value : \$ 140 million
Location : Trabzon, Turkey



Marine Projects



Oyak Port Project

Contract Value : \$ 88.9 million
Location : İzmit, Turkey



Energy Projects



Konya Karapınar Solar Power Plant Project

Contract Value : \$ 850 million
Location : Konya, Turkey

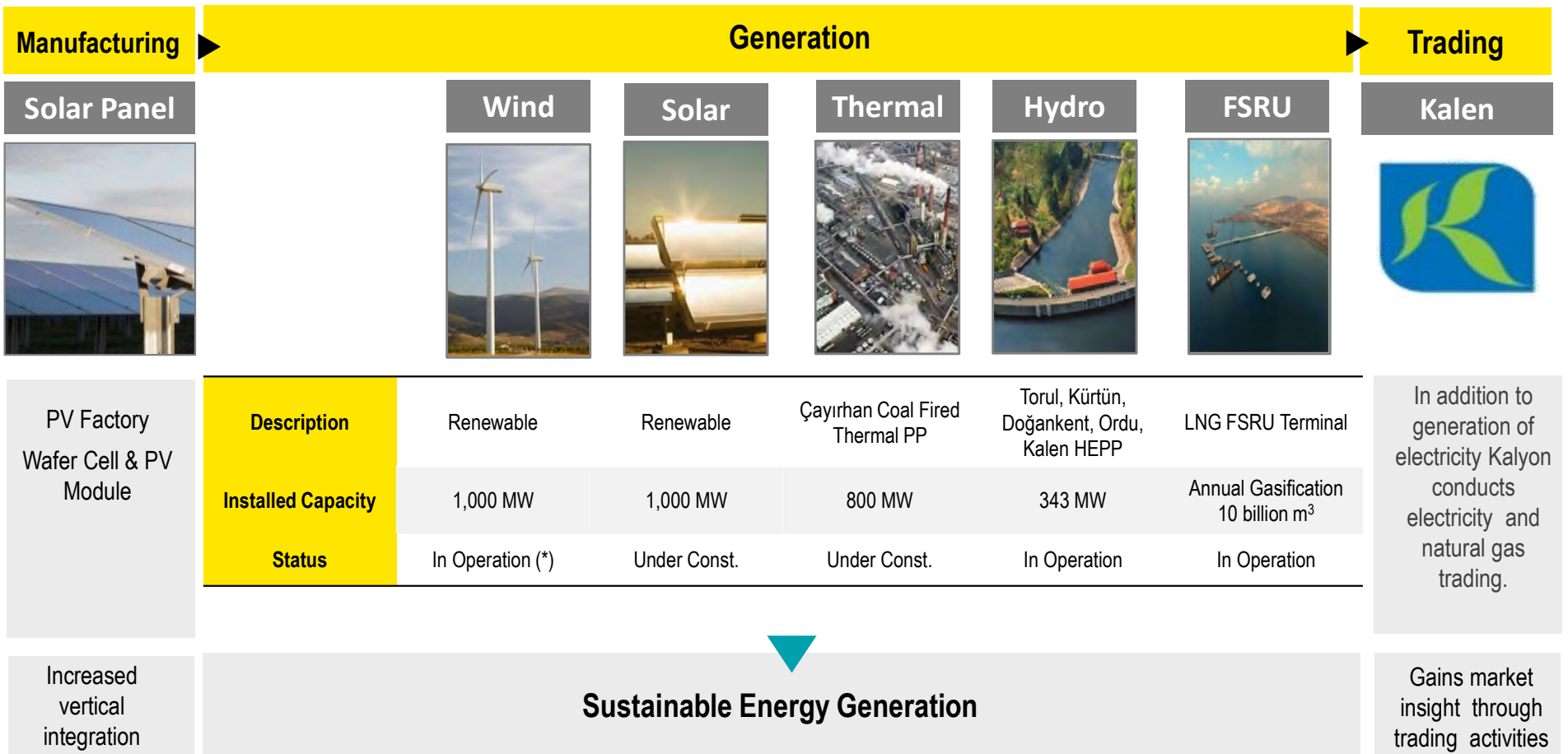




4

Energy

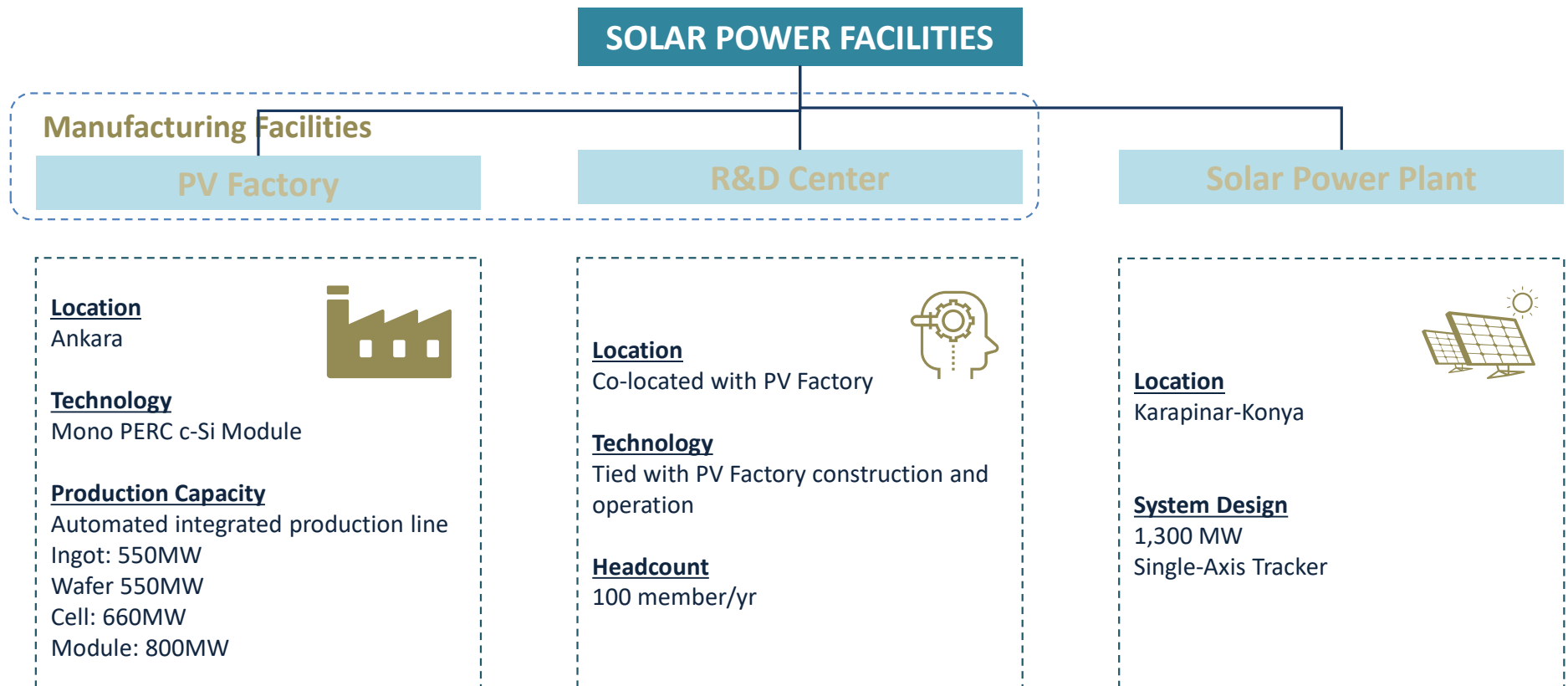
Energy Value Chain



Solar Power Project



The Project comprises a Power Plant, a Solar Panel Manufacturing Facility and an R&D Center

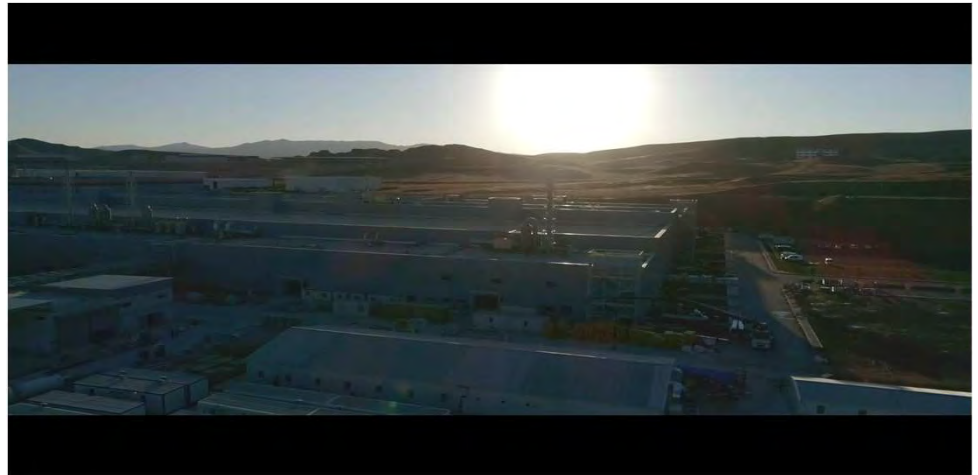


Kalyon PV



Kalyon PV is **Turkey's first fully integrated** photovoltaic panel production facility which has the capable integrated production of ingot, wafer, cell and modules.

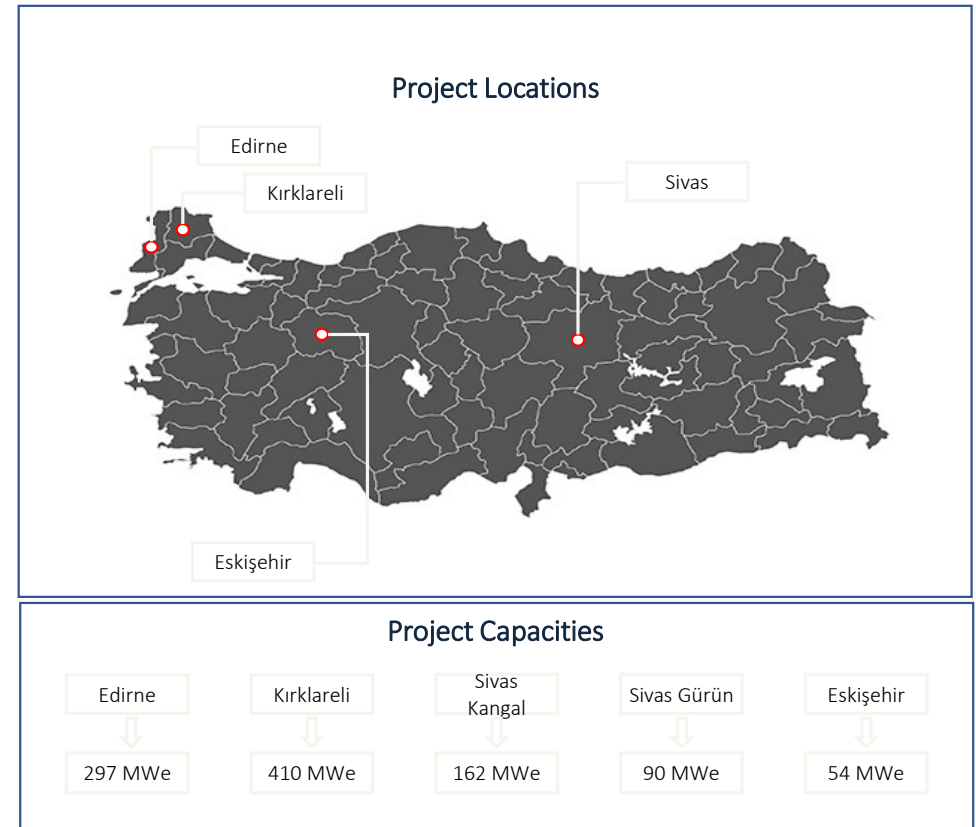
Annual Manufacturing Cap. : **500 MW**
Closed Area : **100,000 m²**
R&D Center : **2,500 m²/100 scientist**



Wind Power Project



- 1,000MW-1,300MW onshore wind project in Turkey
- License to produce energy for 49 years.
- Fixed USD feed-in tariff for the first 15 years.
- The wind sites are mainly located in northwestern part of Turkey with very high capacity factors.
- The Project benefits from a very strong policy support from the Turkish Government



Çayırhan Coal Mine & CFPP Project



800 MW CFPP & Mine Project

- First privatization within the context of the privatization of domestic coal lands
- Support for Market Operator Payment Obligations
- In line with Turkish Government's 2023 goals and Turkey's national energy policy
- Strong contractual structure, ultimately backed by sovereign support for offtake obligation
- 35 years of concession

Reliable and Stable Revenue Structure

- The undertaking of EUAS to purchase electricity for **fifteen (15) years** benefit from a fix price payable in the framework of the PPA

Project Location



Hydroelectric Power Plant Projects



Kalyon has 5 operational hydroelectric power plant projects which are located in north side of Turkey



A hydro portfolio of **343 MW** installed capacity with **1 GWh** annual generation

Relatively **FX protected** revenue stream

Key Characteristics	Torul HEPP	Kürtün HEPP	Doğankent HEPP	Ordu HEPP	Kalen HEPP
Plant Type	Dam	Dam	Run of River	Run of River	Run of River
# of Units	2	2	4+1	4	2+1
Installed Capacity	105,6 MW	84 MW	74,5 MW	42 MW	36,5 MW
Generation pa	352 GWh	142 GWh	313 GWh	156 GWh	80 GWh
PPA (under YEKDEM)	Till 2019	Sales to market	Sales to market	Till 2023	Till 2019
Peak Margin Benefit	Yes	Yes	No	No	No
Royalty Fee to TEIAS	No	No	No	No	No
COD	2009	2003	1971	2014	2009
Where it is	Gümüşhane	Gümüşhane	Gümüşhane	Ordu	Giresun
Transfer of Right Duration	49-year starting from 2016	49-year starting from 2016	49-year starting from 2016	49-year starting from 2009	49-year starting from 2005

FSRU Project



- **FSRU Vessel** - a Liquefied Natural Gas (LNG) carrier designed as a floating LNG storage and regasification unit. The FSRU Vessel can be used both as a LNG carrier and as an LNG Import Terminal which is a vital component required during transit and transfer of LNG.
- The system has annual gasification capacity of 10 billion m³.
- Kalyon has purchased the FSRU Vessel for its own.
- FSRU offers LNG terminal services on capacity allocation basis.
- FSRU Vessels can be moved and re-deployed on a global basis, providing commercial flexibility.





5

Social Responsibility



Hasan Kalyoncu University



A new Global University on the historical Silk Road

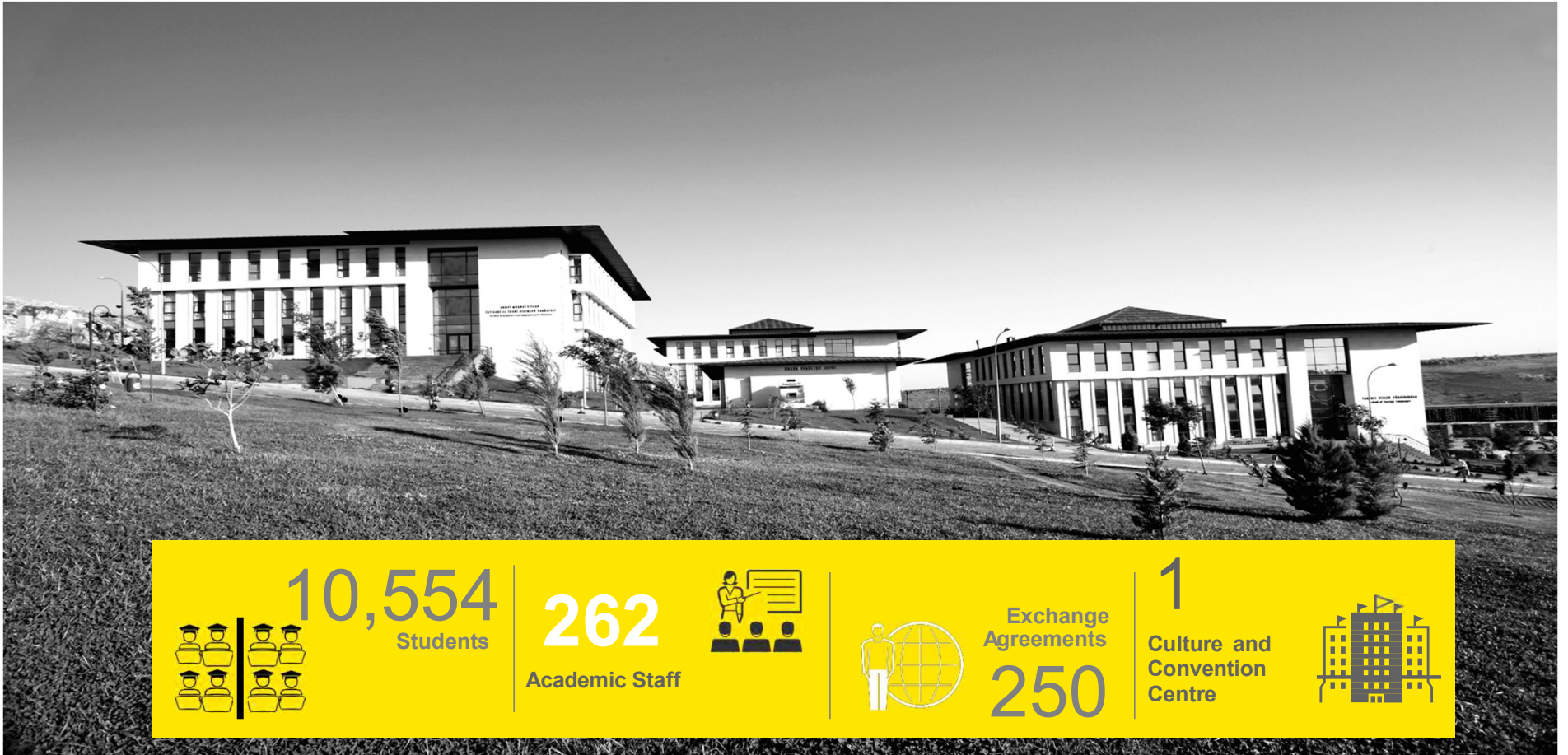
7 
Faculties





1 
School of Foreign Languages

3 
Institutions

 **25**
Departments

3 
Continuing Education Centers



 10,554 Students	262 Academic Staff		 Exchange Agreements 250	1 Culture and Convention Centre	
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THANK YOU

www.kalyonholding.com

