

Conserving Coastal Ecosystem Services Through Private Sector Investment and Markets

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Coastal ecosystems are valuable



and highly threatened

Coastal Ecosystem Services

- Provisioning services
 - fish and other seafoods
 - materials
 - fuel
- Regulating services
 - maintaining hydrological balances and flood control
 - preventing erosion
 - providing nursery areas for fisheries species
 - nutrient cycling and waste processing, etc.
 - Providing grow out areas for aquacultured /farmed species
- Cultural, recreational and spiritual services

General Findings of the Millennium Ecosystem Assessment, 2005

- Ecosystem services are crucial to human well-being
- Almost two-thirds (60%) of ecosystem services assessed are threatened by human activity and changing climate
- Regulating and supporting services are particularly at risk, in part because they are undervalued
- Coastal ecosystem services are especially important to humankind

The thin strip of land that is the coastal zone accounts for only 5% of the world's land mass, yet it provides a disproportionate amount of the ecosystem services that support humankind.



The coastal zone supports nearly 40% of the global population



Status of Coastal Ecosystems & Services

- Coastal populations are growing rapidly
- Coastal densities nearly 3X that of inland
- Exploitation of resources is increasing
- Habitat alteration and loss are continuing
- Degradation from activities in the coastal zone as well as outside it are making some systems approach or cross thresholds

Habitat loss and degradation is the greatest driver

(note impervious surfaces as a major factor)



Indirect degradation also significant



Marine areas present special challenges as the downstream recipients of much degradation from afar...



...while the common property nature of most marine areas and resources has stymied private sector involvement



Business as usual needs to be changed.

But how?

Private Sector Investments in Coastal Services (cont.)

Incentive Mechanisms (Investor Driven):

- Risk reduction (e.g. protecting wetlands and mangroves as storm buffers and for erosion control)
- Enhancing production (e.g. protecting nursery areas while restoring degraded ones to boost fisheries production)
- Increasing tourism value (e.g. protecting coral reefs or coastal bird rookeries / sea turtle nesting areas to increase the value of the tourism experience)
- Increasing product value (e.g. certification of fisheries, aquaculture, aquarium fish)
- Reducing costs (e.g. tax breaks, efficiencies of scale in meeting bundled regulatory obligations)

Private Sector Investments in Coastal Services Conservation

Disincentive Mechanisms (Regulator-driven):

- biodiversity offsets
- mitigation banking
- cap and trade (water quality, by-catch, etc.)

Requirements:

- strong regulatory frameworks
- command & control management
- enforcement capability
- markets to price coastal services and allow trades

Tools

- Land / Sea Ownership, Easements, Leases
- Land Trusts / Marine Endowments
- ITQs / Tradable Permits or Development Rights
- Certification
- Zoning, including Trading Zones
- Hunting and Fishing Licenses
- Bioprospecting Fees
- Public/ Private Partnerships and Voluntary PES
- Privately administered watchdogs and enforcers

The Challenge:

- Harnessing the available tools to develop markets, as opposed to one-off transactions
- Using valuation to underpin market-driven pricing of ecosystem services
- Coalescing actors into natural aggregates
- Bundling services
- Getting regulators to accept the role of private sector in the marine domain
- Reducing opportunities to cheat or free ride

Potential Actors

- Sellers: coastal wetlands landowners, transferable quota holders, fishing co-op members, municipalities, govt. agencies
- Buyers: fishing industry conglomerates, re-insurers, govt. agencies, tourism operators
- Market shapers: regulators, policy-makers, advocates, critics, philanthropic investors and development agencies, trade associations, brokerages

Only a few examples exist worldwide

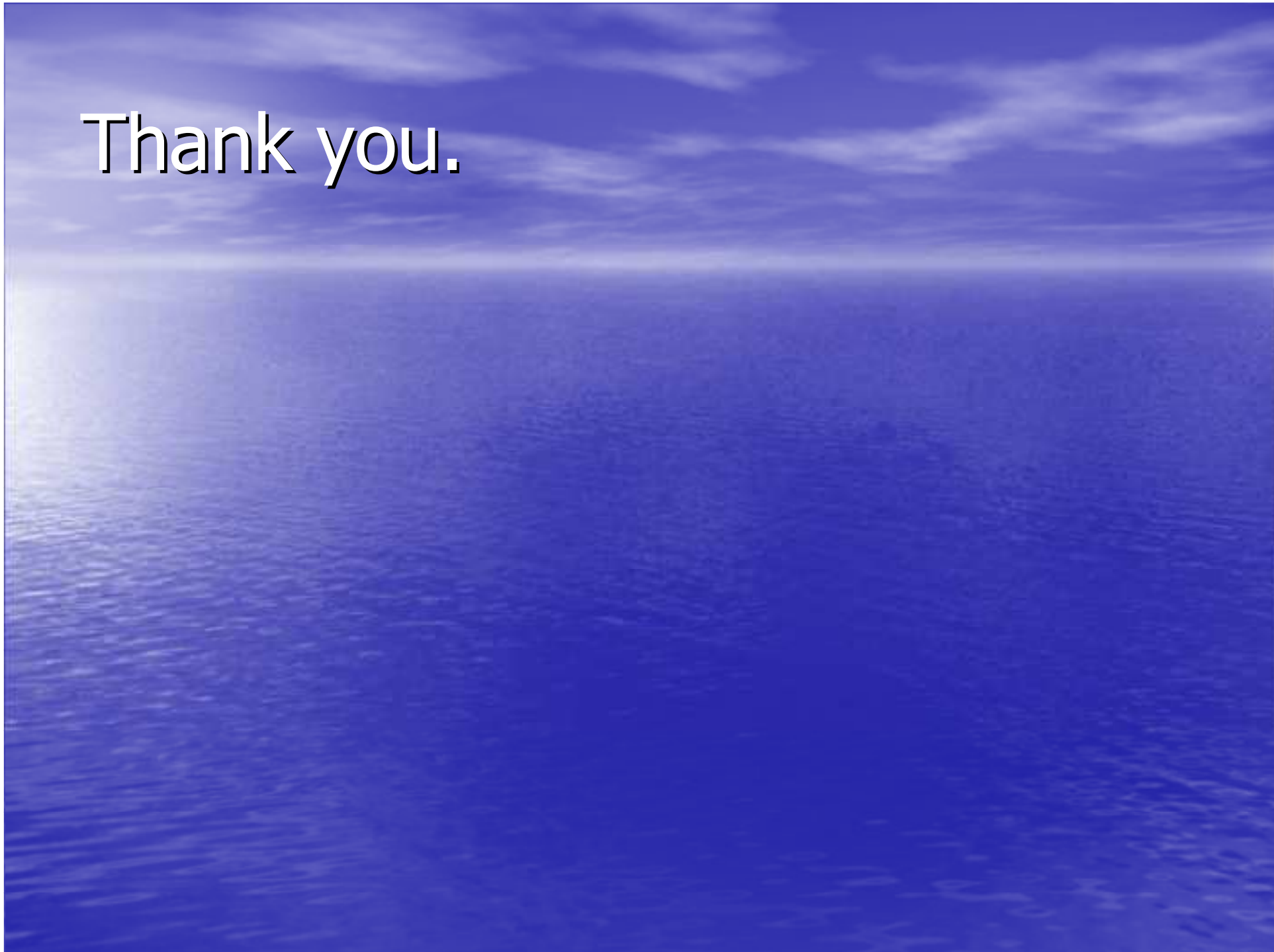


but this means opportunities abound!

Markets may finally allow us to
“value what is priceless”



Thank you.



Questions for Discussion

- What coastal services provide the best opportunities for Market Mechanisms?
- Which tools should be employed, in which combination?
- Who are the most important actors (Buyers and Sellers)?
- Which coastal sites can serve as best pilots?