

## INTERNATIONAL SYMPOSIUM ON THE OCEAN, GREEN SHIPPING AND SUSTAINABLE ENERGY

Institut Océanographique de Paris  
April 28, 2011- April 29, 2011

### SPONSORS:

- The Chair Finance and Sustainable Development (University Paris-Dauphine, Polytechnique, EDF, Crédit Agricole CIB, Caisse des Dépôts et Consignation)
- The Center for Energy, Marine Transportation and Public Policy (Columbia University)
- The Fisheries Economics Research Unit, and the Sea Around Us Project, University of British Columbia
- The government of Monaco

### SCIENTIFIC COMMITTEE:

René Aid (EDF), Albert Bressand (Columbia University), Robert Calcagno (Institut Océanographique), Pierre-André Chiappori (Columbia University), Ivar Ekeland (University of British Columbia), Damien Fessler (Université Paris-Dauphine), Roger Guesnerie (Collège de France, tbc), Delphine Lautier (University Paris-Dauphine), Michel Petit (Institut Océanographique), Rashid Sumaila (University of British Columbia)

### ORGANIZING COMMITTEE:

Ivar Ekeland (University of British Columbia), Damien Fessler (University Paris-Dauphine), Delphine Lautier (Université Paris-Dauphine), Laurence Pécou (Institut Océanographique)

### OBJECTIVES:

Interdisciplinary in nature, the symposium will provide an opportunity to reflect on the policy and strategic implications of growing integration between **four systems of central importance for the sustainable development of the planet:**

- the ocean considered as a global ecosystem,
- the marine transportation system,
- the energy system,
- the global regulation system.

### METHODOLOGY:

To promote a cross-disciplinary, cross-sector dialogue, the symposium will look successively at each of the four systems in light of its interrelationship with the other three, placing the long-term sustainable use of the ocean at the center. The symbol of this approach will be a tetrahedron of which each of the four systems will be an apex. The perspective associated with each single apex (e.g. the perspective of the shipping industry on the development of marine transportation) can then be reassessed within the holistic perspective of the four systems seen as a whole.

A financial market perspective will help analyze how markets themselves have begun to reflect increasing levels of integration between the four systems. At the present stage, this integration maybe observed for instance between commodities markets and forward freight Agreements markets. In the future, carbon markets or carbon instruments of various types may be able to capture the higher levels of integration that are developing between the energy system, marine transportation system and the ocean ecosystem.

**TENTATIVE PROGRAM:**

The symposium will begin with an introductory session at which a keynote speaker will lay out an integrated perspective, in support of the objectives and methodology of the symposium. Each of the four half days of Thursday and Friday will be devoted to one of the four systems in the perspective of its interrelationship with the other three. Two main themes will be discussed during each of these four sessions: the dynamics of the market and governance issues.

The first system to be addressed will be the ocean ecosystem as it begins to be better understood in terms of changing currents, temperature, living renewable resources and of its role as a global climate stabilizer--or possibly destabilizer. The symposium will conclude with a session on global governance assessing the extent to which the interrelated nature of these four systems is presently reflected in terms of governing principles, rules and institutions.