HYDRODYNAMIC ENGINEER

About us
SolarDuck is a fast-growing, Dutch-Norwegian cleantech company pioneering the technology to bring solar PV to the seas. The company (a spin-off of Damen Shipyards, a leading Dutch shipbuilder) was founded in 2018 by a team of experienced entrepreneurs from the maritime industry. SolarDuck is headquartered in the Netherlands and has presence in Japan and Norway.

Fueled by the vision to Electrify the World with Offshore Floating Solar to solve the problem of land scarcity, SolarDuck has developed a unique technology to bring solar PV, the fastest-growing source of renewable energy, offshore. In this way, enabling energy consumers across the sunbelt and beyond to access affordable, reliable, and sustainable energy and providing energy independence as added benefit.

SolarDuck´s technology and organization are maturing rapidly. A year ago, the company launched its first demonstrator in the Netherlands. Later next year, SolarDuck will be launching a full-scale pilot in the North Sea, and the commercial team is already busy establishing strategic partnerships and developing SolarDuck´s first commercial, grid-scale projects.

Rapid growth requires a team which identifies with the company´s vision, gets energized by solving meaningful challenges and has the capacity to execute. If you feel this is a team for you, then we would like to get to know you!

The role
As hydrodynamic engineer you are responsible for the everything that has to do with the interaction between the structure and the environment which is dominated by waves. You will be one of two hydrodynamic engineers in the SolarDuck team and you should be able work well with each other as the rest of the multi-disciplinary team of engineers containing for example structural, mechanical and electrical engineers.

Due to the vast amount bodies, components, and environmental properties we have automated a large part of our work in parametric models and programmed analysis procedures. This allows us to make quick design iterations and saves time. You should enjoy automating your work whilst having the cunningness to perform logic sensitivity checks and help design new methods. If you see something is wrong, you are open and honest in your communication. You are a quick learner and enjoy performing a varying range of tasks and analyses.

Key responsibilities
As a hydrodynamic engineer you will be responsible for:

- Optimizing the plant and platforms design through simulation of the platform's behavior in waves, physical model testing and in-field measurements
- Mooring design, analysis, and installation advice and support
- Export cable design, analysis, and installation advice and support
- Physical model testing and validation / improvement of simulation models
- Analyses and reporting needed for the hydrodynamic aspects of certification (ULS, ALS, FLS)
- Maintaining and improving SolarDuck's inhouse developed analysis tools and using those for site-analyses

Skill & experience
What you deliver is just as important as how you deliver at SolarDuck. We are looking for a candidate with the following background:

- MSc or BSc degree in maritime, offshore engineering (or another degree that could be eligible in the combination with work experience for example civil, mechanical, or aero engineering)
- At least 3+ years of experience in a similar role (there are options for Jr positions if there is a good match with other aspects)
- Familiar with OrcaFlex or similar software and an affinity with programming (preferably in python)
- Structuring and visualizing large data sets
- Good understanding of physics and statistics
- Good team player

What we offer
In SolarDuck you will be part of a fast growing, mission-driven team which works tirelessly to electrify the world with offshore floating solar! We are proud of our remarkable team of professionals, keen to share and learn from each other, fostering an inclusive work environment, where people can be themselves and every idea is valued. SolarDuck offer the unique opportunity to continue to invest in your personal and professional growth on the job and through structured training and learning opportunities. In addition, we offer an attractive compensation package, including a share certificate program and a competitive salary.

Further, we aim to have a diverse team and therefore encourage all qualified candidates to apply for this position.

Apply now
Please register your CV and cover letter when applying to the position.

Excited and or more questions? Please contact us at career@solarduck.tech.

SolarDuck is currently based in Tiel but will be move soon to Rotterdam.