



PIANC French Section



PIANC Mediterranean Days  
and Conference «Port of the future» by Cerema  
25 to 27 october 2023 in Sete France

Dredging for Sustainable Infrastructure  
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# Integrating Dredging in Sustainable Development



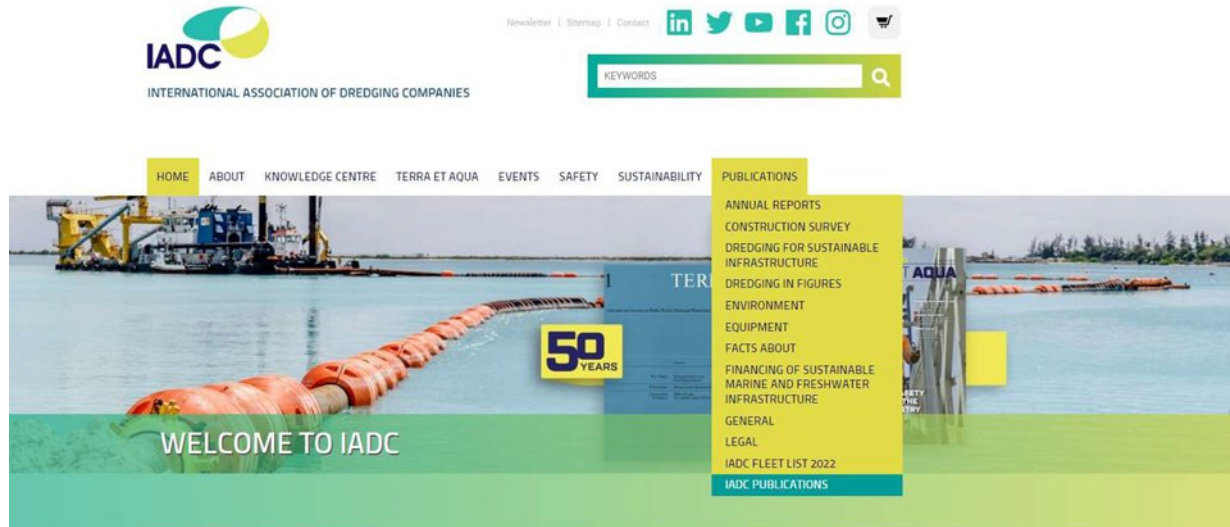
# ABOUT IADC



NMDC GROUP



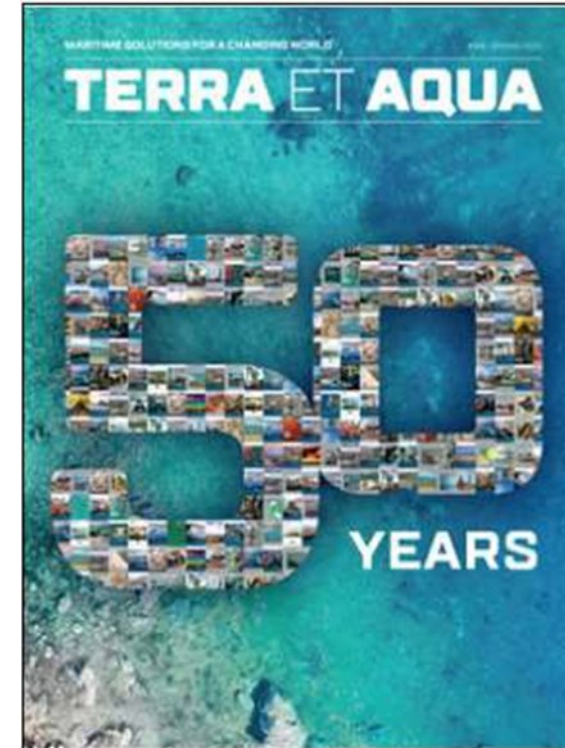
# ABOUT IADC



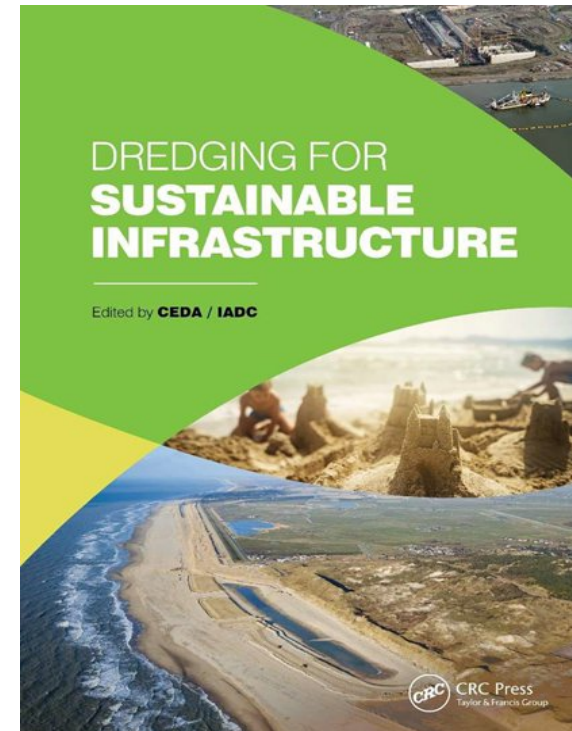
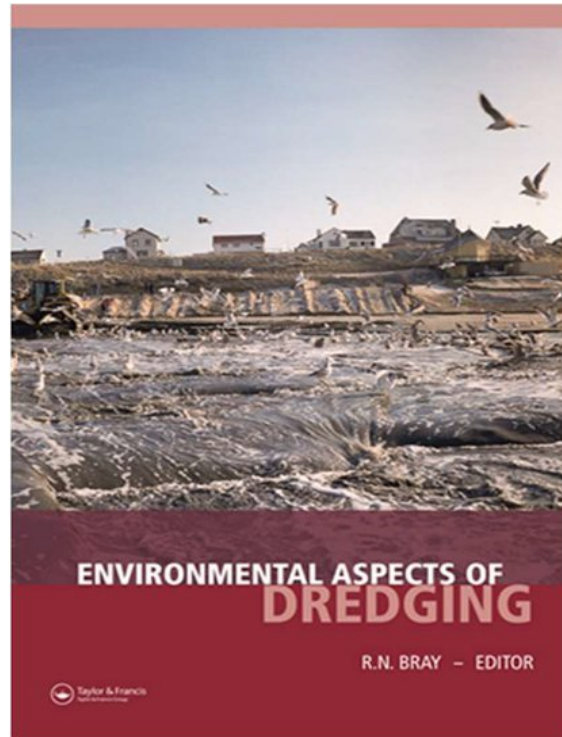
## HOME

The International Association of Dredging Companies (IADC) is the global umbrella organisation for contractors in the private dredging industry: an industry that makes the world a safer, better and more sustainable place to live. IADC is driven to help that industry move forward with a variety of activities and publications, all of which can be found on this website.


[www.iadc-dredging.com](http://www.iadc-dredging.com)



# FROM REACTIVE TO PROACTIVE



# THE GROWING FOCUS ON SUSTAINABILITY



**WODA**  
World Organisation of Dredging Associations  
CENTRAL DREDGING ASSOCIATION  
EASTERN DREDGING ASSOCIATION  
WESTERN DREDGING ASSOCIATION

### WODA PRINCIPLES OF SUSTAINABLE DREDGING

Dredging and dredged material management are essential if we are to maintain and improve our quality of life and economic well-being. This is achieved through the creation and maintenance of water-based infrastructure by navigation dredging and reclamation; enhancing environmental quality by beach nourishment or environmental dredging to remove contaminated sediments; providing flood control; producing minerals and construction materials, and supporting offshore energy production, including renewable energy.

By adhering to principles of sustainability that include working with natural systems to integrate these actions, the goals of environmental quality and economic prosperity can both be achieved.


WODA's objective is to achieve sustainable dredging through implementation of the following principles:


1. From the start and throughout each stage of a dredging project, social, environmental, and economic objectives should be systematically considered and integrated.
2. Development of a project design should identify how to work with natural processes and the site-specific characteristics of ecosystems to achieve the project's objectives, including understanding of the carbon footprint of a dredging project.
3. Project proponents, regulatory authorities and the broad range of stakeholders should be engaged at the earliest conceptual stage in the development of dredging projects. Active collaboration in the development of projects is the key to achieving maximum social, environmental, and economic benefits.
4. Scientifically based criteria, performance guidelines and environmental safeguards for dredging and dredged material management are essential to provide clear directions to project owners, planners and executing companies.
5. Dredged material management should be based upon a holistic and systematic understanding of the ecosystem and natural processes. Beneficial use of dredged materials, such as placement of sediment to nourish shorelines or to enhance or restore wetland ecosystems/marshes and upland habitat, should be given priority.
6. Dredging can be a key solution for remediation and restoration at historically contaminated aquatic sites.
7. Analysis of monitoring and assessment information before, during and after project implementation provides a basis for effective and sustainable project management.

Through the application of these principles of sustainable dredging, WODA believes that dredging will contribute to sound solutions that improve our well-being and protect our aquatic environment for future generations.

Anders Jensen  
Chairman WODA Board of Directors

6 June 2013  
Brussels, Belgium






## PIANC

'Setting the Course'

Report n° 150 - 2014



### 'SUSTAINABLE PORTS'

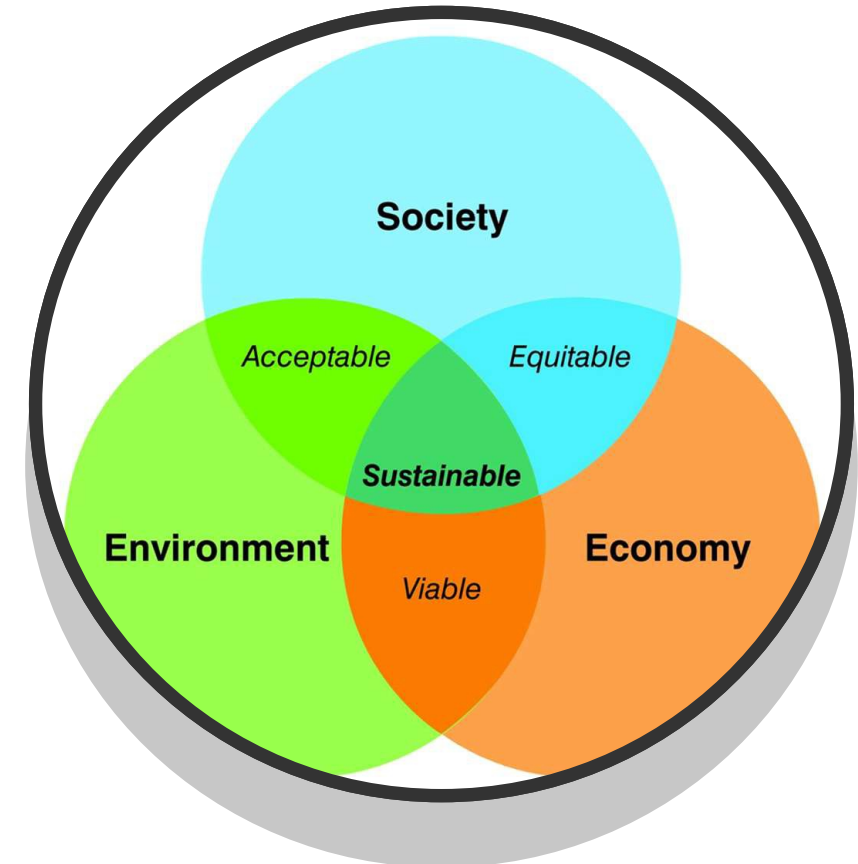
#### A GUIDE FOR PORT AUTHORITIES

The World Association for Waterborne Transport Infrastructure

# APPLYING THE CONCEPT OF SUSTAINABILITY

Our **ambition** is to encourage dredging projects which:

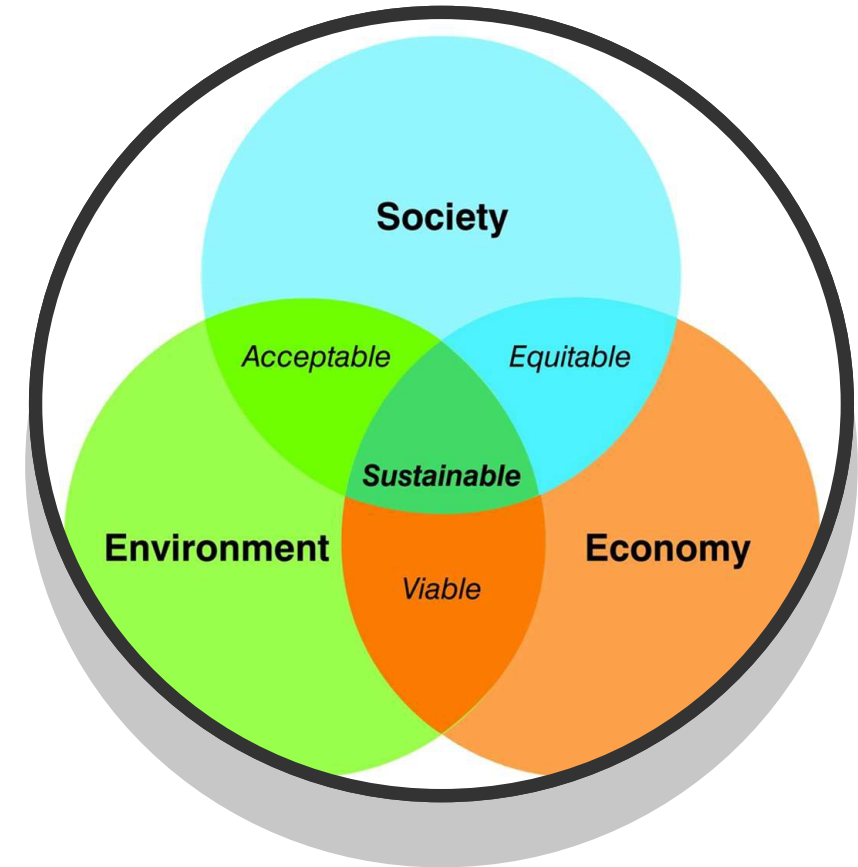
- fulfil their **primary functional requirement**
- generate **added value** to the system
- proactively **engage stakeholders**



*The three pillars of sustainability*

# PRINCIPLES OF SUSTAINABLE DREDGING

- **Increase overall value** of the project through the range of services it provides
- **Reducing costs** associated with the project through efficiency with respect to resources, environmental impacts, ...
- **Balancing** the distribution of values and costs among **the three sustainability pillars, social, environmental and economic** over time.



*The three pillars of sustainability*

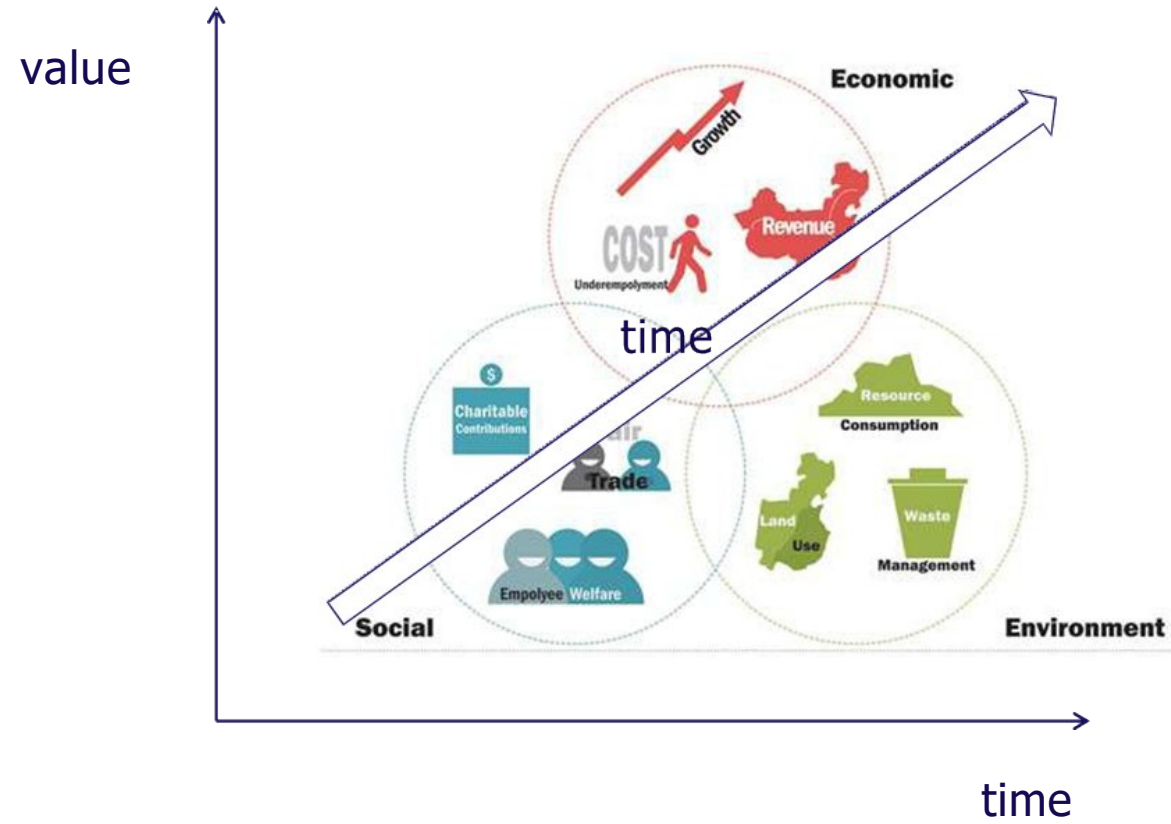


# SOME PRACTICAL IMPLICATIONS FOR DREDGING

- The importance of **vision and value creation**: use the momentum of a project to create added values.
- **Adapting project to nature**, rather than the reverse: Working / Building / Engineering with natural processes.
- Taking the **long view**, considering **life-cycle values** and financing consequences.



# VISION AND VALUE CREATION



# ADAPT TO NATURE INSTEAD OF THE REVERSE



# COMPREHENSIVE STAKEHOLDER ENGAGEMENT





INTERNATIONAL ASSOCIATION OF DREDGING COMPANIES

**THANK YOU**

