Fast charging of oil platforms using folding containers

Are offshore floating charging stations a viable option for sustainable marine transportation?
Offshore charging infrastructure for electric vessels is one of the focal areas for sustainable marine transportation. Pervasive deployment of electric vehicles is restrained by travel range and battery energy capacity. This paper brings to bear the exigency of offshore floating charging stations (FCSs) that charge/recharge electric vessels at sea.

What is an offshore floating charging station (FCS)?
The novel concept of an offshore floating charging station (FCS) was previously reported in 2019 (Sruthy et al.,2019). FCS is an autonomous system focused on reducing carbon emissions in the marine sector,unified with RES and energy storage solutions (ESSs),for sustainable development (Sruthy et al.,2019).

Are offshore charging systems a reality?
Offshore charging systems may be in their infancy,but with continued development and collaboration,workable and practical solutions away from port could soon become a reality. Aside from the sustainability and efficiency benefits of marine electric powertrains,zero-emission vessels improve the air quality in harbors and ports.

Is offshore charging technology ready?
In terms of market readiness,McCarthy says,offshore charging technology is currently at a technical readiness level of around 6 or 7. "TRL 6 or 7 is when you're starting to put things into real working conditions to see what happens," he explains.

Our results suggest charging in time periods with lower energy prices, effectively shifting mid-day charging to off-peak hours for demand ...

Why choose LZY"s solar container power systems Our solar containers ensure fast deployment, scalability, customization, cost savings, reliability, and sustainability for efficient ...

Our results suggest charging in time periods with lower energy prices, effectively shifting mid-day charging to off-peak hours for demand response (e.g. early-day cooling), while ...

This study seeks to explore the effectiveness of employing foldable containers (FLDs) in liner shipping to reduce relocation and the empty containers and bunker costs (BCs) ...

VLFS platforms, with their stability and load-bearing capacity in open waters, are particularly well-suited to host S2S systems, resulting in Platform-to-Ship (P2S) capabilities ...

INTRODUCTION Floating Storage and Offloading unit (FSO) is vessels serving as floating storage and offloading points. Designed to receive and store oil from its wells, nearby ...

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Potential needs for future research include to explore technical advancements such as deepwater floating platforms that can increase the feasibility of offshore charging and high ...

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networks. Compact, modular, and built with ...

Global climate changes evoked by carbon emissions have stimulated genuine interest in sustainable technology apropos the marine transportation sector. Offshore charging ...

This paper presents an octagonal prism-based wireless charging container with multiple folding coils winding equidistantly around the surface of the container.

Housed within a durable 10-foot sea container, it immediately integrates into existing energy or charging networks. Compact, modular, and built with sustainability at its core, the Charge ...

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