The European Dredging Industry: A Maritime Success Story

Dredging is vital to the construction and maintenance of maritime infrastructure upon which our economic prosperity and social well-being depend.

Major investments in jumbo and mega trailers have increased sand and gravel transporting capacity and opened new markets. The ability to transport sand and other dredged material over hundreds of kilometres and to dredge in very deep waters has made possible enormous maritime projects such as the expansion of Hong Kong’s container terminal.
Dredging means transporting: sand, rock, gravel, pipelines, caissons.

Dredging is the maritime transportation of natural materials from one part of the water environment to another by specialised dredging vessels. In fact, in a usual dredging cycle, self-propelled trailing suction hopper dredgers, barges and other ships spend the majority of their time sailing back and forth between excavation sites and placement sites, transporting materials between the port and the borrow site; sailing between borrow sites; and sailing from sites where material has been extracted to unloading or placement sites.

Dredging vessels support
- Port infrastructure development
- Land reclamation for commerce, residences and recreation
- Energy enterprises including oil and gas exploration and delivery and offshore wind farms
- Environmental remediation of brownfields and safe storage of contaminated materials
- On every continent, in every corner of the world, European dredgers have ploughed the waterways of oceans, rivers and estuaries, carrying vital materials to improve the world’s infrastructure.

European Dredgers contribute to a sound environment
Without dredging, waterborne transportation, supertankers and jumbo cargo ships as well as cruise ships would be impossible. And waterborne transport has been proven to be more environmentally friendly than any other transport modes.

Climate Change Adaptation: with sand and rock the European dredgers protect Europe’s coastlines
European dredging vessels, jumbo and mega trailers, transport sand from far out at sea to replenish beaches on the lengthy coastlines of Europe and place rock to rebuild coastal defenses and dunes washed out by erosion and threatened by the consequences of climate change, like the rising of the sea levels.

Dredging vessels deliver and lay pipelines to bring offshore gas and oil to Europe and beyond
Growing global demands for energy are part of modern industrial reality. European dredging companies make it possible to reach oil and gas sites at sea, even in some of the most forbidding climates known on earth.

The European Dredging Industry is an integral part of the European Maritime Community
European dredgers are the natural allies of the European shipping industry and Port Authorities. Port authorities in Europe and abroad know that:
No dredging means no harbours, no ports, no access channels.
Ultimately it means no economic development and no global trade.

Above photos from left to right:
Trade: Aerial view of construction works at Port 2000 at Le Havre, France
Urban Development: Land reclamation at Hong Kong’s downtown business centre
Environment: IJsseloog depot for contaminated dredged sediments at Ketelmeer, the Netherlands
Tourism: Cruise ships docked at Freeport, the Bahamas
Coastal Protection: Erosion in Australia before (top) and after beach nourishment
Oil & Gas: OGGS Shell gas pipeline crossing in Nigeria

All photos courtesy of Terra et Aqua/IADC
The European Dredging Industry is an essential part of the Maritime Cluster that has created Europe's excellent reputation for maritime infrastructure construction.

"THE MARITIME CLUSTER OF EUROPEAN EXCELLENCE"
European dredging companies are part of the historical maritime cluster developed over centuries by seagoing nations. This "sectoral cluster" includes specialist dredging contractors, international consultants and advisory offices, specialised shipyards and diversified maritime suppliers, technical institutes and universities, in-house training facilities based on high-tech dredging and navigation simulators and (public) port authorities and ministries. Working together these organisations support and stimulate each other – they increase productivity of the companies in the cluster, they drive innovations and they stimulate new business in the field, delivering worldwide excellence in dredging and maritime construction. Together they keep Europe in the forefront of the maritime industry.

"No Dredging, No Shipping, No Global Trade"
European dredging companies lead the world:
European dredging companies have a **66% market share** of dredging in worldwide open markets.

**Turnover**

**Annual turnover of European dredging business (2008) Fleet:**
€ 6.8 billion (doubled since 2000)

**Annual turnover open dredging market worldwide (2008):**
€ 10.3 billion

Despite the downturn in the global economy, EuDA companies have shown a **15% growth** rate in 2008.

**Fleet**

European dredging contractors own and operate **40% of the global Cutter Suction Dredgers fleet**, including the most powerful and most technologically advanced vessels.

European Dredging Fleets:
**98% of European Trailing Suction Hopper Dredgers** have an IMO registration and a seagoing class certificate.

European dredging contractors own and operate **46% of the global Trailing Suction Hopper Dredgers fleet**, including some of the largest and most technologically advanced vessels.

1/3 of dredging vessels are European flagged; but they execute 2/3 of the world’s dredging projects.

“Long distance maritime transport of dredged material has made possible projects in Hong Kong, Singapore and Panama, as well as the expansion the European ports, such as Rotterdam and Antwerp, maintaining their global competitiveness.”
The Dredging Industry is an economic engine for Europe

**Innovations**

- European innovation has created new markets: 2.5% of turnover is re-invested in Research & Development.

**Investments**

- European investments by European dredging companies from 2008-2011: €5 billion.

**Employment**

- Direct employment: 25,000 people, with the four largest European dredging companies alone almost doubling their workforces in recent years.
- Indirect employment: 48,300 people including suppliers, shipbuilders and consulting engineers.
- All dredging personnel are well-trained and highly skilled professionals, with 40% having Bachelors or higher Degrees.

**Economic returns**

- 70% of all operations by European dredging companies take place outside Europe, yet almost 90% of return flows back to Europe.
- European dredging vessels can dredge to depths of 150 metres.

“Studies made at the Institute of Transport and Maritime Management, University of Antwerp, indicate that the direct spin-off from the overseas activities of the European dredging contractors to Europe is as high as 90%. This results from the industry’s high dependency on European subcontractors and suppliers”
Where we work: The results of the European dredging industry are visible everywhere around the world

- Construction and extension of the Suez Canal and the Panama Canal (3)
- Land reclamation for the airports of Chek Lap Kok (Hong Kong), Changi Airport (Singapore), Sydney (Australia), Taipa (Macao), Doha (Qatar) (4)
- Land reclamation for all the recently developed artificial islands in the Gulf (Palm Islands, The World, Port Rasheed (Dubai), Al Marjan islands (Ras Al Khaimah), Al Raha Beach (Abu Dhabi), Pearl Qatar (6)
- Construction of large-scale container ports in Abu Dhabi, Hong Kong, Germany, France, UK, Malaysia, Singapore, Netherlands, Belgium and elsewhere
- Construction of LNG ports in Qatar, Mexico, Peru, Belgium, Netherlands and pipeline laying in the North Sea and Russia (2)
- Construction of the world’s largest far-shore wind farms off Belgian, Dutch, UK and Scandinavian coasts (1)
- Historical coastal protection works in the Benelux (Delta Plan, Sigma Plan) and worldwide (Australia, Europe, Asia) (7)
- Construction of the ports of Tanger (Morocco), Richards Bay, Durban (South Africa), Mangalore and Mumbai (India) and cruise terminal ports in the Caribbean (5)

How we do it: Fair play, fair wages, fair contracts

Companies outside of Europe praise us, emulate us and copy us

Abroad the European dredging companies are a model for other nations and favourite service suppliers as well. European dredgers are there when needed: in Hong Kong, Dubai, Singapore. Everywhere whenever maritime infrastructure is on the table, European dredging contractors are asked to participate.

European dredgers are fiercely competitive

European dredging contractors welcome competition – fair and straightforward. Stiff competition contributes to innovation; it sharpens our prices; it ensures the best possible maritime solutions. And European dredging contractors always fully comply with European and international environmental, safety and labour regulations.
Level Playing Field & access to markets without barriers

Unfair practices by foreign competitors distort competition
Development aid to Africa should not result in a reduction of competition. Copying and use of technology developed through expensive research in Europe, without any payment of IPR, is having devastating effects on European R&D investment decisions. Blatantly ignoring environmental and safety standards gives a huge cost advantage to foreign dredging companies that offer low-quality, harmful products and services. Distorted competition is an impediment to healthy growth.

At home in Europe, the contributions of European dredging companies to the world economy are sometimes forgotten
European dredging companies are contributors to the high quality of life on the European continent. We are an essential part of the economic, social and environmental fabric of the European Union.

The European dredging industry helps to generate hundreds of thousands of jobs, helps provide a cleaner environment, protects European coastlines from the threats of climate changes.

To maintain our competitive edge, the European Dredging Industry needs recognition and support from the European Community
Be it building new ports and harbours, or maintaining the depths of existing ones, or helping Europe to adapt to Climate Change, the European Dredging Industry champions innovation, building unique high tech equipment. The majority of significant technical and environmental improvements stem from the hard work, in-depth research and engineering efforts on the drawing tables of European dredging contractors.

“They say imitation is the highest form of flattery, but in today’s competitive markets imitation can also be intellectual property theft”

The European Dredging Industry asks that European and non-European companies abide by the same rules and regulations worldwide:

- All companies should follow the same international norms and standards including environmental, safety and labour ones
- Fiscal policies should be fair and consistent
- Labour regulations should be fair, consistent and socially responsible
- World markets should be open and accessible on the basis of reciprocity
- Fair access to funding for international infrastructure projects should be available to all parties

Without a doubt, European dredging companies are the world leaders in maritime infrastructure and land reclamation. Working together, we can ensure it remains so.
MEMBERS OF EuDA

Belgium
DEME Building Materials NV (DBM)
Dredging International N.V.
N.V. Baggerwerken Decloedt & Zoon
Jan De Nul nv
Fédération du Dragage Belge A.S.B.L.
Flanders Dredging Corporation NV

Cyprus
Boskalis Westminster Dredging & Contracting Ltd.
Van Oord Middle East Ltd

Denmark
Rohde Nielsen A/S

Estonia
Terramare Eesti OU

Finland
Terramare Oy

France
EMCC
Atlantique Dragage S.A.
Atlantique Dragage Sarl
Société de Dragage International ‘SDI’ SA
Sodranord SARL
Sodraco International SAS

Germany
Brewaba Wasserbaugesellschaft Bremen mbH
Heinrich Hirdes G.m.b.H.
Josef Möbius Bau-Aktiengesellschaft
Nordsee Nassbagger-und Tiefbau GmbH
Vereinigung der Nassbaggerunternehmungen E.V.

Ireland
Irish Dredging Company
Van Oord Ireland Ltd

Italy
Boskalis Italia
Dravo SA
Società Italiana Dragaggi SpA ‘SIDRA’

Latvia
Baltic Marine Contractors SIA

Luxembourg
European Dredging Company S.A
Jan De Nul Group (Sofidra SA)

Netherlands
Aannemingsbedrijf L. Paans & Zonen
Baggerbedrijf De Boer B.V. / Dutch Dredging B.V.
Baggermaatschappij Boskalis B.V.
Ballast Nedam Baggeren bv
Boskalis B.V.
Boskalis International B.V.
Boskalis Offshore bv
Dredging and Contracting Rotterdam B.V.
Mijnster zand- en grinhandel bv
Tideway B.V.
Van den Herik B.V.
Van der Kamp B.V.
Van Oord ACZ Marine Contractors bv
Van Oord Nederland bv
Van Oord nv
Van Oord Offshore bv
Vereniging van Waterbouwers
Water Injection Dredging bv

Portugal
Dragapor Dragagens de Portugal S.A.
Dravo SA

Spain
Flota Proyectos Especiales, S.A. (Grupo ACS)
Dravo SA
Societad Española de Dragados S.A.

Sweden
Boskalis Sweden AB

UK
British Marine Aggregate Producers Association
Dredging International (UK) Ltd.
Jan De Nul (UK) Ltd.
Rock Fall Company Ltd
Van Oord UK Ltd.
Westminster Dredging Co. Ltd.

ABOUT EuDA
The European Dredging Association (EuDA) is a non-profit industry organisation for European dredging companies and related organisations. It represents the interests of the European dredging industry, primarily at the European institutions. The European dredging companies represent approximately 25,000 European employees “on land and on board of the vessels” in direct employment and more than 48,300 in indirect employment (supply and service companies). Approximately 750 seaworthy vessels with European flag are servicing the ports and maritime channels worldwide. The Association will pursue its goals by endorsing policies to create fair and equitable conditions for competition; commits to respecting applicable national, European and international rules and regulations; commits to operating its fleet safely, effectively and responsibly.

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