Advancing aquaculture for climate gains

Seaweed and Bi-Valve Farming

Seaweed

- 3 to 33 tons dry weight per acre- species specific, yield improving with strain selection.
- ~ 40 species farmed. Farmed for food, feed, extracts, emerging bioplastic technology.

Requires no:

- Arable land
- Fresh Water
- Fertilizers
- Pesticides

Bi-valves

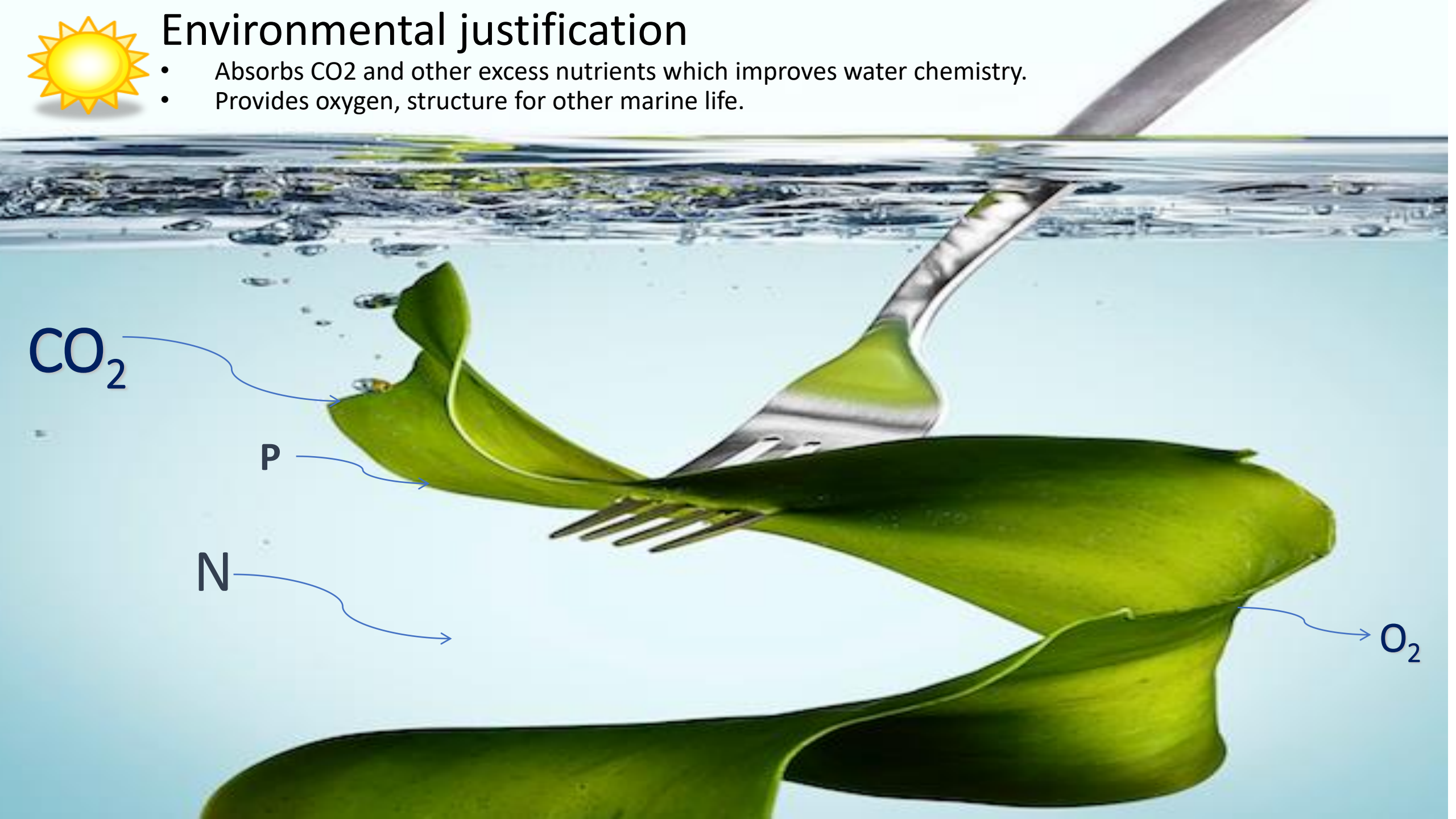
- 13.5 to 40 tons (6.75-20 tons protein x-shell) per acre.
- Species and farming method specific.

Requires no:

- Arable land
- Fresh Water
- Fertilizers
- Pesticides

Environmental justification

- Absorbs CO2 and other excess nutrients which improves water chemistry.
- Provides oxygen, structure for other marine life.

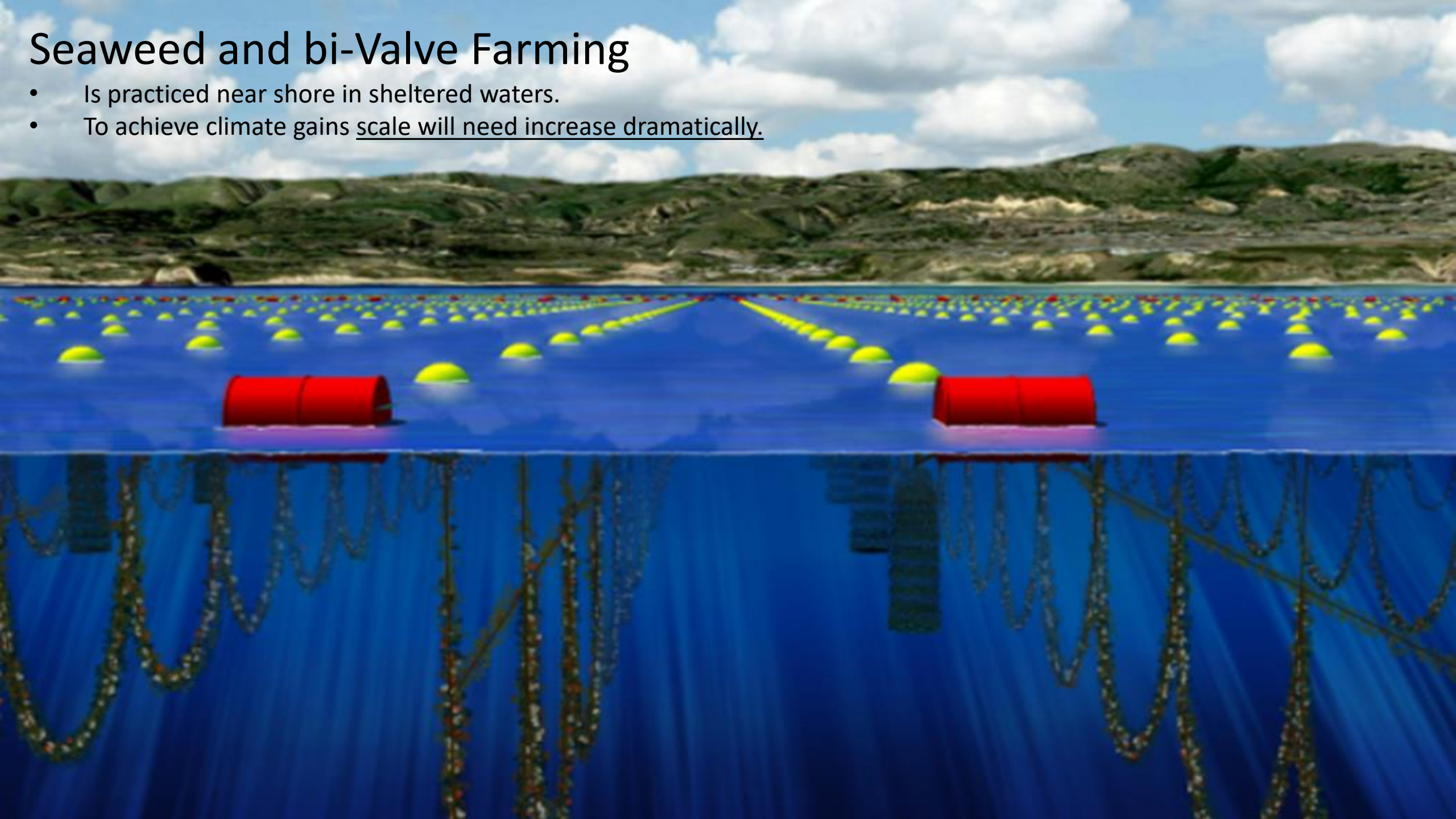


Environmental justification

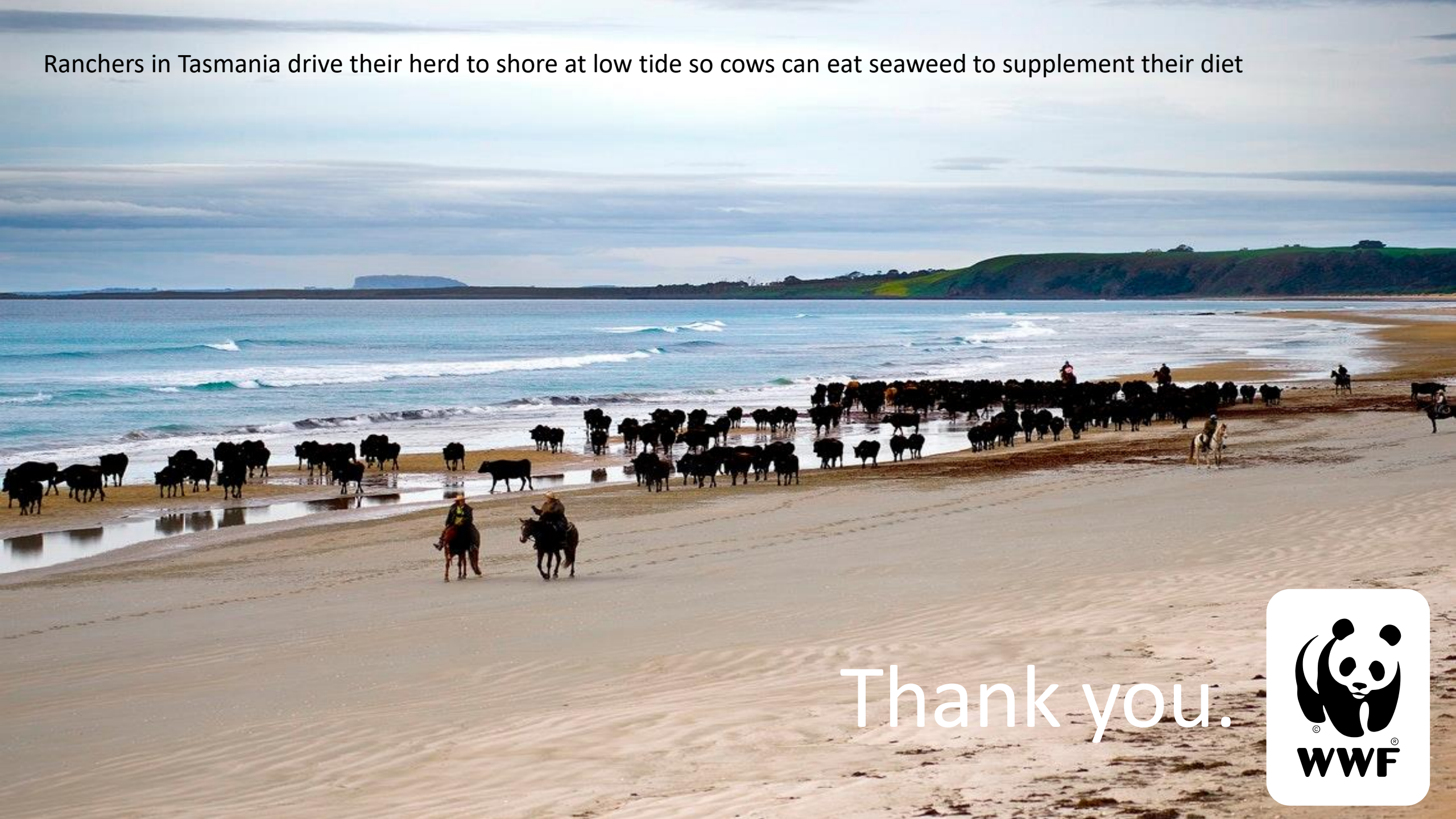
- A single bi-valve will filter 13-50 gallons of seawater per day.
- Creates animal protein- requires minimal inputs.

Seaweed and bi-Valve Farming

- Is practiced near shore in sheltered waters.
- To achieve climate gains scale will need increase dramatically.



Ranchers in Tasmania drive their herd to shore at low tide so cows can eat seaweed to supplement their diet



Thank you.