



LUDAN
GROUP

LUDAN
GROUP
Business
Overview
2022





General	3
Top Management	5
Milestones	7
Group Structure	9
Where to find us	11
Spectrum of Services & Clients Sectors	13
Market Presence & Major Clients	17
Main 2022 Highlights	21
2022 - Financial Data	31
Strategic Objectives	33
Strategic Paths for Future Evolution	36
Group Contacts	38

General



Who We Are

LUDAN GROUP is proud to be a most diverse provider of integrated solutions for Industrial Development, Plant


Optimization, Environmental Issues, and Industry- Specific Implementation Knowledge.


LUDAN GROUP is a unique blend of companies in the fields of Engineering, Software, Process Control, Environment, Energy and more, located in Israel, western Europe (Holland, Belgium), Eastern Europe (Romania, Bulgaria).


Ludan: Stable, Dynamic & Innovative



Stable


 Cultivates a multi-disciplinary approach


 A public, financially stable company


 Highly diversified market activity

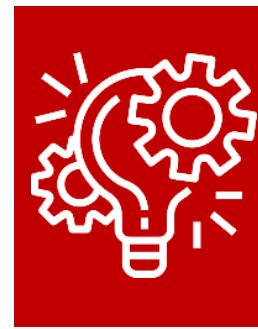


Dynamic


 Invests in continuous growth


 Responds quickly to global macro changes and local micro changes

 In selected sectors, the company's maintenance portfolio acts as an extension of projects implementation



Innovative

 Back office and vehicle fleet management software development for the public transportation market

 Electric bus, management and charging system Payment solutions: EMV,

Top Management





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C.E.O - Ludan
Group



Avi Lieber
C.E.O of
Ludan Tech
& C.E.O of
Symcotech



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CEO of KH Group



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V.P. Engineering
& Marketing



Oz Midian
CEO Ludan
Environmental
Technologies

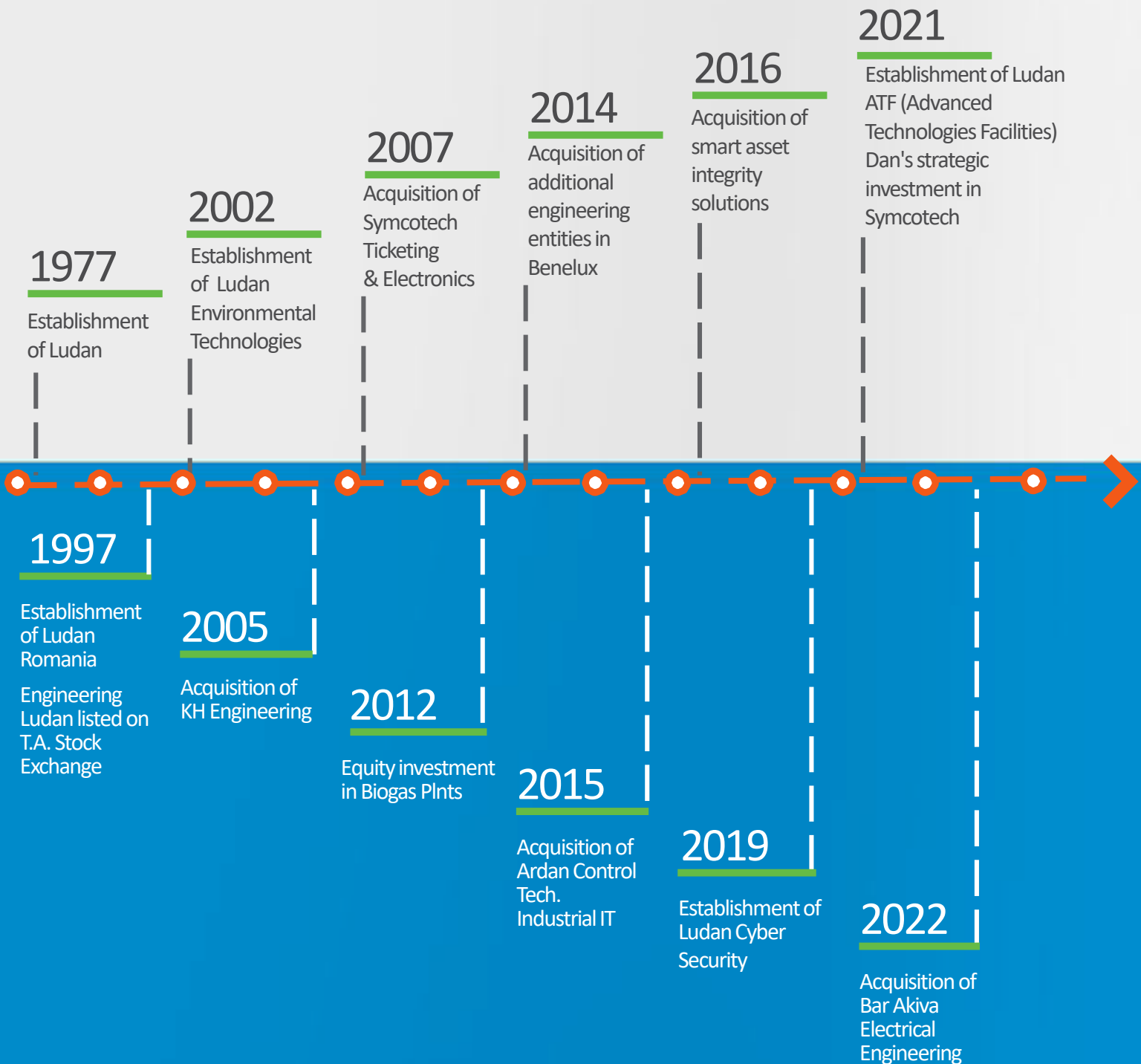


Omri Harel
V.P. Business
Development

Milestones



Stability and Development Milestones



Group Structure



Corporate Structure



LUDAN GROUP



SW & Control Sector



SYMCOTECH



www.ardantech.com



Ludan Software and Control systems



Engineering Sector



BarAkiva ENGINEERS



LUDAN Engineering Israel Ltd



LUDAN ENVIRONMENTAL TECHNOLOGIES



ECO-TECH



Ludan Romania



תשע"ג ובינו (1993) בל"ג, קרול, ונגון ופיקוח הנדסה ארדנטית ומכינה

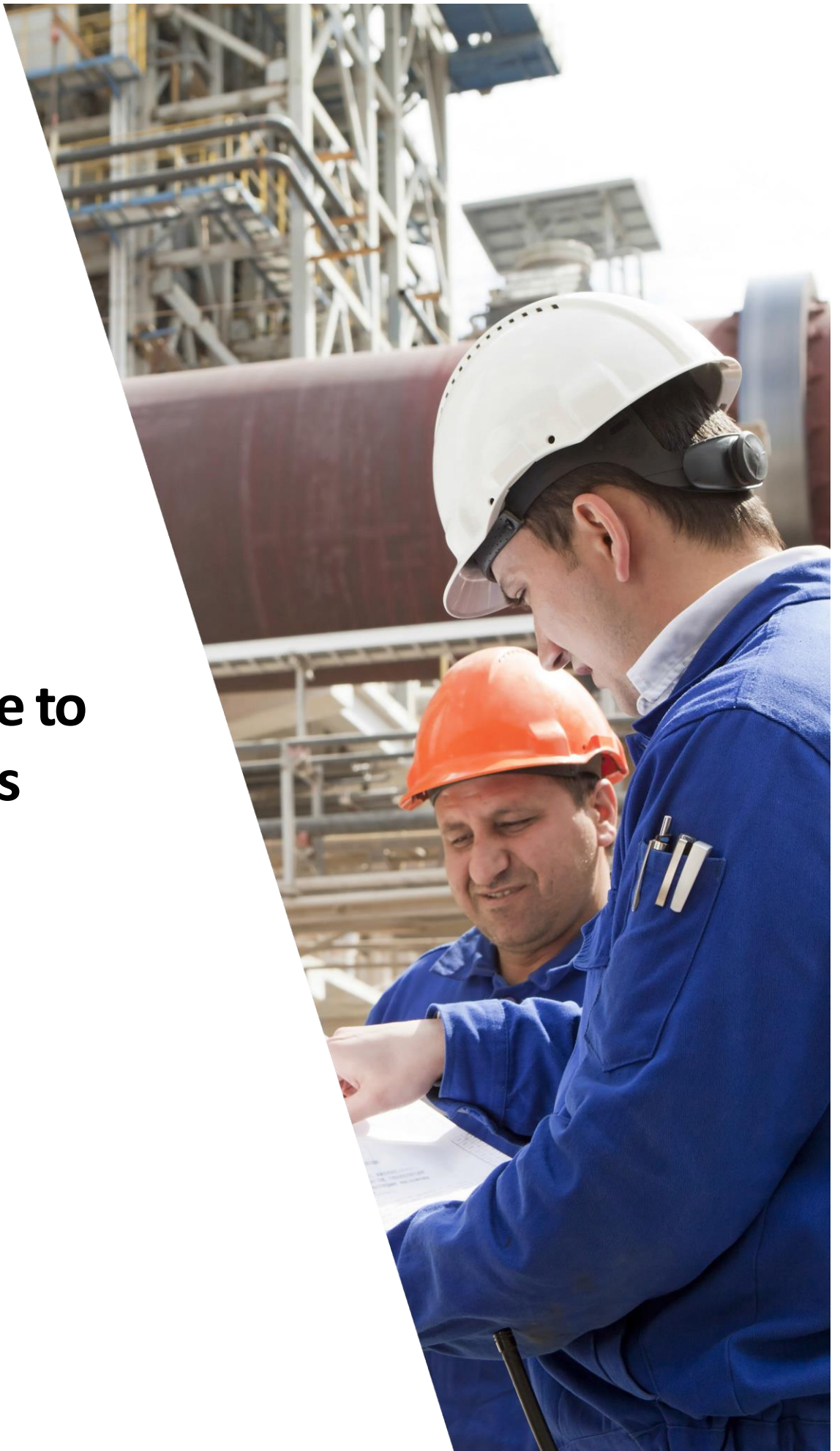


KH Engineering Belgium

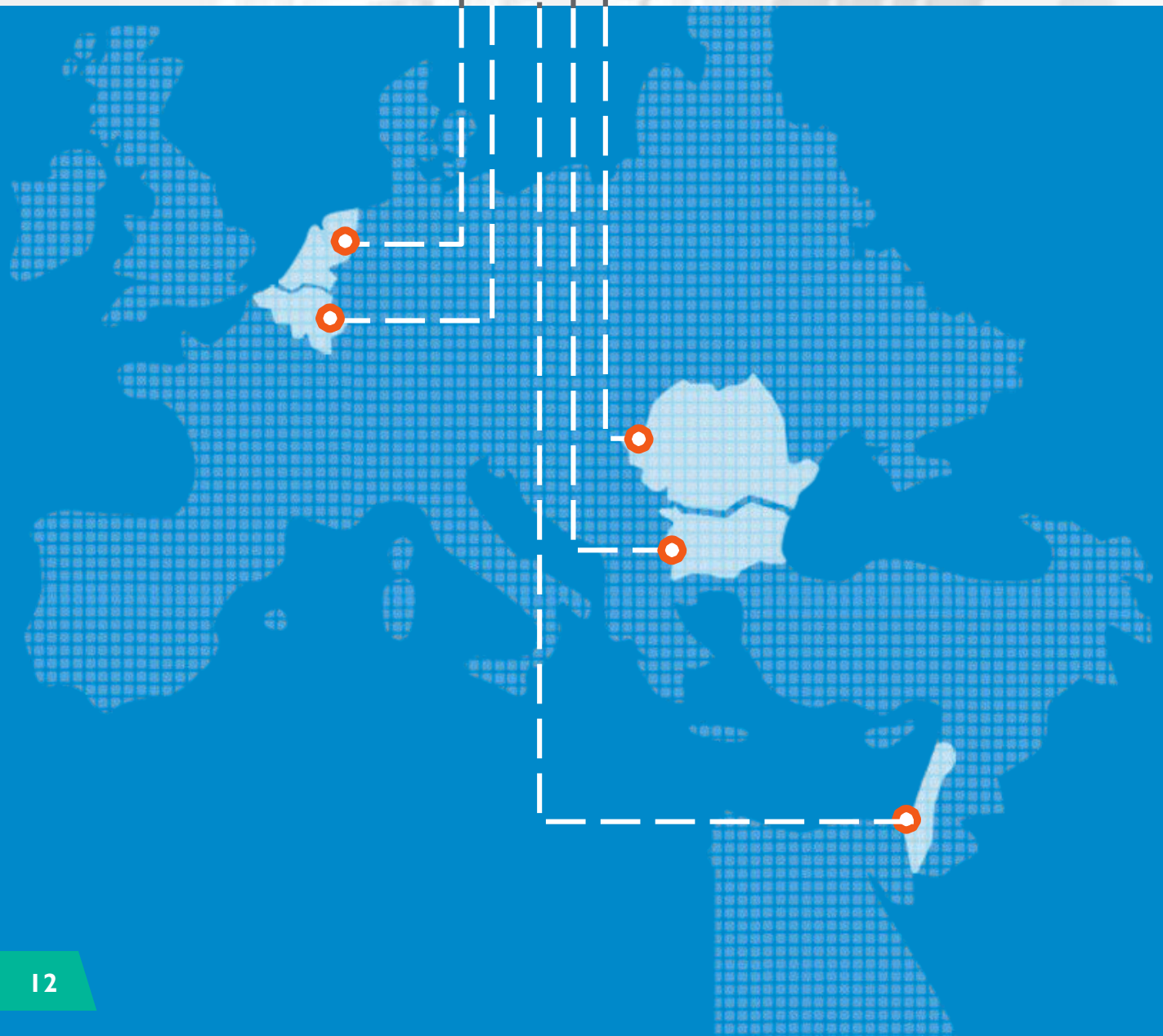
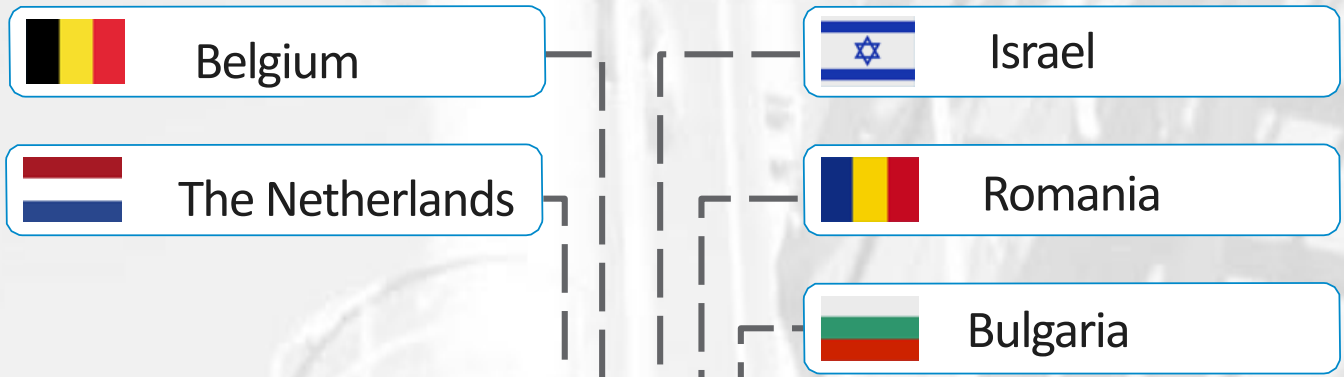


KH Engineering NL

**Where to
find us**



Global Reach



Spectrum of Services & Clients Sectors



Engineering Sector Over 600 active clients

Current Activity

- A significant player in the process industry
- A widespread geographic presence

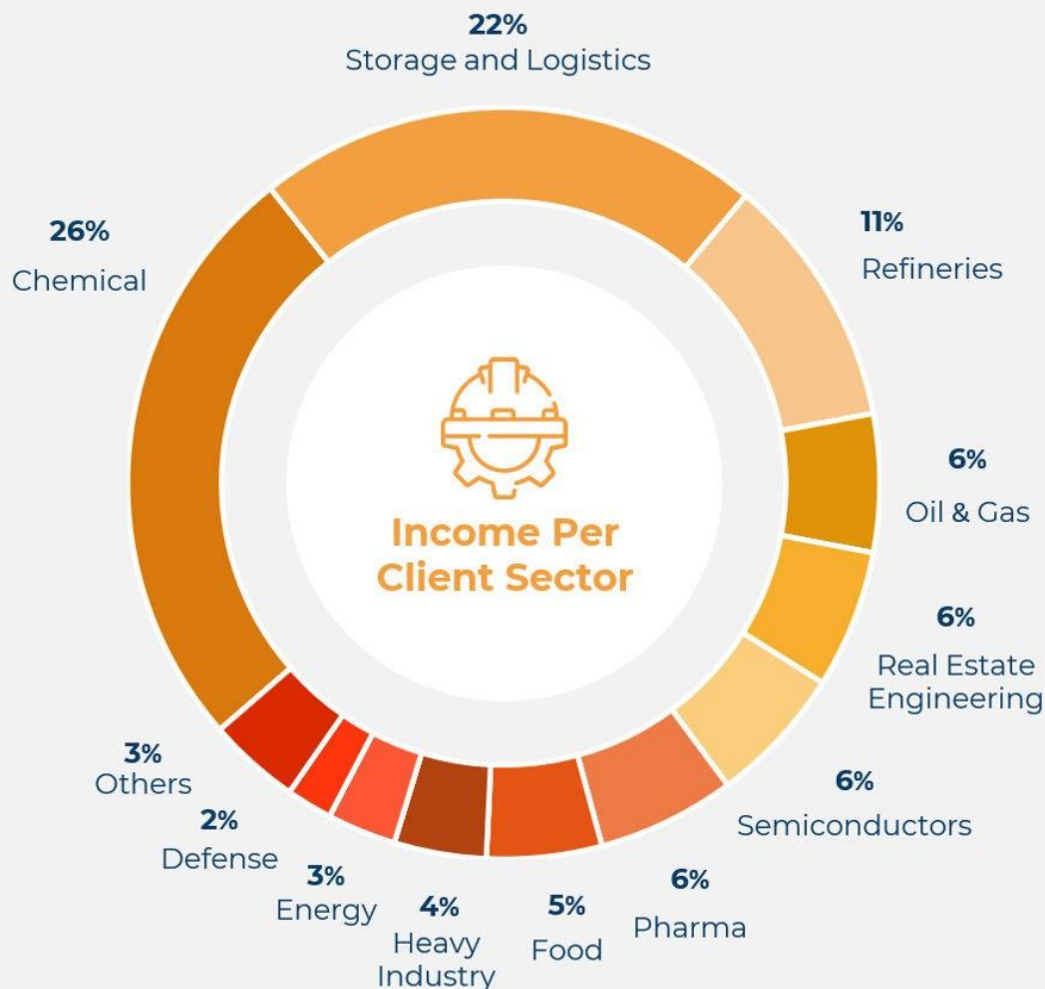
Establishing a Competitive Advantage

- Low Cost Center (LCC) operations
- EPC & Technological project implementation

Services

Services are provided as engineering services in the EPCM or EPC framework, which, inter alia, include:

- Project management
- Preparation and Control of budgets and schedules
- Permitting Authority Engineering
- Multidisciplinary engineering design
- Procurement and contracting
- Construction management and Supervision
- Validation (implementation of international standards, such as FDA/GMP)
- Commissioning



Tech Sector

Over 550 active clients

Current Activity

- Public transportation
- Homeland Security
- Building management
- Testing equipment for the defense industries
- Software & Cyber security
- Industrial control systems implementation

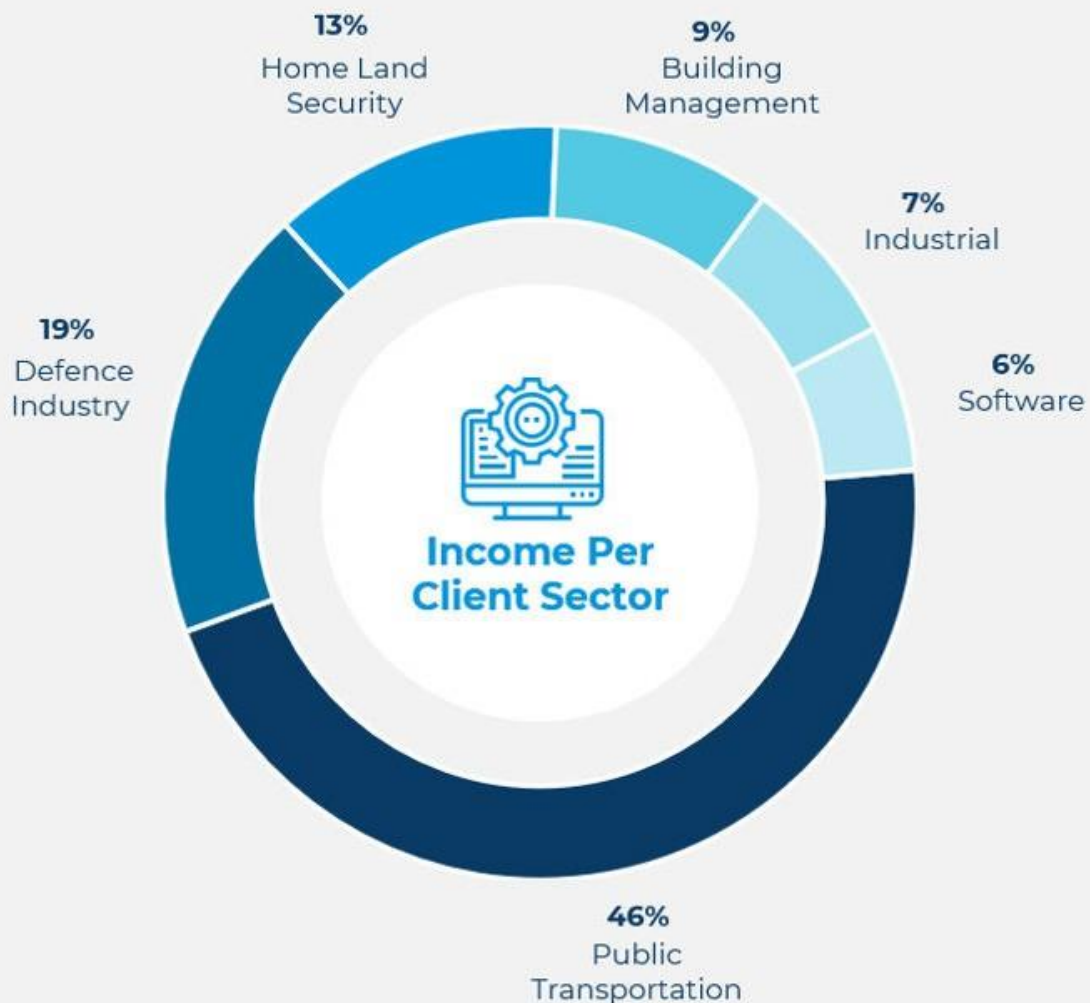
- EMV & cellular payments
- Industry app. software portfolio expansion

Activity Expansion

- Europe based public transportation
- Europe based cyber security
- Rapid growing maintenance portfolio
- Electrical Fleets Charging management SW

Establishing a Competitive Advantage

- Product & software development for
- transportation market



Environmental Technology Sector

Approx 100 active clients

Current Activity

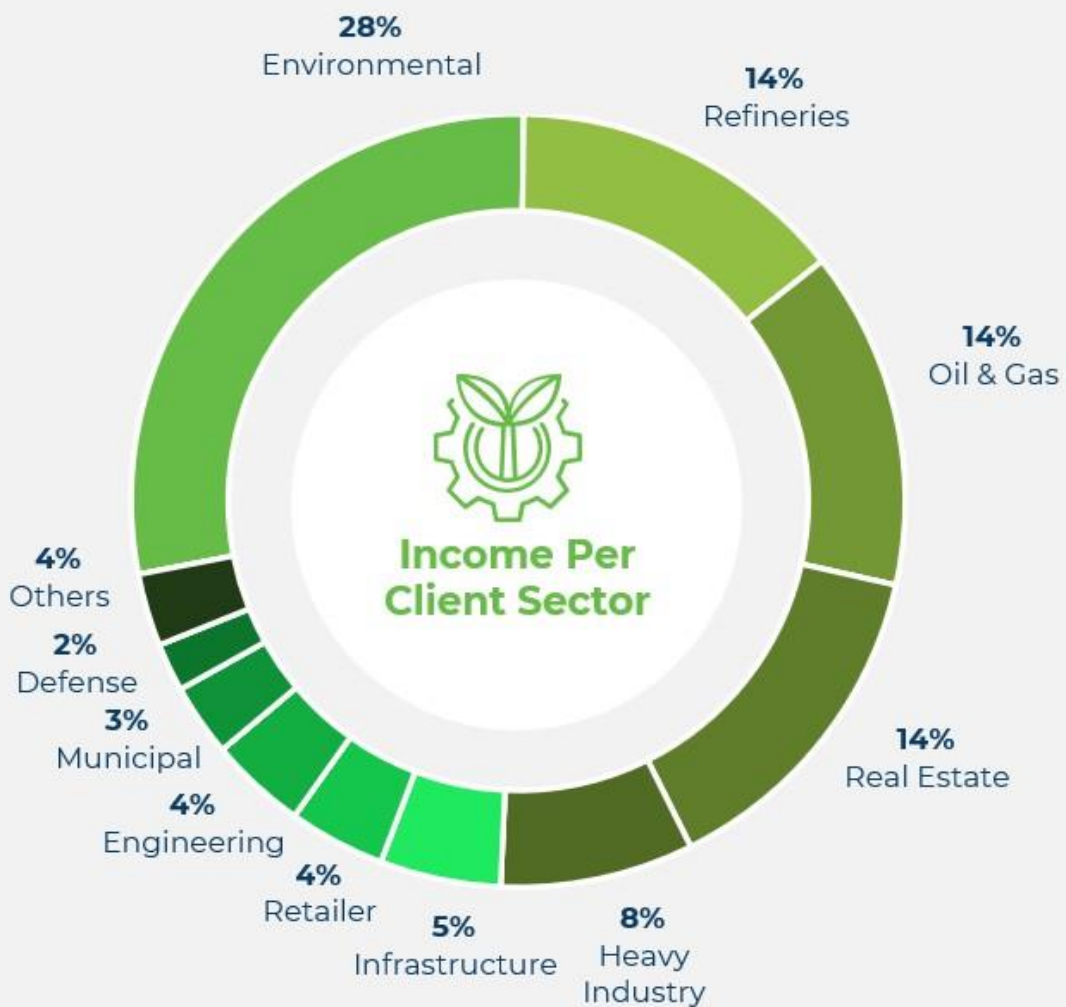
- Environmental consultation for industries & infrastructures
- Pollutant measurements & solution implementation
- Rehabilitation project implementation

Establishing a Competitive Advantage

- Relationships with know how providers

Activity Expansion

- Land rehabilitation
- EPC & technology projects
- WTE system initiation, implementation & operation



Market Presence & Major Clients



Markets/ Industries



Chemical



Energy



Natural gas



**Petrochemical
and Refining**



Pharmaceutics



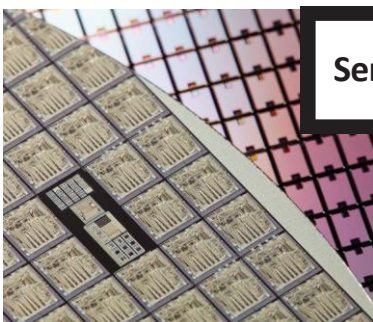
**Public Trans-
portation**



**Defense
Industry**



Food



Semiconductors



Agrochemical



Engineering Sector Customers (Partial list)



S/W & Control Customers (Partial List)

2022 Highlights



Tank farm Expansion

Client: NESTE

Project Goal: increase the storage capacity by 68,400 m³

Scope: Detail design, Design Management.

Year of Completion: 2022

Project Value: Confidential

The storage terminal will be expanded with 15 tanks, divided over 4 groups of tanks. In addition, there will be 5 Truck loading stations, 2 Transfer pumps, Infrastructure. and Capacity expansion where required, High voltage intake station, Substation, Service building with control room, New service water system



LANDING LOGISTIC, TA'ZIZ CHEMICAL PARK

Client: VTTI

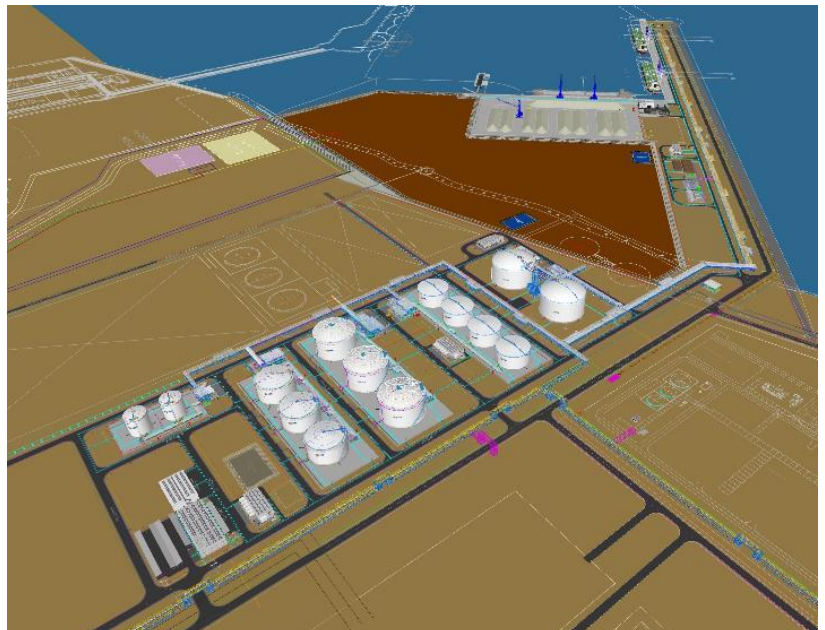
Project Goal: provide the logistics infrastructure for the TA'ZIZ chemical park in Ruwais

Scope: FEED design

Year of Completion: 2022

Project Value: Confidential

- The overall project involves the following scope:
- Tank farm and storage sheds (total of 12 tanks),
- Vapour handling systems,
- Marine infrastructure (comprised of jetties, ship loading berths, quays and causeways, loading arms, and bulk loading systems),
- Pipeline network and pumping systems (for feedstock and final products),
- Dredging and reclamation
- Building such as substations, central control room etc.
- A new tank terminal will be developed to handle bulk chemical liquids and bulk solids including interconnecting pipelines between the terminal and the TA'ZIZ Industrial Zone.
- Within this project, the following product storage facilities for the tank terminal are foreseen for export via the marine facilities:
- Iso Propyl Alcohol (IPA)
- Sodium hydroxide (NaOH)
- Ethylene dichloride (EDC)
- Methanol (MeOH)
- Ammonia (NH₃)



Regenerative Thermal Oxidizer

Client: ICL

Project Goal: Improve air pollution treatment

Scope: FEED EPC

Year of Completion: 2022

Project Value: Dozens of millions of NIS

- An air pollution treatment system installed in the customer's yard that treats emissions using a regenerative thermal oxidation system.
- An EPC project (planning, procurement and construction) which includes the design and supply of a gas condensation and recovery system, scrubbers, construction and management of the entire project.



Backup boiler for a thermo-solar power plant

Client: Magalim

Project Goal: Adding a back up boiler

Scope: EPC

Year of Completion: 2022

Project Value: Dozens of millions of NIS

- Adding a new steam boiler to the solar power plant in Ashalim
- The project includes planning, procurement, construction and management including connection to natural gas piping, connections to the existing steam piping and installation of the boiler itself.



Electrical design for Three Data Centers

Client: Black & White Engineering

Project Goal: building 3 Data Centers for Amazon

Scope: Detailed Electrical Design & Localization

Year of Completion: 2022

Project Value: Several millions of NIS

- Accompanying the electrical planning for 3 Data Centers using the planning-execution method. The executing company is Compass, the end customer is Amazon.
- Each information center is carried out in 2 stages where in the final stage each will have an intermediate voltage electrical connection of 32 megawatts.



Rehabilitation of contaminated land for Real Estate purposes

Client: A real estate company located in a factory formerly occupied by a pharmaceutical factory

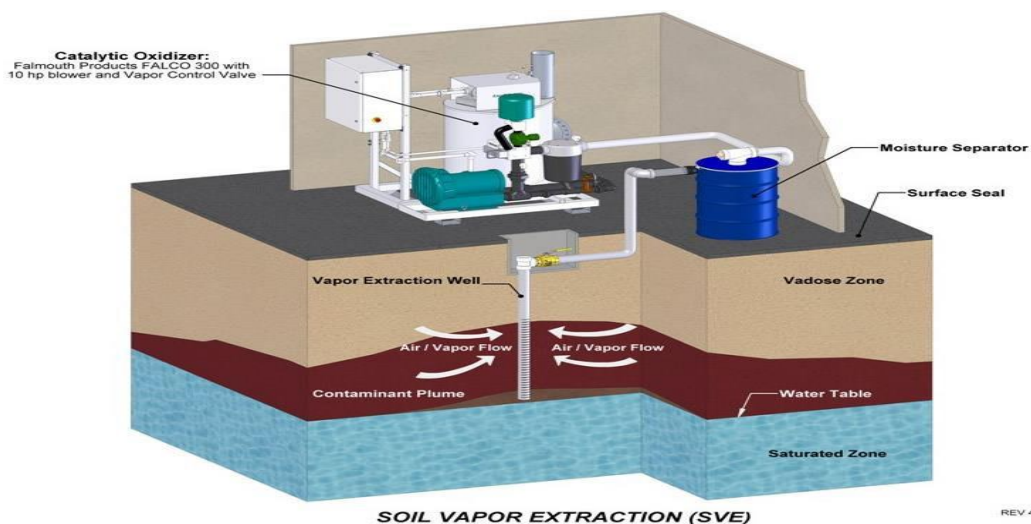
Project Goal: Rehabilitation of contaminated land

Scope: Turn Key

Year of Completion: 2022

Project Value: Several millions of NIS

- Step 1 soil vapor extraction
- Supply and installation of equipment to treat volatile pollution
- Step 2 land survey
- Drilling, analyzes and reports to the relevant authorities
- Step 3 Water treatment
- Supply and installation of a groundwater purification system



Supply of Validation equipment and advanced peripherals

Client: Egged

Project Goal: Implement Hardware, software & Integration of ticketing capabilities

Scope: Turn Key

Year of Completion: 2022

Project Value: Several millions of NIS

- Symcotech, a Ludan Group company, supplies Egged with verification equipment and advanced peripherals. As part of the scope of the project, Symcotech provided Egged with a back office system with high monitoring capabilities, which interfaces with other company systems.
- To date, over 6300 validators have been supplied, which are maintained on a national scale by a team of expert technicians. This project joins a long line of projects carried out by Symcotech in Egged and other companies.



Security and Entrance Control

Client: Ministry of Finance

Project Goal: Implement Hardware, software & Integration of home land security systems

Scope: Turn Key

Year of Completion: 2022

Project Value: Several millions of NIS

- Establishment of security, cyber, communication and computing systems.
The project contains unique cyber systems for security and communication needs as well as Milestone's control systems



2022 - Financial Data



2022 - Financial Data

Consolidated Balance Sheet (in '1.000 NIS)

	% of the balance	31.12.21	% of the balance	31.12.22
Cash and cash equivalents	9%	32,360	12%	45,716
customers and revenue to receive	45%	161,586	46%	180,174
Other current assets	13%	47,105	11%	44,561
Total current assets	67%	241,051	69%	270,451
non-current assets	33%	117,070	31%	119,121
Total assets	100%	358,121	100%	389,572
short term credit	7%	26,493	4%	17,057
Suppliers and eligibles	42%	150,110	39%	150,753
other current liabilities	8%	27,666	6%	23,306
Total current liabilities	57%	204,269	49%	191,116
Long term commitments	20%	71,778	17%	66,801
Shareholders' Equity	23%	82,074	34%	131,655
Total liabilities and Shareholders' Equity	100%	358,121	96%	389,572

2022 - Financial Data

Consolidated P&L (in '1.000 NIS)

	2020	2021	2022
Revenues	531,675	513,740	575,966
Gross profit	58,658	52,646	67,715
Gross profit margin	11.0%	10.2%	11.8%
Operating profit (before other income)	32,262	26,185	40,926
Operating profit rate	6.1%	5.1%	7.1%
Net Profit	15,297	16,304	28,862
Net Profit Rate	2.9%	3.2%	5.0%
EBITDA	37,651	32,296	47,196
(*) EBITDA Rate	7.1%	6.3%	8.2%

(*) 16 IFRS Effect Neutralized

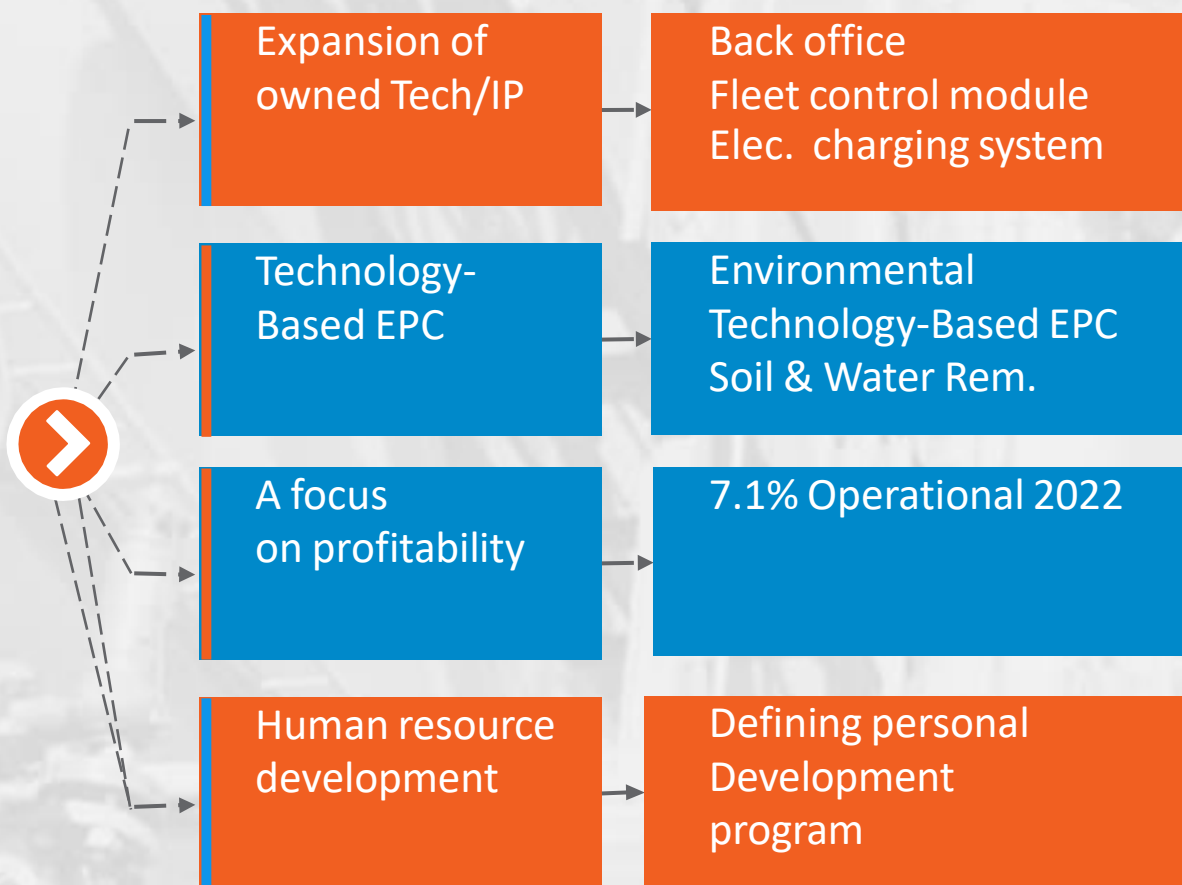
Strategic Objectives



Strategic Objectives



Realization Methods



Strategic Paths for Future Evolution



Strategic Paths for Future Evolution



Engineering Sector

Management and planning of
structure and infrastructure systems



Hydrogen and clean
energy



Emissions measurement using
drones



Software & Control Sector

Electric fleet management



Clearance



Symcotech Global
Expansion



Group Contacts



Group Contacts

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LUDAN
GROUP

global experience
local approach