

ABSTRACT

The present invention provides an apparatus for reducing greenhouse gas emission in a vessel including a seawater supplying unit 110 for supplying seawater, an absorbent liquid circulation supplying unit 120 for providing and circulating absorbent liquid that absorbs CO₂, an absorption tower 130 including a CO₂ removing unit 131 that cools exhaust gas emitted from a vessel engine 10 by reacting with seawater and reacts cooled exhaust gas with an absorbent liquid to change CO₂ into an aqueous carbonate solution and to collect CO₂, an absorbent liquid regenerating unit 140 for reacting an aqueous carbonate solution with bivalent metal oxide or bivalent metal hydroxide to regenerate an absorbent liquid and generating sediment, and an outboard emission unit 150 for separating sediment to be emitted to the outside of a vessel by seawater. Accordingly, CO₂ is mineralized to be emitted to the outside of a vessel and corrosion of a separator 152 occurring due to seawater is minimized.