

# Energy Storage Solutions

Make the world greener together

WESTRAFO



# SOME PROJECTS

*Our applied expertise*

GERMANY 2019

13 battery storage containers 45ft

Nominal Power at poi: 50MW

Nominal Energy at poi: 50MWh

Energy storage

SCOTLAND 2022

2 battery storage containers 45ft-

Nominal Power at poi: >8 MW

Nominal Energy at poi: >8,6 MWh

Energy storage

GERMANY 2022

3 battery storage containers 40ft

Nominal Power at poi: 12 MW

Nominal Energy at poi: 8 MWh

Energy storage

ITALY 2022

9 MVS-STP units including

2500 kVA or 3000 kVA 20/0,66 kV

transformer

Solar energy substation optimized for

inverter load

HONDURAS 2019

4 MVS-STP units including a

1350 kVA 33/0,48 kV transformer

Solar energy substation optimized for

inverter load

MAYREAU ISLAND 2019

2 battery storage containers

20ft ISO

Energy storage

CONGO 2018

2 MVS-STP units including a

630 kVA 20/0,4 kV transformer

Solar energy substation optimized for

inverter load

ARGENTINA 2020

1 MVS-STP unit including a

1800 kVA 33/0.47 kV transformer

Solar energy substation optimized for

inverter load

MADAGASCAR 2021

2 MVS-STP units including a

1600 kVA 20/0,4 kV transformer

Solar energy substation optimized for

inverter load

AUSTRALIA 2022

2 battery storage containers 40ft HC

Nominal Power at poi: 10 MW

Nominal Energy at poi: 5 MWh

Energy storage







# BATTERY STORAGE

## *The right solution for every application*

### DUCTING SYSTEM

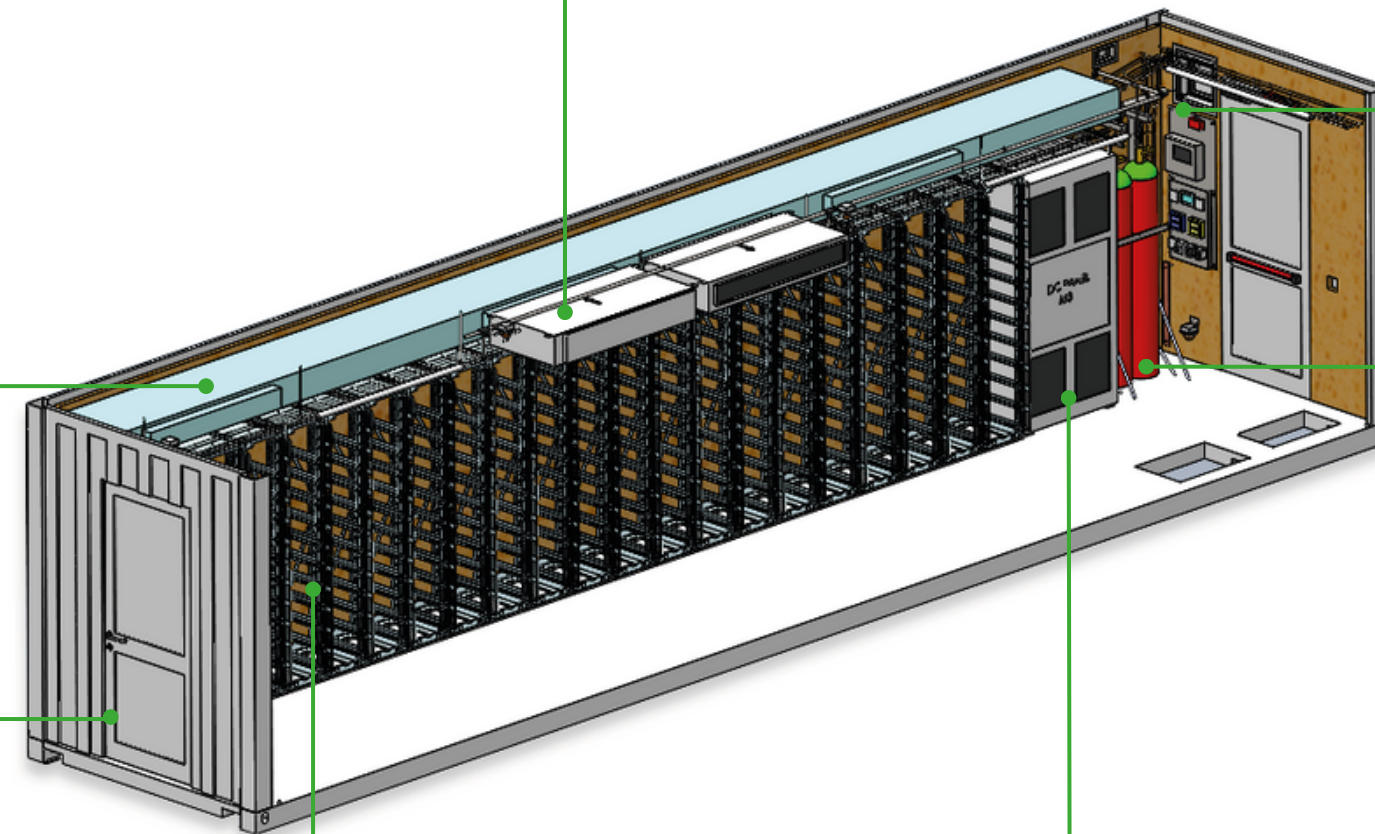
- Aluminium panels and PUR (water-foamed polyurethane, CFC- and HCFC-free)
- Fire resistant materials (starting from B1 class)
- Customised solutions for an equal air flow distribution throughout the container

### HVAC

- Customised solutions selected according to the whole equipment thermal losses, the batteries heat dissipation and the environmental conditions
- Cooperation with well-known brands
- Continuous R&D for new and innovative solutions to optimize space

### AUXILIARIES

- Lights
- Sockets
- Humidity and temperature sensors
- UPS according to customer requirement



### CONTAINER BODY

- Designed in accordance with all local standards
- Designed to withstand loads of snow, wind (or other) and local environmental conditions
- CSC certification for maritime transport, if required
- The installed materials are fire resistant starting from B1 class
- Walls, roof and floor insulation, to avoid condensation and to reduce thermal losses

### BATTERY RACKS

- A completely customised layout designed according to the rack type, to optimize the space inside the container and increase the installed energy

### AC AND DC PANELS

- AC and DC panels designed by WESTRAFO, according to customer requirements
- Study of local regulations for CD development
- Control system and supply system
- Particular attention to safety management

### F&G

- Fire suppression system designed for batteries technology
- Fire detection system supplied from the main brands, to ensure protection against fire hazard
- ASD system (aspirating smoke detection), on request

# MEDIUM VOLTAGE SUBSTATIONS

*Customised to your plant's demands*

## MEDIUM VOLTAGE COMPARTMENT

- MV switchgear from the well known brands
- Auxiliary cabinet designed by WESTRAFO
- Lights, sockets, protection and safety devices on request

## TRANSFORMER COMPARTMENT

- Transformer WESTRAFO
- Transformer side doors interlocked with the MV panel on request

## CONTAINER BODY

- 10ft/20ft/40ft container structure, skid or concrete solutions
- Complete factory assembled unit
- UV-light, weather, wear-mineral oil-salty water and impact-resistant
- CSC certification for maritime shipping, on request

## LOW VOLTAGE COMPARTMENT

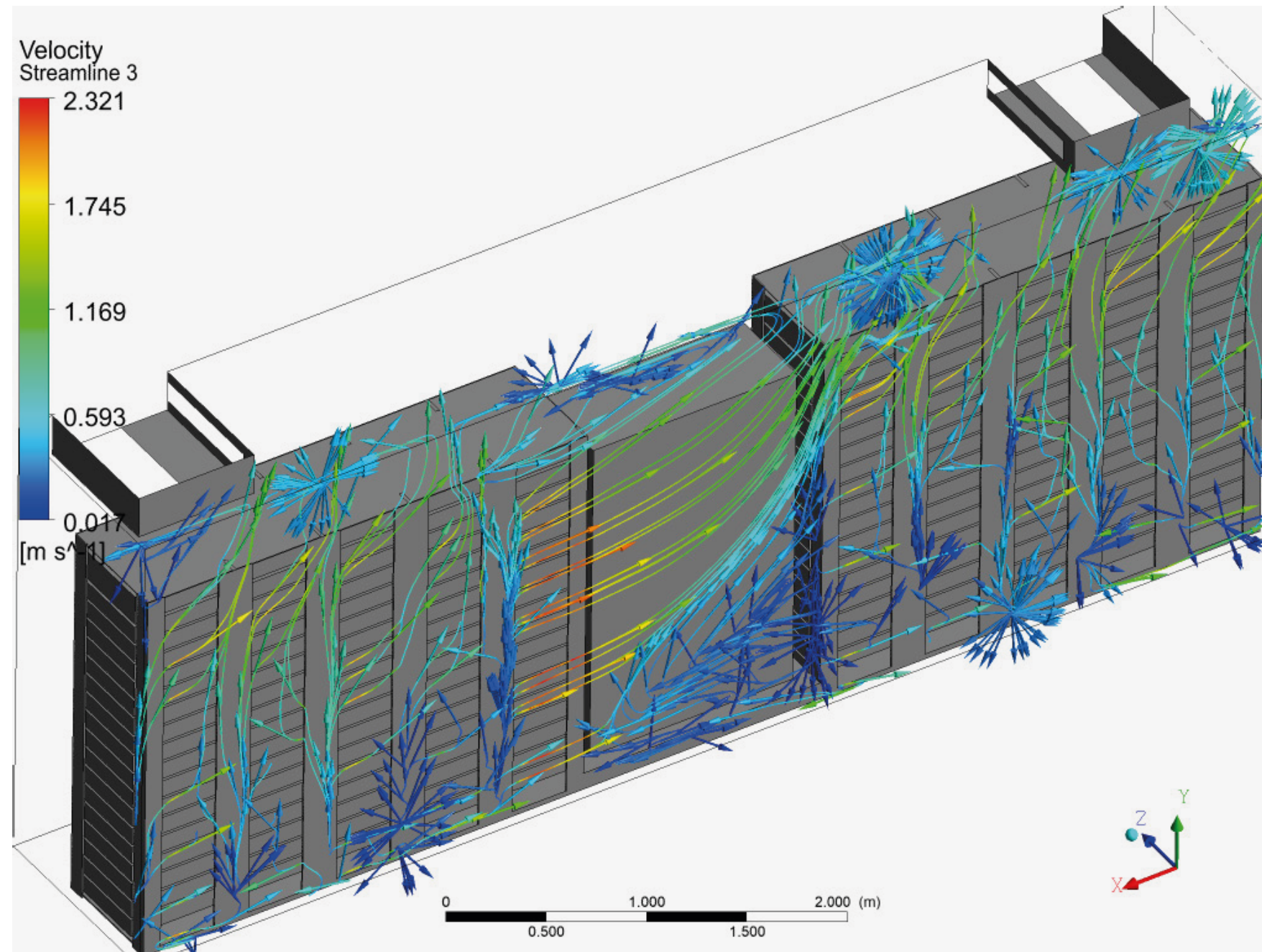
- LV panel designed by WESTRAFO
- Main switch and fuses switch-disconnector IP20
- Lights, sockets, protection and safety devices on request





# OUR SERVICES

*Designed to achieve maximum performances*



## → ENGINEERING STUDIES BASED ON A PROJECT SPECIFIC LAYOUT

- CFD simulation
- Structural calculation and design
- Customised circuit diagram designed by WESTRAFO

## → TURNKEY PROJECTS

- A 360° flexibility in design phase
- On-site activities performed by a team of experts
- Pre- and after-sales assistance

## → HIGH QUALITY

- Installation of components from well-known brands
- Stringent product quality check system



# SUSTAINABLE BUSINESS SOLUTIONS TO CREATE A BETTER TOMORROW

Our mission is innovation and flexibility in design of sustainable products, matching the energy market needs and latest trends with the improvement of quality standards in the energy production.

Contact us: [sales@westrafo.com](mailto:sales@westrafo.com)



WESTRAFO