TA-6619 REG: Marine Aquaculture, Reefs, Renewable Energy, and Ecotourism for Ecosystem Services

#### Context

| Decommissioning platforms is new to Asia (\$100 bn cost) | 1000's of platforms | ASEAN members: limited Decom experience | Inconsistent regulations | Cautious | High regulatory uncertainty creates excess cost (re: Oil Co's) resulting in stalemate

#### Solution

| As an <u>SPV</u>, <u>D2G</u>: "<u>Decom Operator</u>" to <u>operationalize</u> <u>Blue Economy</u> opportunities | <u>D2G</u>: a new class of supplier to <u>manage</u> offshore late-life assets & Decom processes | <u>D2G</u> assists ASEAN members & Oil Co's to harmonize regs; deliver <u>MARES</u> solutions



#### **Technology**

| Oil Companies reduce: cost, complexity, managerial efforts to run late-life assets | D2G: negotiate & offload late-life assets | D2G: Repurpose | Rigs-2-Reef Retire | D2G: to "cookie-cutter" activity across concessions & ASEAN borders for efficiency

#### **Business Model**

| Leverage <u>Blue Finance</u> to repurpose late-life assets | <u>Earn income</u> (Fish, RE) | Rigs-2-Reef reduces Decom cost by <u>15% -25%</u> | D2G and Oil Co's <u>share \$\$ savings</u>

## **PROJECT SUMMARY**

#### **PROJECT NAME:**

Proposal to recycle "used" O&G platforms for: Aquaculture Fish Farms and Renewable Energy

#### **CAPITAL COST:**

Initial budget at \$15 million:

Due Diligence (\$1M now sought)

FEED (\$4M) | Pilot (\$10M)

#### **DEVELOPER:**

Decom-2-Green PLC

#### PROJECT HOST:

**TBA** 

#### GEOGRAPHICAL LOCATION:

Gulf of Thailand (scaled globally)

#### TYPE OF PROJECT:

Repurpose energy infrastructure for Aquaculture operations, offshore RE development, and other MARES operations

PROJECT TIMELINE:

2023-2025

#### **Financing**

A Pilot Test proves concept | Three phases: Pre-FEED (4 mo.), FEED (6 mo.) and Field Trial (18 mo.) | Cost: US\$10m-\$15m

#### Results

| Converting Scrap ⇒ Gold | D2G is a one-stop shop to repurpose late-life assets (MARES style) and terminate as Rigs-2-Reef

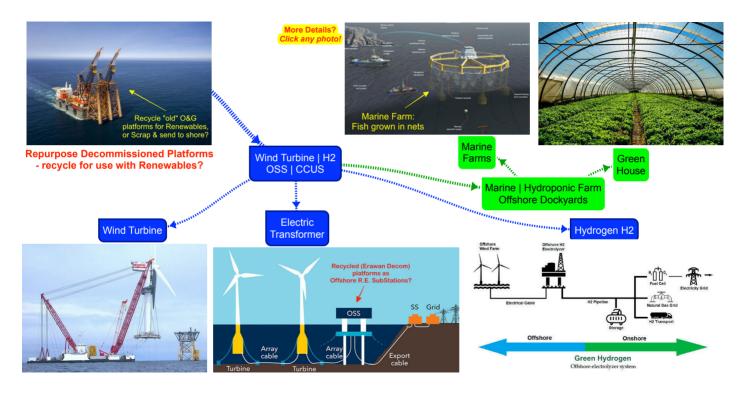
#### **Lessons Learned**

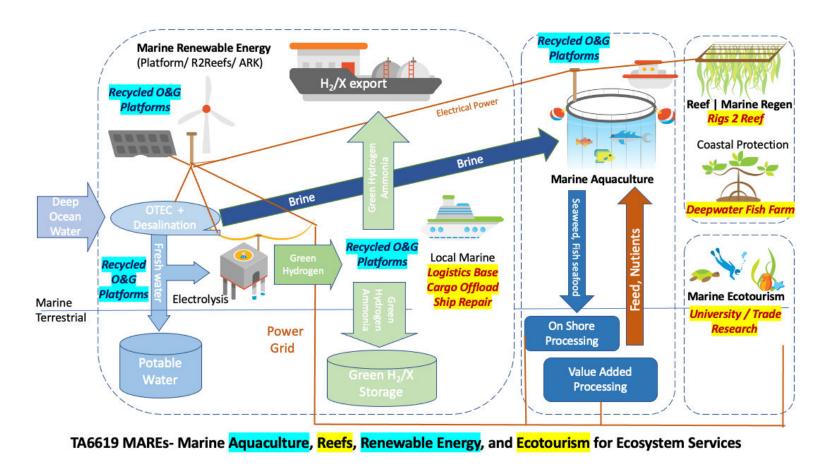
| Every nation has its own unique (Decom) Regs | Little harmonization | Oil Companies frustrated by high Decom \$\$\$ costs

#### Developer

D2G have assembled a group of qualified contractors to develop/operate: Wind & Fish Farms, Rigs-2-Reef, CCUS, and more







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### Financial pro forma

No	Item		2023	2024		2025	2026	2027		2028	2029		2030		2031		2032		2033
	Marine Renewable Energy																	$\overline{}$	
	Capital Cost 1 (VAWT to power Fish Farm)			\$ (500,000)	\$	(200,000)	\$ (250,000)	\$ (250,000)	\$	(300,000)	\$ (300,000	) \$	(350,000)	\$	(350,000)	\$	(400,000)	\$	(400,000)
	Capital Cost 2 (HAWT for Green H2 TBA)																		
	Revenue 1 - VAWT (internal use: Fish Farm)																		
	Revenue 2 - HAWT (TBA)																		
	Balance (Revenue - Cost)			\$ (500,000)	\$	(200,000)	\$ (250,000)	\$ (250,000)	\$	(300,000)	\$ (300,000	) \$	(350,000)	\$	(350,000)	\$	(400,000)	\$	(400,000)
														$\perp$				<u> </u>	
	Marine Aquaculture	$\vdash$										+		<u> </u>				$\vdash$	
	Capital Cost (Pre-FEED   FEED engineering)	Ś	(5,140,000)											$\vdash$				$\vdash$	
	Capital Cost (Pilot - repurpose platform)	Ť	(3,140,000)	\$ (7,000,000)	¢	(1.500.000)	\$ (1,650,000)	\$ (1,815,000)	¢	(1 996 500)	\$ /2 196 150	1 \$ /	2 415 765)	\$ 1	2 657 342)	\$ 13	923 0761	Ġ	(3 215 383)
	Capital Cost (Fish Pens - installed)	+		\$ (1,500,000)		(2,700,000)	\$ (2,000,000)	\$ (1,615,000)	7	(1,550,500)	\$ (2,130,130	7 7 1	2,413,703	7	2,007,342]	7 (2	2,323,070]	,	(3,213,303)
	Capital Cost (Fish Feed per year)	+		\$ (3,504,000)			\$ (15,412,125)	\$(16,953,338)	\$11	8 648 671\	\$ /20 513 539	1 \$12	2 564 8921	\$1	24,821,381)	\$ 12	7 303 520)	\$1:	30,033,872)
	capital cost (rish reed per year)			\$ (5,50-1,000)	71	11,112,100	V (10)+11/110/	\$\(\(\frac{10}{300}\)\(\frac{10}{300}\)	7 (-	10,010,011	Ç (20,020,000	7 4 (2	2,001,052,	7 (-	2-1/022/002/	V (2	7,505,520,	7(0	10,000,012,
	Fish Pen - Capacity (m3)			12,800		29,000	14,500												
	Fish Pen - Total Capacity Available (m3)			12,800		41,800	56,300	56,300		56,300	56,300		6,300		56,300		6,300		56,300
	Fish Kg - Gross Weight (for processing)			384,000	1	1,254,000	1,689,000	1,689,000	1	,689,000	1,689,000	1,	689,000	1,	,689,000	1,0	689,000	1	,689,000
	Revenue 1 - Fish (Sea Bass) @ 50% Capacity			\$ 2,112,000	\$	7,586,700	\$ 10,218,450	\$ 11,240,295	\$ 1	2,364,325	\$ 13,600,757	\$ 1	4,960,833	\$ 1	6,456,916	\$ 18	3,102,608	\$ 1	19,912,868
	Revenue 2 - Fish (Seriola) @ 50% Capacity			\$ 3,072,000	\$	11,035,200	\$ 14,863,200	\$ 16,349,520	\$ 1	17,984,472	\$ 19,782,919	\$ 2	1,761,211	\$ 2	23,937,332	\$ 26	5,331,065	\$ 2	28,964,172
	Balance (Revenue - Cost)	\$	(5,140,000)	\$ (6,820,000)	\$	2,979,150	\$ 6,019,525	\$ 8,821,478	\$	9,703,625	\$ 10,673,988	\$ 1	1,741,387	\$ 1	2,915,525	\$ 14	1,207,078	\$ 1	15,627,786
	Total Capital Cost	\$	(5,140,000)	\$ (12,504,000)	¢Ι	15 042 750\	¢ /10 212 125\	\$(19,018,338)	¢ In	20,945,171)	\$ (23,009,688	1 6/2	5,330,657)	ė t	27 020 722\	¢ /2	0 626 505)	¢1:	33,649,255)
<u> </u>	Total Free Cashflow	\$				2,779,150	\$ 5,769,525	\$ 8,571,478	- 1	9,403,625	\$ 10,373,988		1,391,387		2,565,525		3,807,078		15,227,786
$\vdash$	IRR - 15%	۶	45%	\$ (1,320,000)	Ą	2,113,130	\$ 3,703,323	\$ 0,3/1,4/6	Ş	J,403,023	\$ 10,575,500	ا د	1,351,367	ا د	2,303,323	Ş I	3,007,078	ر ډ	13,221,100
	NPV - 15%	-	\$21,330,275									+		$\vdash$				$\overline{}$	
	1414 - 1270		J21,330,273									+		$\vdash$				$\vdash$	
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Note: Costs are indicative and subject to change.

Note: Business Model focus is initially on raising and selling fish (e.g., Sea Bass, Seriola); R.E. expansion is considered if ROI is positive.

Note: Assuming the (platform) late-life assets are transferred to D2G at no charge (e.g., donated by the Oil Co.).

Note: Fish Feed costs may be reduced by growing and harvesting seaweed.