



# Shore Connection Power for Aquaculture Production

Changing the power supply at aquaculture farms from diesel electric generators to a shore connection supply provides considerable economic and environmental savings.

No longer needing to run generators continuously on the farm will not only mean a huge reduction in diesel costs; maintenance costs will also be significantly reduced as a result of the main power source no longer being a diesel electric generator. SO<sub>x</sub> and NO<sub>x</sub> emissions are also eliminated.

We can supply everything you need to switch your diesel-powered aquaculture farm to a more environmentally friendly and cost-efficient production site. Our solution includes transformers, switchboards, control stations, cables, working hours, installation, calculations, documentation, commissioning or a combination of these. We can change your system (refit) or fit out a completely new aquaculture farm from start to finish.

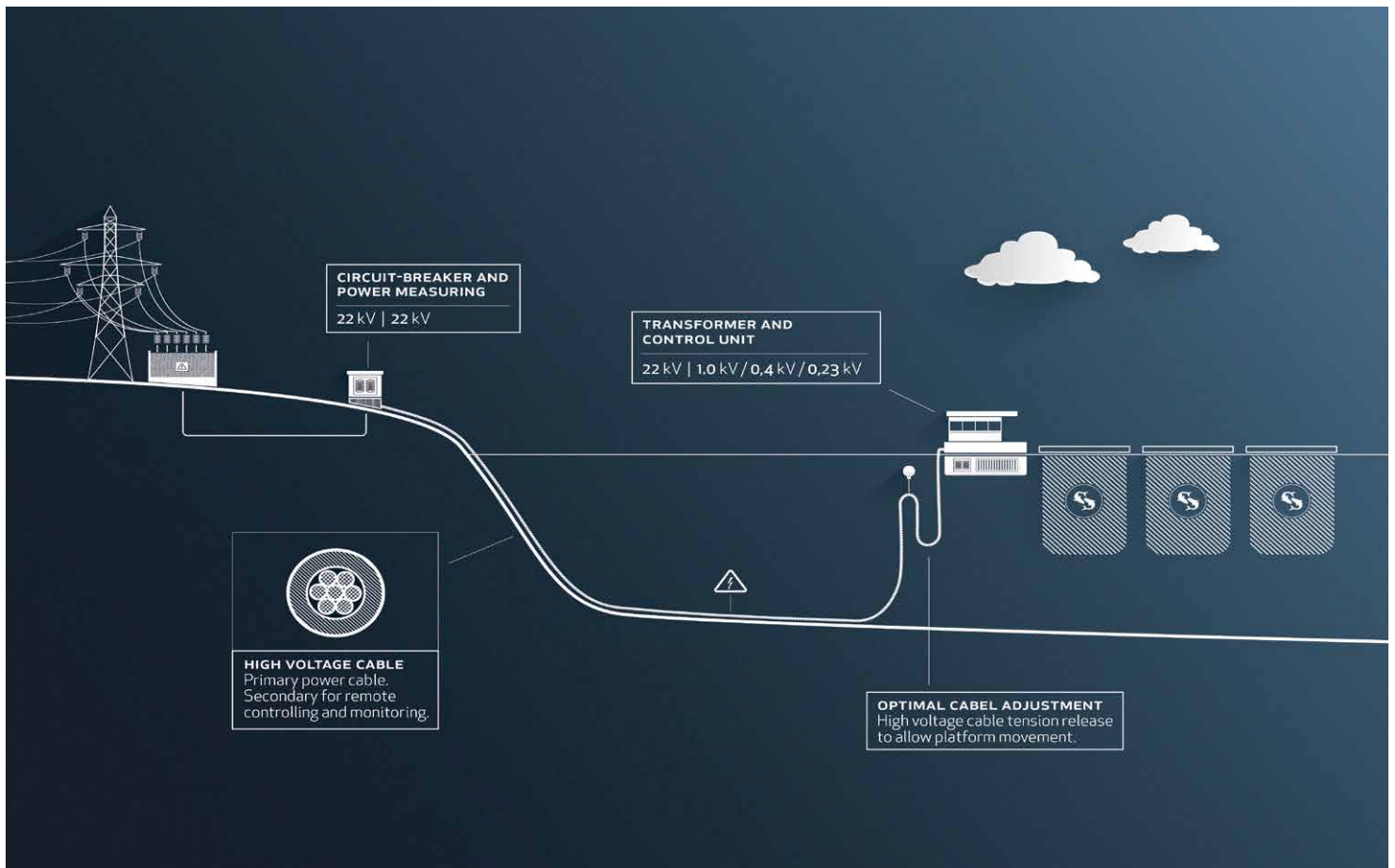
Another big advantage is the option of moving the monitoring and control stations from the platform to shore. Fibre-optic communications running in parallel with the power cables provide a stable connection.

From the shore supply, we install a transformer (if required) and a state-of-the-art switchboard solution with all the required safeguards, monitoring, alarm system and synchronization (with emergency power if required). The monitoring station can be integrated as

part of the switchboard or as a separate unit (console). From the switchboard, the power cable runs into the sea and to the aquaculture farm. A tension-release system allows the cable to follow the movements of the platform and the sea. On the platform, the cable is connected to a second switchboard/cabinet for distribution to all the different systems. This switchboard can also be integrated and combined with a UPS and/or emergency generator solution for optimal reliability.

Our solution allows savings of more than 60,000 litres of diesel per year for a typical aquaculture farm. (The estimated average power consumption for an aquaculture farm is 300,000–500,000 kWh a year; 500,000 kWh is equivalent to more than 60,000 litres of diesel.)

Elpro Solutions offers tailor-made solutions for aquaculture farms of any type and size.



## FEATURES

- Onshore electric power instead of diesel generators eliminates NOx and SOx emissions
- No diesel or maintenance means lower generator operating costs
- Low sound emissions and better work environment
- Secondary voltage options: 0.11kV–1kV
- Options to upgrade to higher overall reliability by combining onshore connection with UPS and/or emergency generator solutions combining onshore connection with UPS solutions.

## WE PROVIDE

- Highly skilled engineers with many years' experience within the maritime sector
- Engineering, installation, testing and commissioning
- Project management from A to Z
- Tailor-made solutions
- Specification compiled in close cooperation with client
- Fast and reliable delivery time
- A single point of contact

## ABOUT ELPRO

The Elpro Group consists of three well-integrated business units: Solutions, Electro and Installation. Elpro has more than 30 years' experience within the electrotechnical and electromechanical sectors. A wide spread of clients across our project portfolio has given us extensive problem-solving skills and industry knowledge. Talk to an experienced partner about your next project – talk to Elpro!