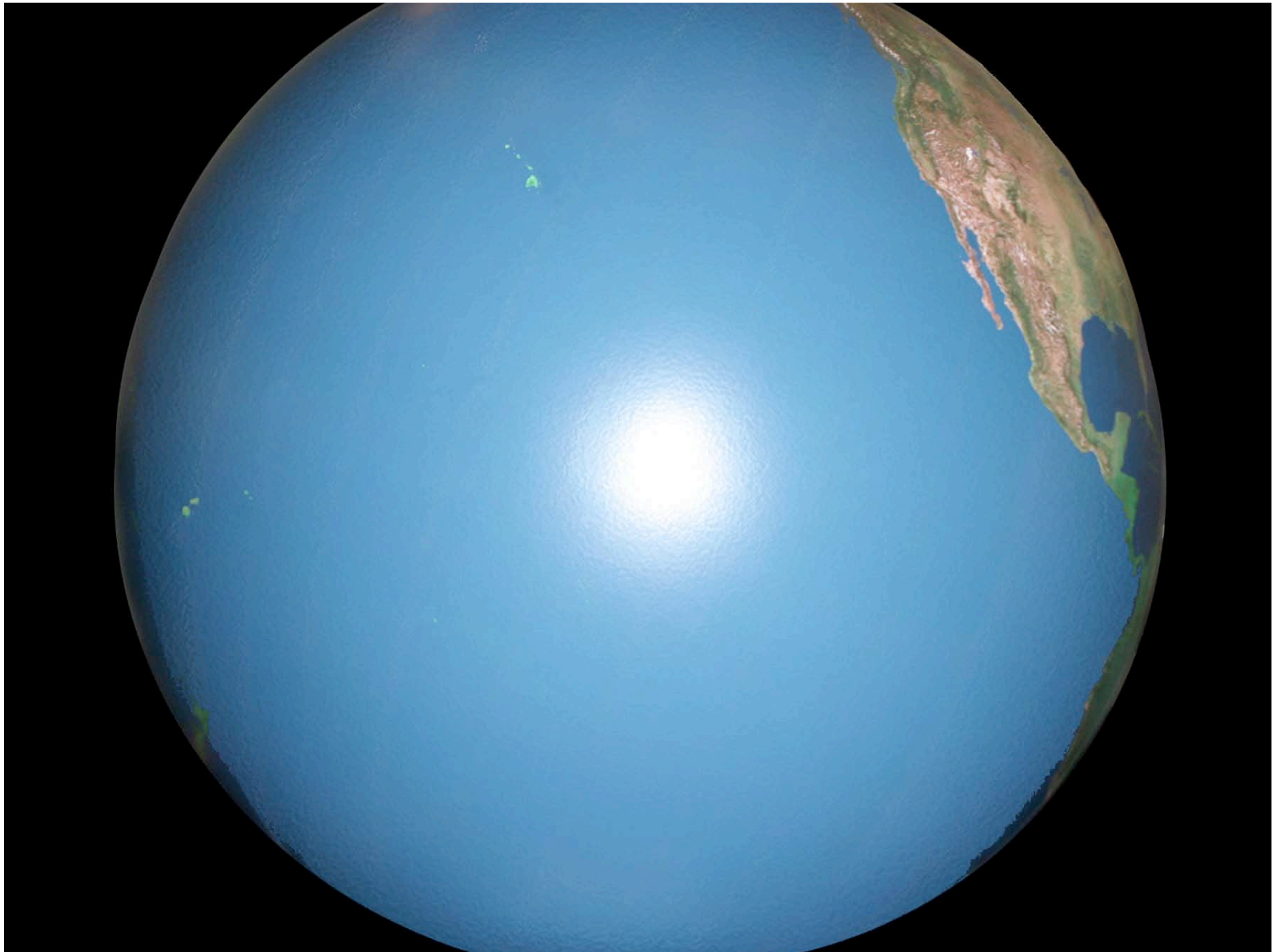




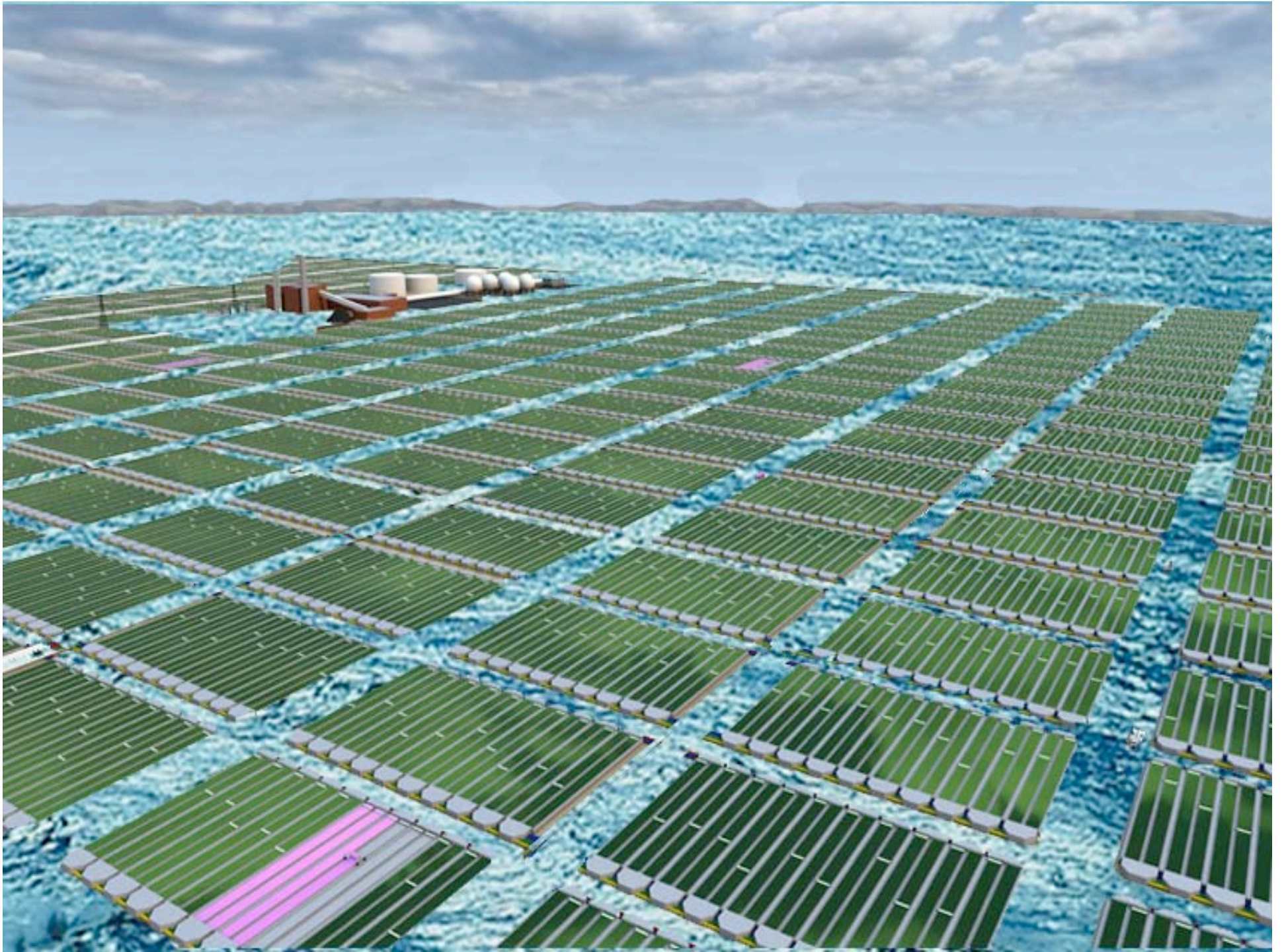
Wind, Sea, & Algae
(thought experiment)

Jonathan Trent
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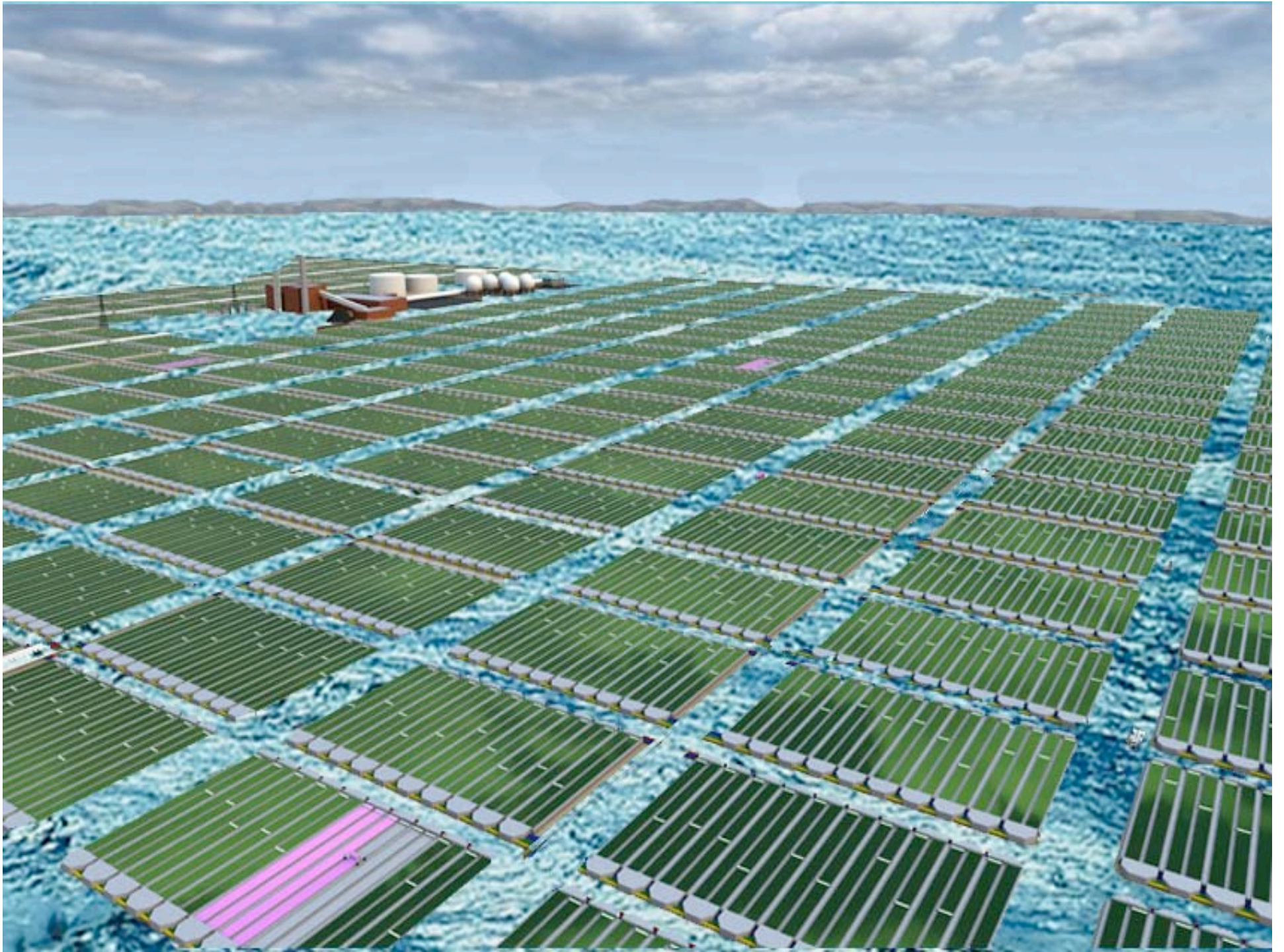












Marinas and Docks

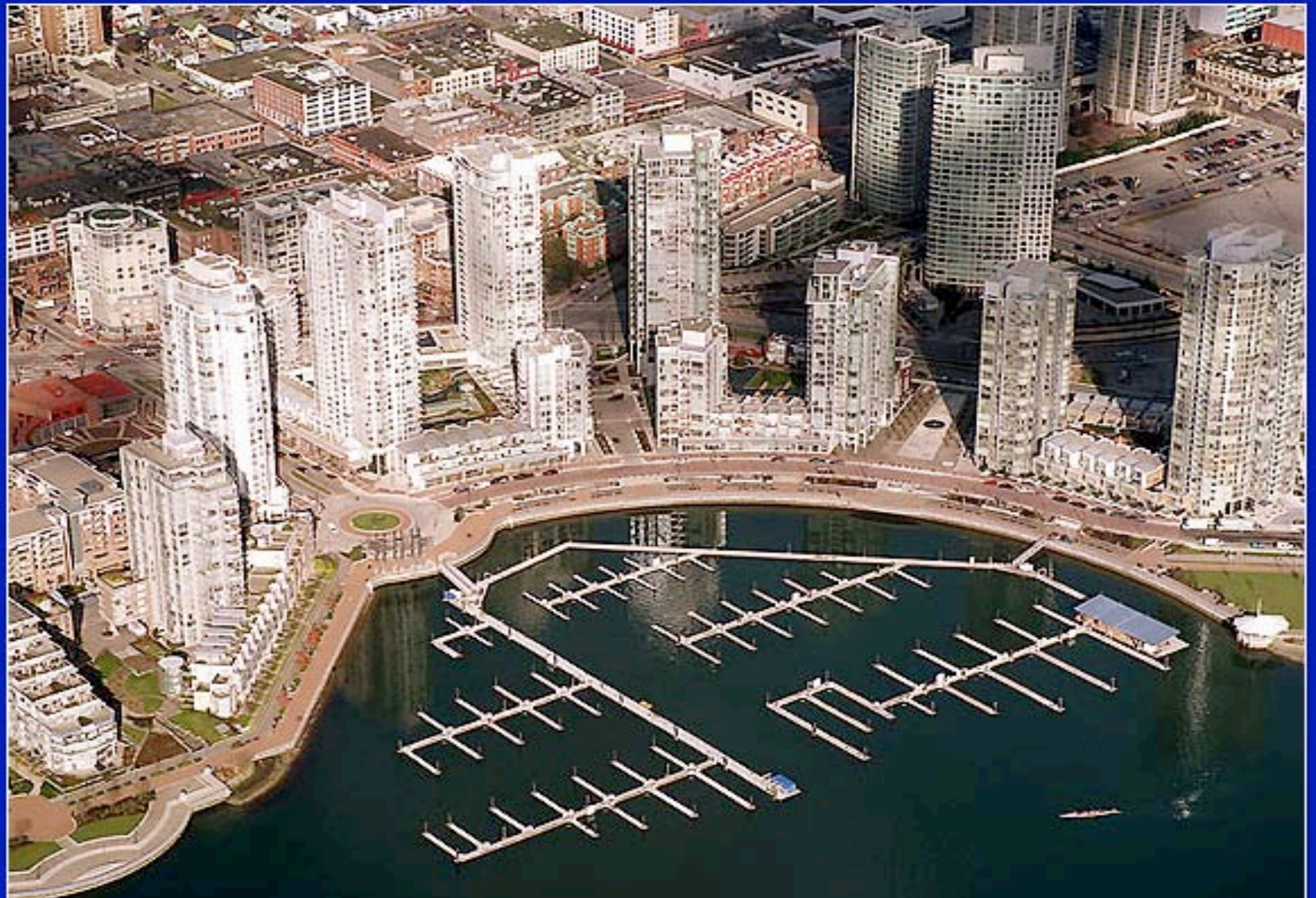






Fig. 3: The blue mussel *Mytilus edulis*



Fig. 4: The oyster *Crassostrea gigas* (juveniles)



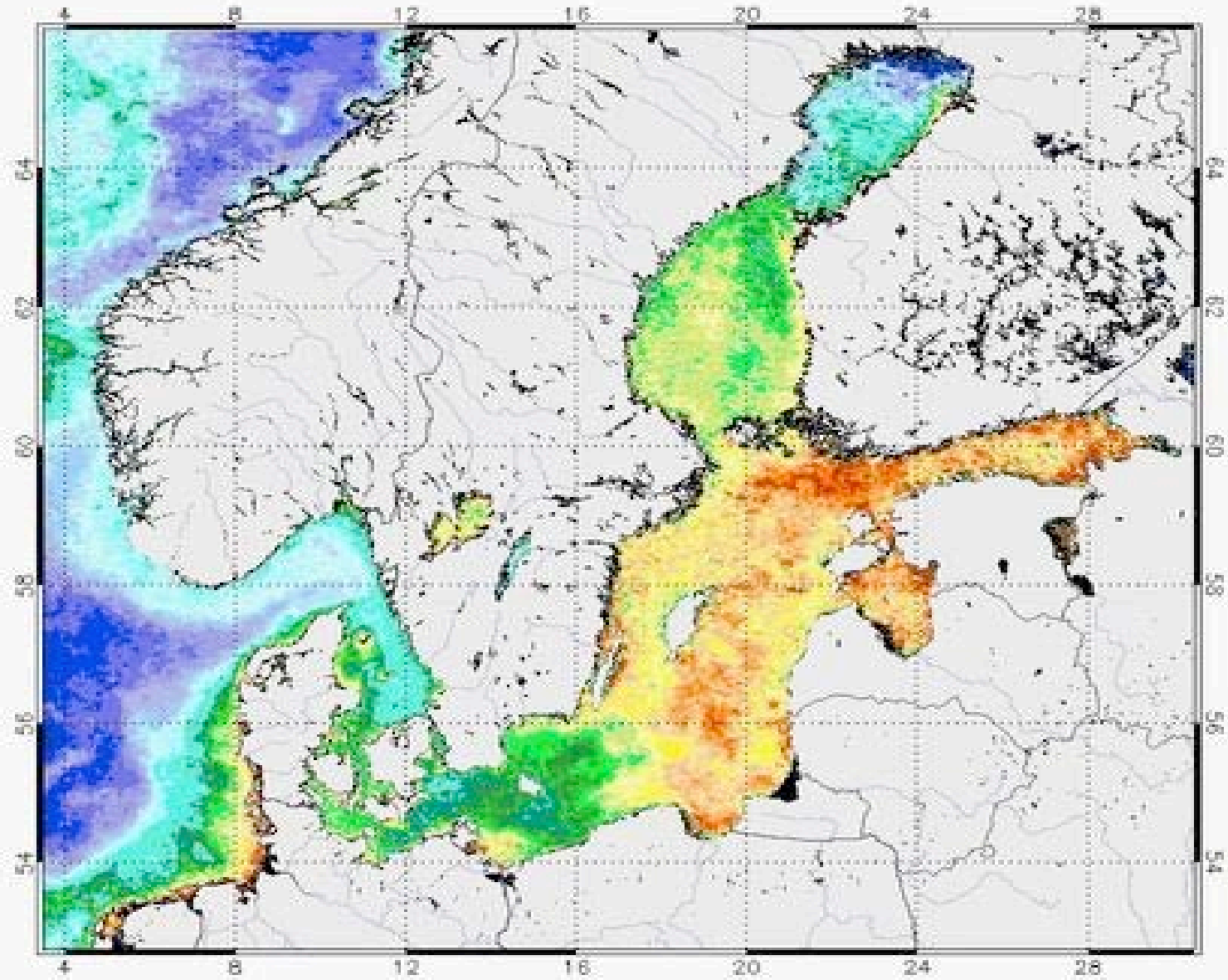
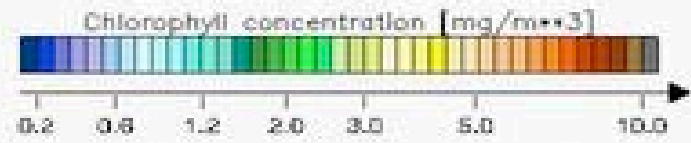
Fig. 5: The macroalgae *Laminaria saccharina*



Fig. 6: The macroalgae *Palmaria palmata*



Baltic Sea Chl-a 2005 July-August Mean





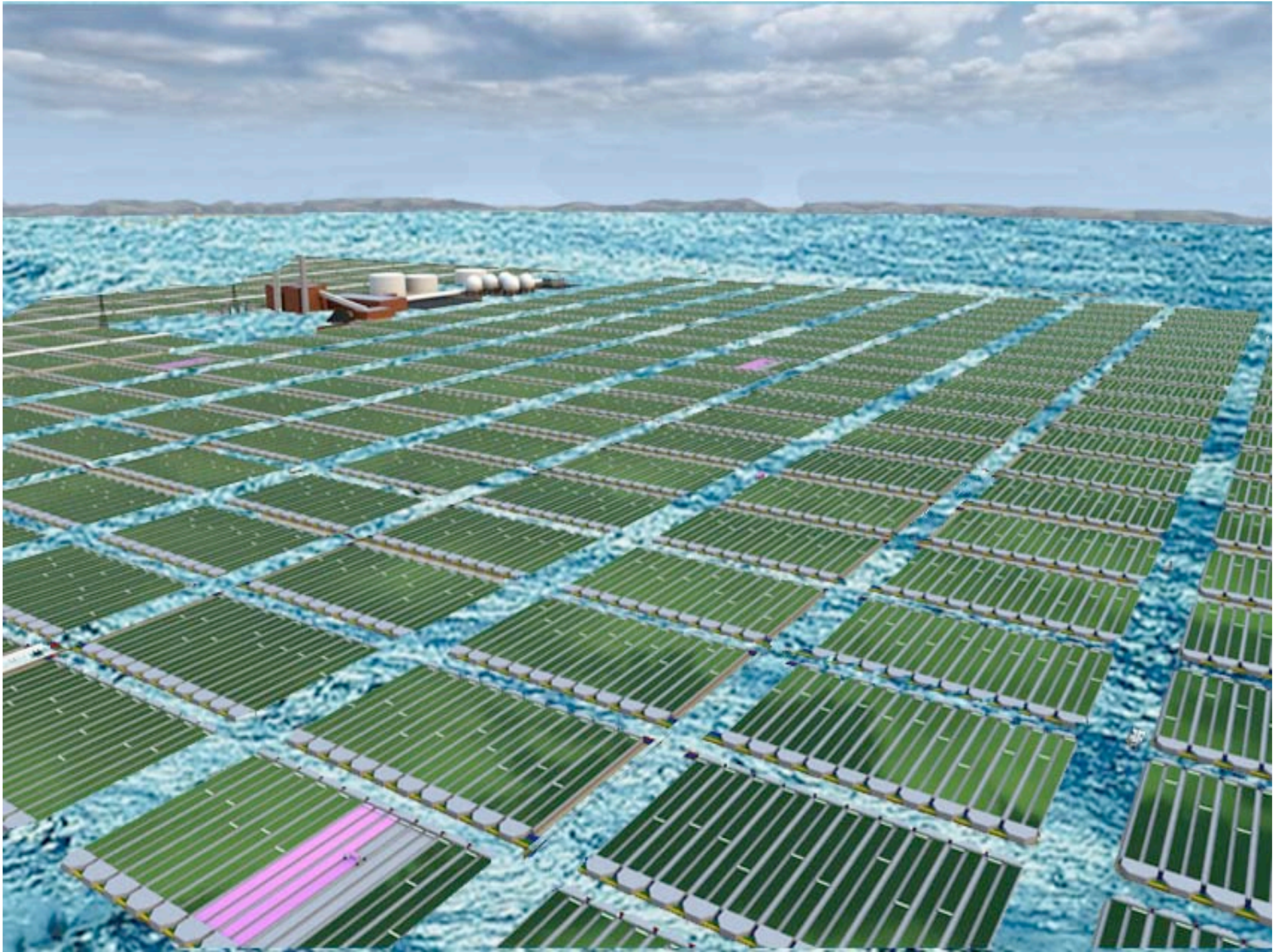


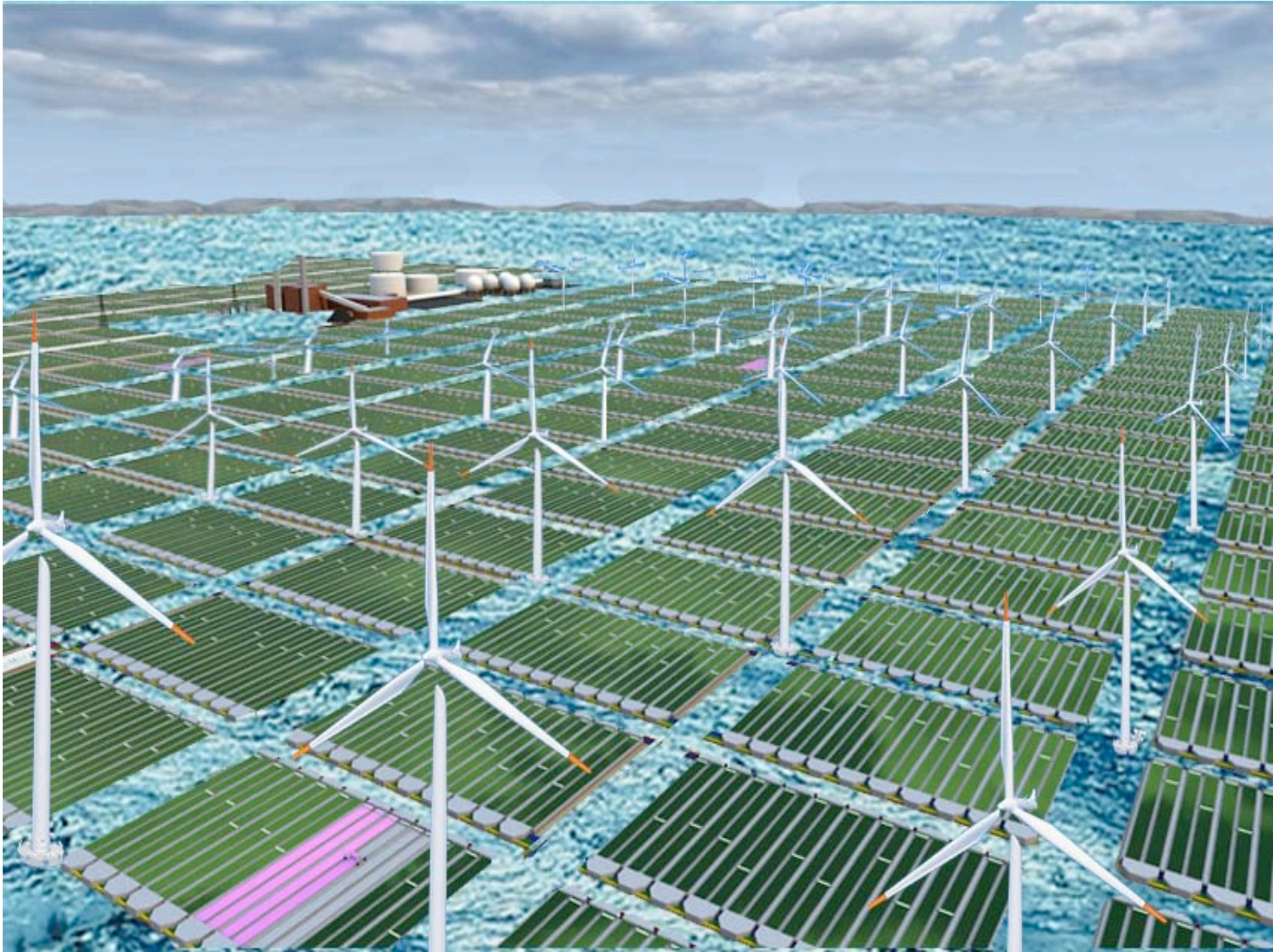


Wind Farms

Location	Country	Online	MW	No	Rating
Vindeby	Denmark	1991	4.95	11	Bonus 450kW
Lely (Ijsselmeer)	Holland	1994	2	4	NedWind 500kW
Tunø Knob	Denmark	1995	5	10	Vestas 500kW
Dronten (Ijsselmeer)	Holland	1996	11.4	19	Nordtank 600kW
Gotland (Bockstigen)	Sweden	1997	2.5	5	Wind World 500kW
Blyth Offshore	UK	2000	3.8	2	Vestas 2MW
Middelgrunden, Copenhagen	Denmark	2001	40	20	Bonus 2MW
Uttgrunden, Kalmar Sound	Sweden	2001	10.5	7	GE Wind 1.5MW
Yttre Stengrund	Sweden	2001	10	5	NEG Micon NM72
Horns Rev	Denmark	2002	160	80	Vestas 2MW
Frederikshaven	Denmark	2003	10.6	4	2 Vestas 3MW, 1 Bonus 2.3MW, and 1 Nordex 2.3MW
Samsø	Denmark	2003	23	10	Bonus 2.3 MW
North Hoyle	UK	2003	60	30	Vestas 2MW
Nysted	Denmark	2004	158	72	Bonus 2.3MW
Arklow Bank	Ireland	2004	25.2	7	GE 3.6 MW
Scroby Sands	UK	2004	60	30	Vestas 2 MW
Totals			587	316	







Wind, Sea, Algae?

Water

Non-competitive space

Infrastructure

Access

Nutrients

Local Power



Wind, Sea, Algae?

Useable infrastructure?

Containment?

Contamination?

Nutrients?

Environmental impact?

Obstruction to sea traffic?

Other problems?





PROPOSAL:

**Workshop on offshore algae in Lolland, DK
Nov. 2008?**

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