

THE OCEANS DAY AT RIO+20



Scaling Up Actions to Restore Ocean Ecosystems

	Ocean Hypoxia	Ocean Acidification	Over-fishing	Marine Invasive Species
	Reduce nutrient over-enrichment of coastal areas	Energy efficient shipping Protect & restore coastal carbon sinks	Reduce unsustainable fishing practices	Reduce aquatic species transfer via ship hull fouling
Strategic Planning Methodologies	<ul style="list-style-type: none"> Scale up TDA/SAP in 20 remaining LMEs (& linked river basins) facing hypoxia Scale up ICM in same LMEs as tool to leverage nutrient pollution reduction investments and protect nutrient sinks 	<ul style="list-style-type: none"> Build on UNFCCC <ul style="list-style-type: none"> Ocean pH target (minimum) Adoption of Blue Carbon Build on new IMO ship energy efficiency guidelines ICM, TDA/SAP to help promote scaling up local and national Blue Carbon initiatives 	<ul style="list-style-type: none"> Build on Global & Regional Legal & Institutional Frameworks <ul style="list-style-type: none"> Complete WTO negotiations to phase out negative fisheries subsidies Strengthen RFMOs & LME inst'ns TDA/SAP : Scale up in ~50 LMEs/fisheries areas facing depletion/overexploitation ICM as tool to promote sustainable fishing at local level 	<ul style="list-style-type: none"> Build on anticipated global Convention on Ship Hull Fouling Incorporate hull fouling issue into LME TDA/SAPs where invasives are priority issue
Policy Instruments	<ul style="list-style-type: none"> Nutrient management regulations Nutrient emissions cap and trade in river basins (national, regional) Fertilizer subsidy reform Subsidies to agricultural nutrient reduction practices & technology Subsidies to wastewater & indust. nutrient recovery & re-use Global nutrient reduction fund capitalized by innovative financial mechanism(s) 	<ul style="list-style-type: none"> Amend UNFCCC to incorporate safe ocean acidity limit & catalyse action on low carbon economy Blue carbon inventory methodologies Tools, methodologies, standards & guidelines to promote uptake of IMO energy efficiency guidelines <ul style="list-style-type: none"> Ship management plans (SEEMP) Ship design standards (EEDI) Facilitate private sector R&D 	<ul style="list-style-type: none"> Shift (-) fisheries subsidies \$16 bn/yr to sustainable aquaculture & MPAs Scale up Indiv. Transferable Quotas (ITQ), \$ to MPA, aquaculture, mgmt CBD Aichi Biodiversity Target 11 – 10% oceans under MPAs Ensure sound science, EBA, data sharing, precautionary principle in RFMO & LME commission mandates UN Fish Stocks Agreement, FAO Code of Conduct, Port State Measures, etc. 	<ul style="list-style-type: none"> Tools, methodologies, standards & guidelines on hull fouling management Support convention negotiations and enhanced implementation capacity Facilitate private sector technology R&D
Costs, Benefits & Catalysis	<ul style="list-style-type: none"> Public costs: <ul style="list-style-type: none"> TDA/SAP LMEs: \$1.0 billion (1 time) ICM global: <\$2.2 billion (1 time) Benefits (avoided costs): \$200-790 billion/year Catalysed Finance: <ul style="list-style-type: none"> TDA/SAP LMEs: \$60 billion ICM global: \$22 billion 	<ul style="list-style-type: none"> Public costs: \$420-820 million (1 time) Benefits (avoided costs) <ul style="list-style-type: none"> Shipping on CC: \$19 billion/yr (2050) Blue carbon on CC: \$10-32 billion/yr (2050) Shipping \$90-310 billion/yr (fuel savings) by 2030 Catalysed Finance: <ul style="list-style-type: none"> Blue Carbon \$0.6 – 4.5 billion/yr Shipping - multiple \$ billions R&D 	<ul style="list-style-type: none"> Public costs: <ul style="list-style-type: none"> Reg Fisheries/LMEs: \$496-\$600 m. MPAs @ 10% ocean: <ul style="list-style-type: none"> Establish \$28 billion (1 time) Operation \$21 billion/yr Benefits (avoided costs): \$50 billion/yr Catalysed Finance: <ul style="list-style-type: none"> Shifted subsidies: \$16 billion/yr ITQ sales: \$40 billion/year Reduce overcapacity: \$38 billion 	<ul style="list-style-type: none"> Public costs: \$20 million (1 time) Benefits (avoided costs): \$10-\$90 billion/year Catalysed Finance: \$10-30 billion

Catalysing Ocean Finance Case Studies

Case Study	Methodology/ Approach	GEF Grants (\$ m.)	Catalysed Public & Private Finance (\$ m.)	Catalytic Ocean Finance Ratio	Result
Danube/Black Sea basin	TDA/SAP	51.9	2,980	57:1	Reduced nutrient loads, reversal of Black Sea hypoxic area
Yellow Sea LME	TDA/SAP	14.74	10,860	737:1	30% reduction fishing capacity, 10% reduction nutrient discharges every 5 years
Rio de la Plata /Maritime Front	TDA/SAP	9.31	2,620	281:1	Significant reductions in sewage, nutrient, industrial pollution loads to RPMF
E. Asian Seas /PEMSEA	ICM	36.1	10,000	277:1	11% of East Asian coastline under ICM (vs. ~0% baseline); 20% target for 2015
W/C Pacific Fisheries	Regional legal framework	15.1	3,214	222:1	Moving 1/3 world's tuna fishery towards sustainability
GloBallast	Global legal framework	14.0	35,000	2,500:1	Significant reductions in invasive species introductions; multi-billion dollar BW treatment industry

THE OCEANS DAY AT RIO+20





Ocean Industry Leadership and Collaboration in Sustainable Development

Paul Holthus

Executive Director

World Ocean Council

paul.holthus@oceancouncil.org



The international business alliance
for “Corporate Ocean Responsibility”

Growing Ocean Use

- Shipping
 - Offshore oil and gas
 - Fisheries
 - Aquaculture
 - Cruise tourism
 - Mining
 - Dredging
 - Submarine cables/pipelines
 - Offshore wind energy
 - Wave/tidal energy
 - Ports/marinas
 - Recreational/sport boating
 - Desalination
 - Carbon sequestration
 - Navy/military use
- Kinds of use
 - Levels of activity
 - Duration
 - Intensity
 - Frequency
 - Location of activity
 - Geographical Extent
 - Frequency

A diverse Ocean Business Community

Tier 1: Direct Ocean Users

- Industries that depend on the ocean for the extraction or production of goods (living, non-living, energy) and the provision of services (transport, tourism, etc.)

Tier 2: Ocean User Support Industries

- Industries that depend on direct users for their existence (e.g. shipbuilders) or drive the need for ocean industry (e.g. extractors, manufacturers, retailers that transport materials or products by sea)

Tier 3: Ocean Use “Infrastructure” Providers

- Financial, insurance, legal and other services that enable ocean industries to operate

The Ocean Industry Challenge

- Ocean industries require access and the social license to use ocean space and resources.
- Many of the critical issues affecting access and social license are cross-cutting or cumulative.
- Sustaining ocean health and productivity requires responsible use and stewardship by all users.
- The best efforts by a single company, or an entire industry sector, are not enough to secure the future health and productivity of the ocean.
- Ocean industries will benefit from collaboration with other sectors to develop synergies and economies of scale to address the issues and ensure access and social license.

World Ocean Council

International, Cross-Sectoral Business Leadership Alliance

- Bringing ocean industries together, e.g. shipping, oil/gas, fisheries, aquaculture, tourism, offshore renewables, etc.
- Catalyzing leadership and collaboration in addressing ocean sustainability - “*Corporate Ocean Responsibility*”

Goal A healthy and productive global ocean and its sustainable use, development and stewardship by a responsible *ocean business community*

Creating business value for responsible companies

- Access and social license for responsible ocean use
- Synergies and economies of scale in addressing issues
- Stability and predictability in ocean operations

World Ocean Council: Members

Almi Tankers S.A.

A.P. Moller-Maersk A/S

Baird Publications

Battelle Memorial Institute

Beveridge & Diamond, P.C.

BigBlueStuff

Birds Eye – Igloo

Blank Rome

BP

China Navigation Co/Swire Pacific Offshore

CSA International

Det Norske Veritas (DNV)

EDP Renewables

Eniram

EPJ Consulting

ESRI

ExxonMobil

FOB

Global Trust Certification

Golder Associates

Heidmar, Inc.

Hepburn Biocare

Holman Fenwick Willan LLP

Hull Surface Treatment

International Chamber of Shipping (ICS)

JASCO Applied Sciences

L3 MariPro

Lloyds Register

Louisbourg Seafoods

M3 Marine (Offshore Brokers) Pte Ltd

MarineXplore

Nautilus Minerals, Inc.

N America Marine Environment Protection Assoc (NAMEPA)

Ocean Nourishment

Offshore Marine Group

PanGeo Subsea

Powerboat P1

RightShip

Rio Tinto

Shell

Sinclair Knight Merz

Southall Environmental Associates (SEA)

SubCtech

Teck Resources

TierraMar Consulting

TOTAL

Transocean

Twin Dolphins

University of Texas Marine Science Institute

Zodiac Maritime

Priority Needs/Opportunities for Leadership

1. Ocean Governance

- Convention on Biological Diversity (CBD); Law of the Sea

2. Marine Spatial Planning (MSP)

- EU; US; Australia

3. Operational Environmental Issues

- Marine Invasive Species – ballast water, hull biofouling
- Marine Mammal/Vessel Interactions
- Sound and Marine Life
- Marine Debris - port waste reception facilities
- Water Pollution/Waste Discharge

4. Regional Ocean Business Councils

- Arctic, Baltic, Australia, Trans-Atlantic, Med, Arabian Gulf

5. Smart Ocean / Smart Industries: Ocean Understanding

- Observations and Data from Ships/Platforms of Opportunity



Thank You !

Paul Holthus

Executive Director

World Ocean Council

paul.holthus@oceancouncil.org



The International Business Alliance
for Corporate Ocean Responsibility

www.oceancouncil.org

The Global Programme of Action for Protection of the Marine Environment from Land-based Activities (GPA)



WWW.GPA.UNEP.ORG







Photo, Clinton Bauder

THE OCEANS DAY AT RIO+20

