

Supplementary Materials

Table S1. Existence of strategies for reducing GHG emissions in mega ports.

	Port	Country	Strategies for reducing GHG emissions in mega ports							References
			Alternative fuel supply	On-shore Power Supply	Differentiated port fees	Low Emission Zones	GHG reduction targets	Digitalization systems	Renewable energy generation	
1	Shanghai	China	Yes	Yes	No	Yes	Yes	N/F*	Yes (N/S**)	[1], [2]
2	Singapore	Republic of Singapore	Yes	Yes	Yes	Yes	Yes	Yes	Yes (solar)	[3], [4]
3	Ningbo-Zhoushan	China	Yes	Yes	No	Yes	Yes	Yes	N/F	[5], [6]
4	Shenzhen	China	Yes	Yes	Yes	Yes	Yes	N/F	N/F	[7]
5	Guangzhou Harbor	China	Yes	Yes	N/F	Yes	Yes	Yes	Yes (N/S)	[8]
6	Busan	South Korea	Yes	Yes	Yes	Yes	Yes	Yes	Yes (N/S)	[9], [10]
7	Qingdao	China	No	Yes	No	Yes	Yes	N/F	N/F	[7]
8	Hong Kong, S.A.R.	China	Yes	Yes	Yes	Yes	Yes	N/F	N/F	[7]
9	Tianjin	China	No	Yes	No	Yes	Yes	N/F	N/F	[11]
10	Rotterdam	The Netherlands	Yes	Yes	Yes	Yes	Yes	Yes	Yes (wind)	[12], [13]
11	Jebel Ali, Dubai	United Arab Emirates	N/F	Yes	No	N/F	Yes	Yes	Yes (solar)	[14]
12	Port Klang	Malaysia	Yes	Yes	No	N/F	Yes	Yes	Yes (solar)	[15]
13	Antwerp	Belgium	Yes	Yes	Yes	Yes	Yes	Yes	Yes (solar & wind)	[16]
14	Xiamen	China	N/F	N/F	No	Yes	Yes	N/F	No	[17], [18]
15	Kaohsiung, Taiwan	China	Yes	Yes	No	Yes	Yes	Yes	Yes (solar)	[19]
16	Los Angeles	U.S.A.	Yes	Yes	Yes	Yes	Yes	Yes	Yes (solar)	[20]
17	Tanjung Pelepas	Malaysia	Yes	Yes	No	N/F	Yes	Yes	Yes (solar)	[21]
18	Hamburg	Germany	Yes	Yes	Yes	Yes	Yes	Yes	Yes (solar)	[22], [23]
19	Long Beach	U.S.A.	Yes	Yes	Yes	Yes	Yes	Yes	Yes (solar)	[24]
20	Keihin Ports	Japan	N/F	Yes	No	N/F	Yes	N/F	N/F	[25]
21	Dalian	China	Yes	Yes	No	Yes	Yes	N/F	N/F	[26]
22	Laem Chabang	Thailand	N/F	N/F	No	N/F	Yes	Yes	N/F	[27]
23	New York-New Jersey	U.S.A.)	Yes	Yes	Yes	Yes	Yes	Yes	Yes (solar)	[28], [29]
24	Suzhou	China	N/F	N/F	No	Yes	Yes	N/F	N/F	[30]
25	Ho Chi Minh City, Saigon	Vietnam	N/F	N/F	No	N/F	Yes	Yes	No	[31]
26	Colombo	Sri Lanka	N/F	Yes	No	N/F	Yes	Yes	N/F	[32]
27	Tanjung Priok, Jakarta	Indonesia	N/F	N/F	No	N/F	Yes	Yes	N/F	[33]
28	Yingkou	China	N/F	N/F	N/F	Yes	Yes	N/F	No	[34], [35]
29	Valencia	Spain	Yes	Yes	Yes	Yes	Yes	Yes	Yes (solar)	[36]
30	Piraeus	Greece	Yes	Yes	No	Yes	Yes	Yes	Yes (solar)	[37], [38]

\*N/F: Not found.

\*\*N/S: Not specified.

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