

## Trends

Monopile size ↑

Hammer size ↑

Noise ↑

Hammers & noise mitigation € ↑↑

Other foundations #piles ↑



## Our solution

Make less noise by driving piles differently.

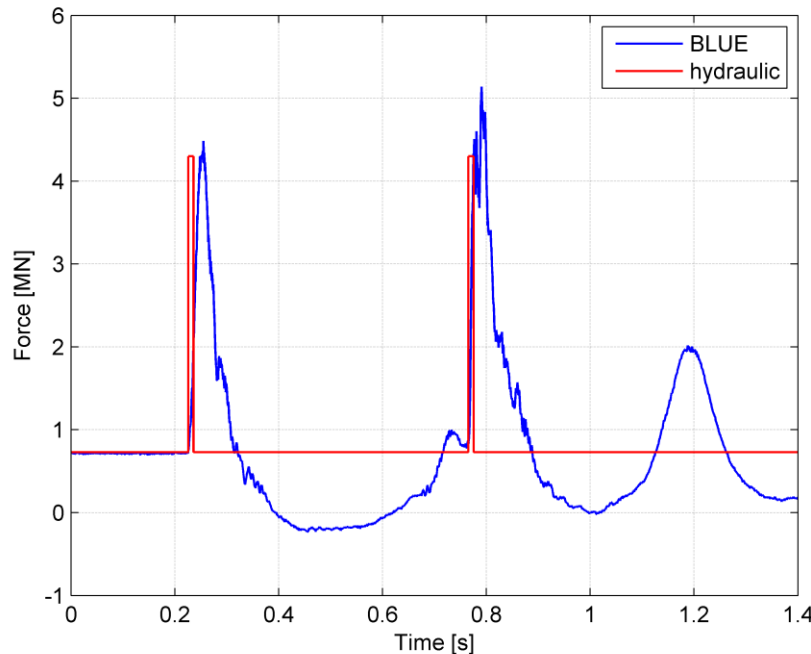
## Requirements

Pile driving force > soil resistance

Force duration long enough

Financially and technically competitive

# BLUE piling technology



Longer force duration  
more silent  
more pile set  
lower tensile forces  
➔ Less fatigue

Gradual force build-up  
lower accelerations



## Planning

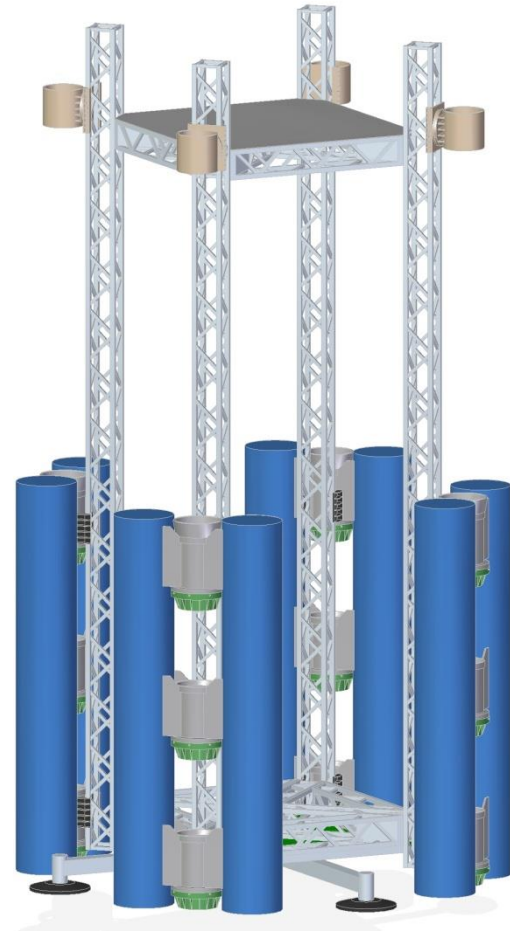


2014  
Energy 600-800 kJ



2015  
Energy 1500-2000 kJ

## Future applications





# Results & Summary

More silent (max SEL 152 dB @ 70 m!)

Broad range of applications

(XL) monopiles

jacket piles

concrete piles?!

Cost effective!

