

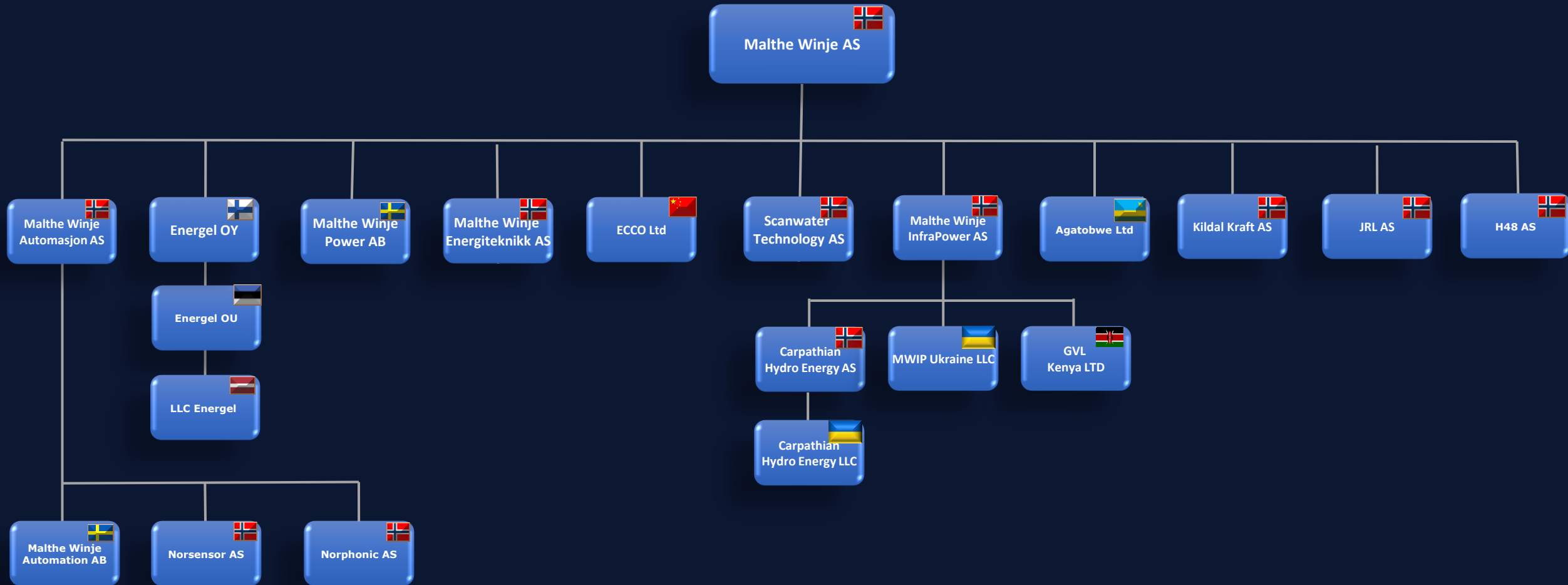
MALTHE WINJE GROUP

Malthe Winje-Group

- Founded 1922
- Privat Holding company
- Budget ca 1,0 MRD (2026) +
(approx. 30 Meuro commission-based sales)
- 21 companies – 9 countries
- 170 employees



Malthe Winje-Group



Market areas



Water and
Wastewater



Transport



Building automation



Energy



Hydropower



Cloud solutions



Water
preparedness



Automation products



SCADA Systems



Installation material

MALTHE WINJE

ISO Certified: Quality, Environment and Information Security



Varsling

- Push-varsel
- SMS
- E-post

Web-baserte brukergrensesnitt

Dashboards



Rapporter



Styring og kontroll



Sanntidsdata til blant annet:

- ERP-system
- FDV- / vedlikeholdssystem
- Energioppfølgingssystem (EOS)
- Kommunal datasjø
- Power BI
- Kartverk / Lekkasjeovervåking

Strømpris

Nedbør, tidevann og værprognoser

Andre tredjeparts data



Datastrøm

Lagring - Digital Tvilling

Rapporter

Analyse

Logikk og styring

- Maskinlæring
- Kunstig intelligens

Kryptert Protokoll
- høy sikkerhet

Lokalt nett

IoT Edge

Instrumentering i felt

Mengdemålere, nivå, trykk, digitale signaler etc. (mulighet for batteridrift)

Lokale styresystemer

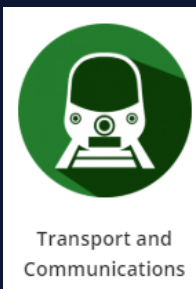
PLS'er, regulatorer

Lokale servere

Driftskontrollsystemer, SD-anlegg, databaser etc.

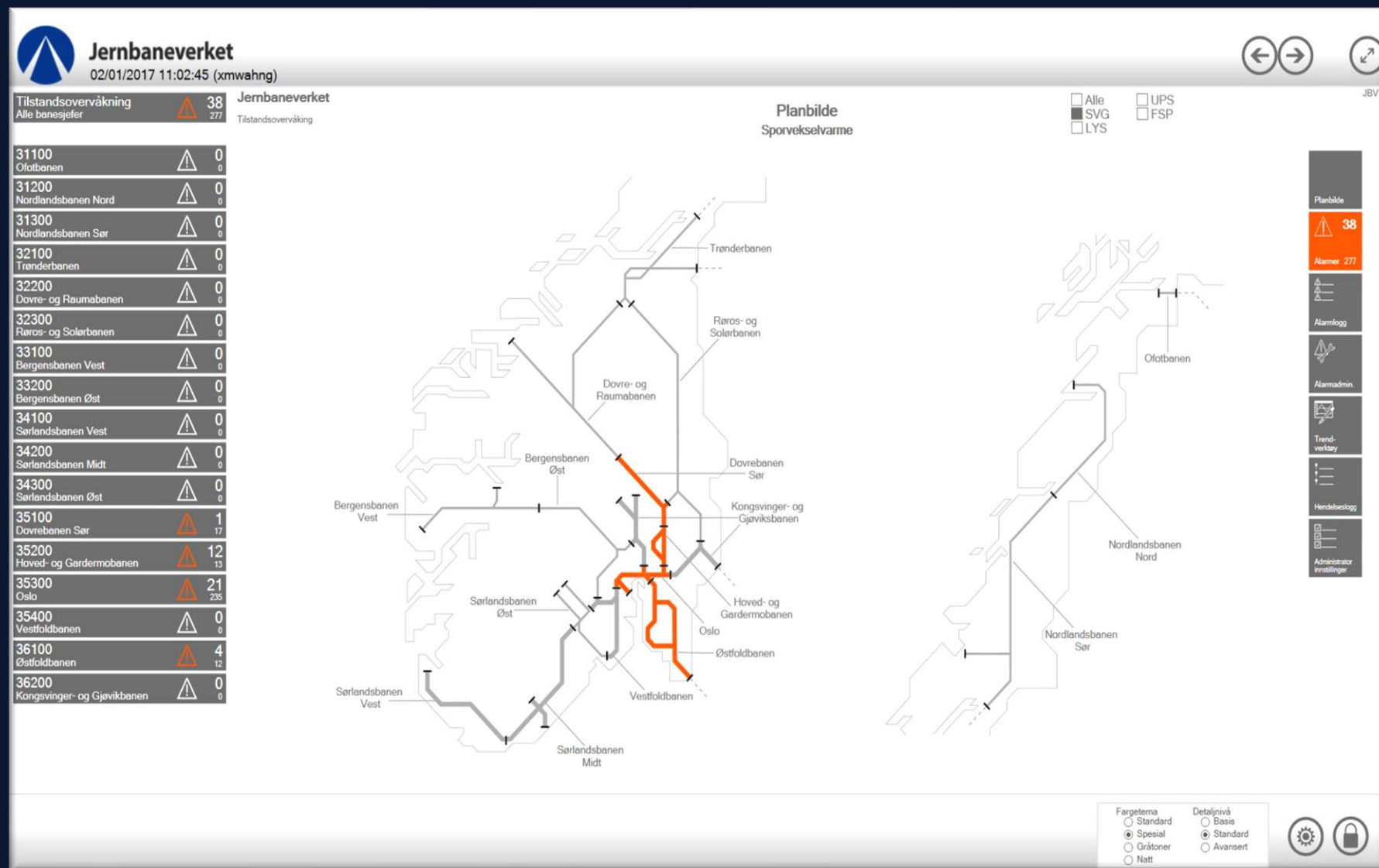
Mobilt utstyr

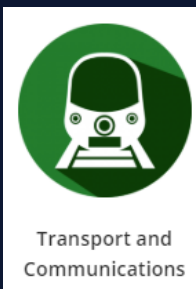
Tanker, kjøretøy, beredskapsutstyr etc. (mulighet for batteridrift)



National SCADA system for BaneNor

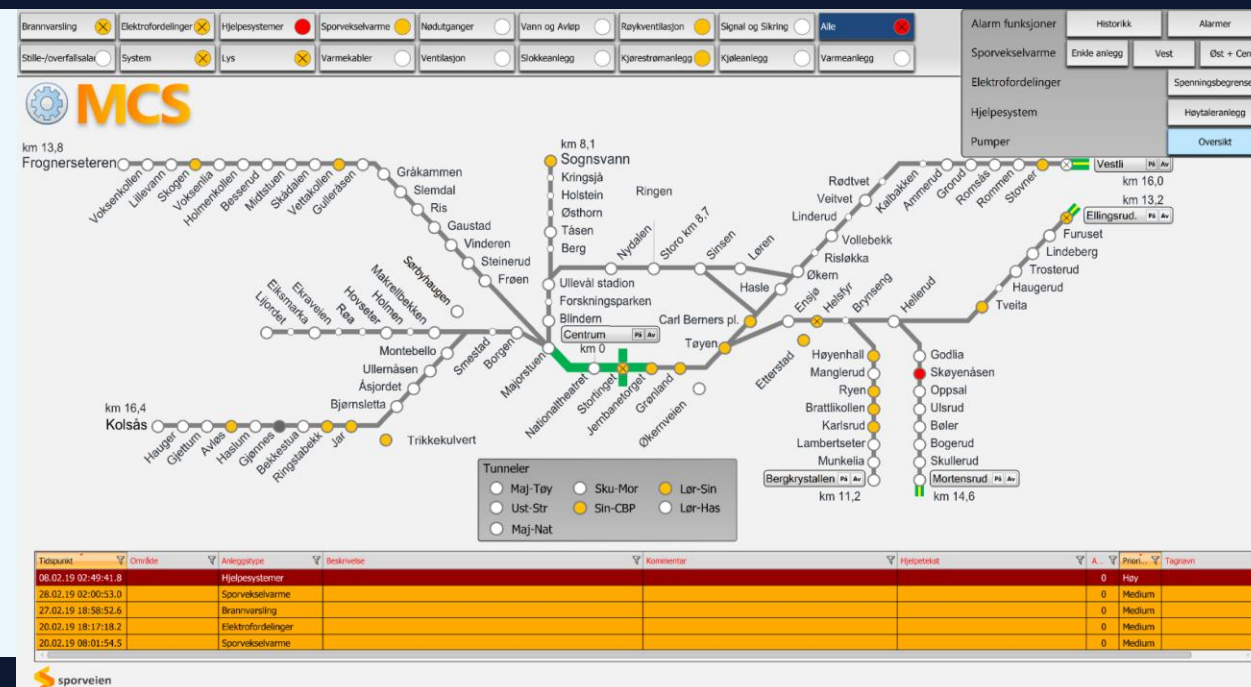
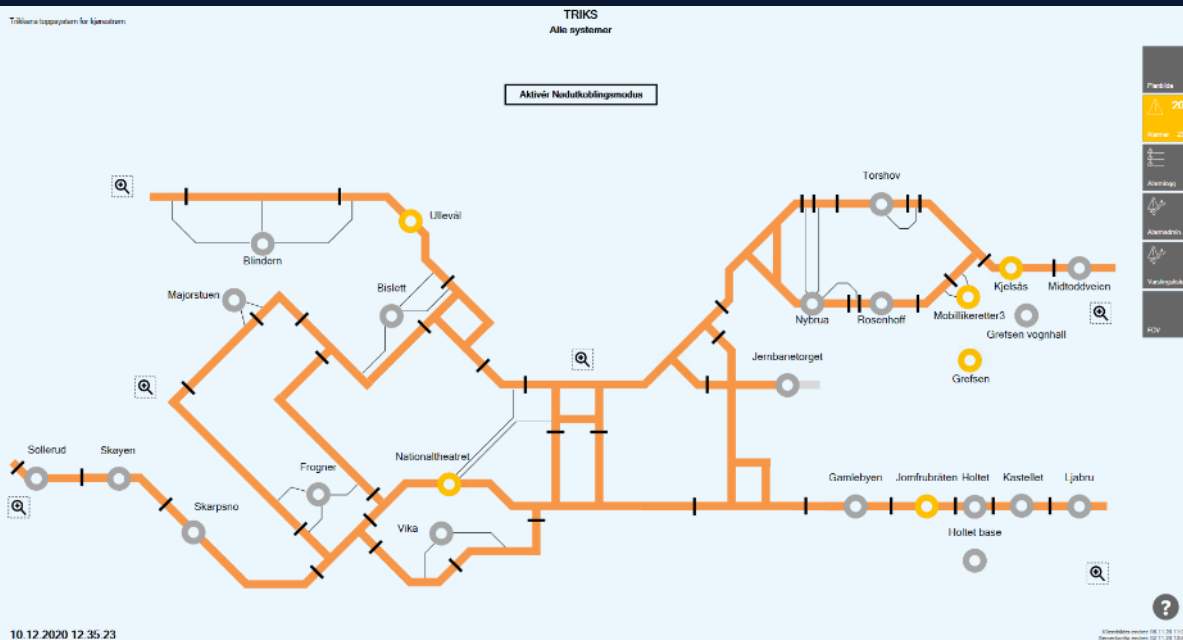
- Delivered by Malthe Winje
- Integration of 3000 subsystems
- Follo banen, will be integrated.





Oslo Sporveier (Tram and Metro)

Technical installations are controlled from the Traffic control center in Oslo



NYTT PRODUKT FRA MALTHE WINJE ENERGITEKNIKK AS

BESS står för **B**attery **E**nergy **S**torage **S**ystem – ett system som lagrar elektrisk energi i batterier och levererar den tillbaka vid behov. Detta används bland annat för att stabilisera elnätet, integrera sol- och vindkraft, hantera effekttoppar och ge reservkraft.

BESS

WHAT A BESS LOOKS LIKE AND HOW IT WORKS

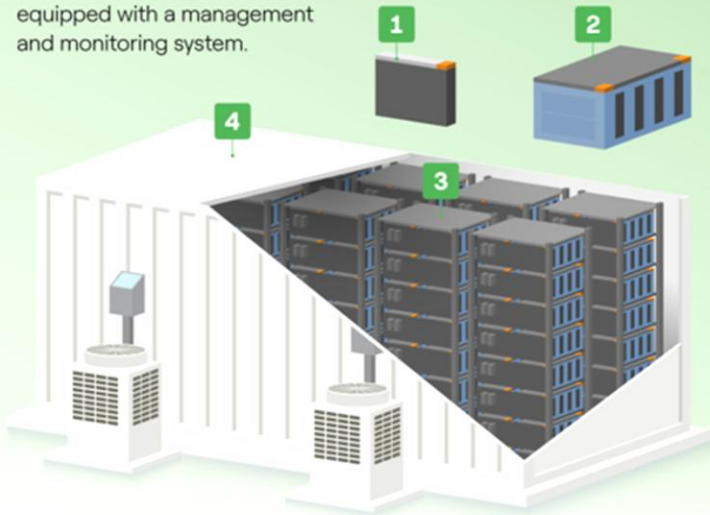
1 CELLS are the basic devices that make up a BESS. **They transform electrical energy into chemical energy** and vice versa, thereby enabling its storage.

2 MODULES are **sets of cells** assembled in a container. They are electrically connected and equipped with a management and monitoring system.

3 RACKS are sets of modules connected together.

4 CONTAINER.

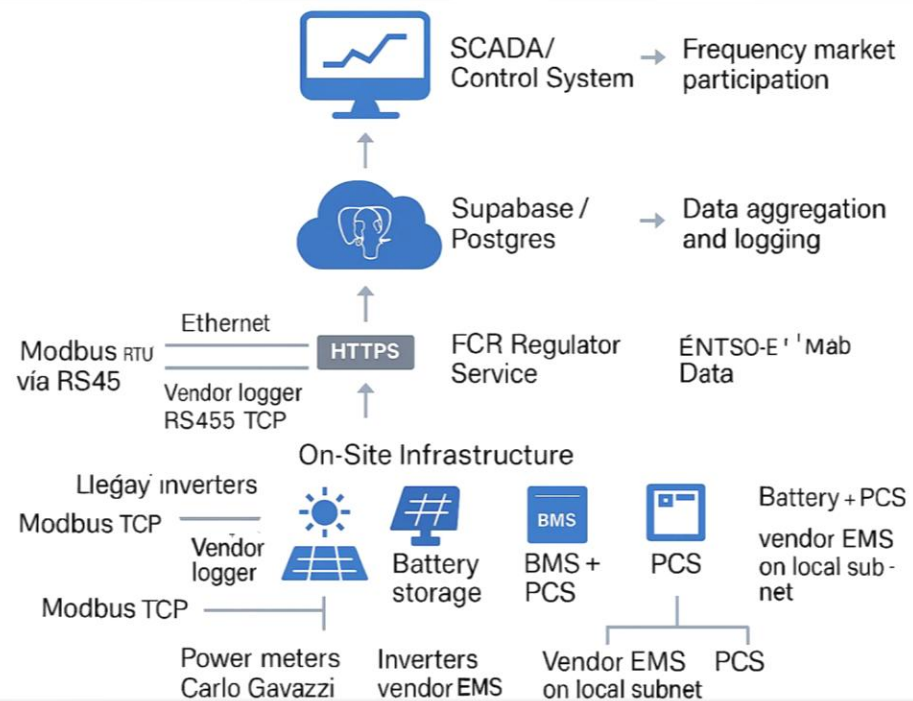
The container, which is suitable for outdoor installation, **houses a number of racks and all the management devices** necessary for the operation of a BESS, including safety, security, management and control systems.



HOW A BATTERY WORKS

In the charging phase, ions (i.e., electrically charged particles) are accumulated in one of the battery's two poles. In the discharge phase they then flow to the other pole. This movement of ions within the cell enables electrons to flow into the external circuit, thus generating electric current.

Kontrakter signert i Finland
2* 10 MW/37 MWh.





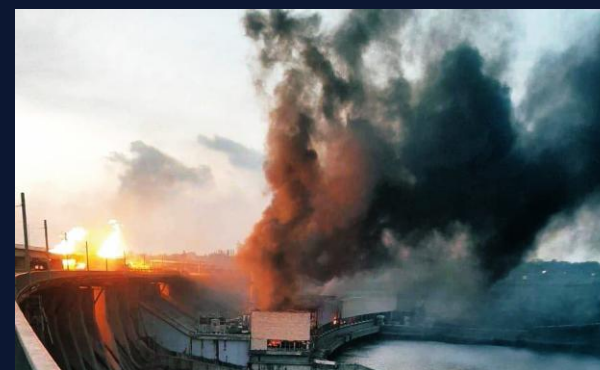
MWIP Ukraine + Africa

- Acquire old brownfield projects that are in production or with existing dams.
- Refurnish dams with new mechanical equipment
- Build an organization to maintain and operate a series a SHPP's
- A long-term commitment for Ukraine, we are in it for the long run:

Brownfields, reconstruction and greenfield projects.

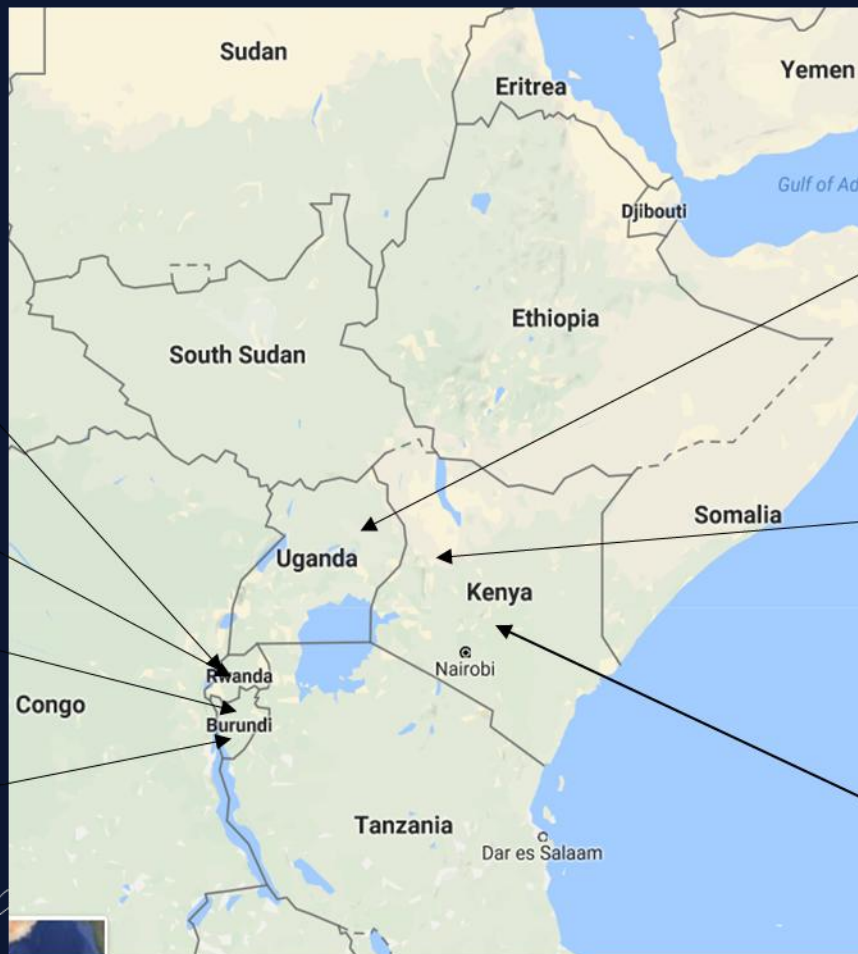
Project List – Stage 1 Hydropower Assets

Name	Capacity	Status & Comments
Voronevska	200 kW	Out of commission – Stopped production in 1962
Sabarivska	1.05 MW	Operational, electromechanical equipment from 1920s, 8760 full load hours
Zolotolypska	200 kW	Existing production, refurbishment
Ivano Frankivsk	200 kW	Existing production, refurbishment
Ternopil	200 kW	Old mill, repurposed for hydro, civil construction and grid conn completed.
Gulsk	630 kW	Out of commission – abandoned watermill
Zagreblia	230 kW	Old mill, repurposed for hydro
Voskodavy	330 kW	Old mill, repurposed for hydro
Zvyahel	500 kW	Old mill, repurposed for hydro





Malthe Winje InfraPower (Eksport)



Rwanda:
Agatobwe
0.4 MW
operating

Rwanda:
Rucanzogera
1.9 MW
Capex 7.7
MUSD

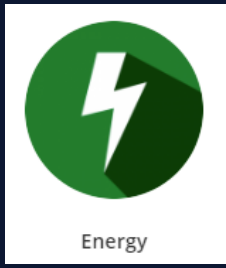
Burundi:
WAGA
1.3-2 MW
Capex 7-9.7
MUSD

Burundi:
Pipeline 25.1
MW
Capex est.
85.2 MUSD

Uganda
Simu and Sisi
15.5 MW
Capex est.
17.7 MUSD

Kenya:
Maresi
7.5 MW
Capex est. 17.7
MUSD

Kenya:
Mbiri
and Gitie
15.4 MW
Capex est. 40.8
MUSD



Transmission and Distribution

200 MVA Trafo to Tallin, Estonia



Products for HV stations



Rectifier to Finland

