A horizontal banner with a dark blue background and a lighter blue, abstract, curved shape on the right side. The text "EUROPEAN ENERGY VENTURE FAIR 2002" is written in white, bold, sans-serif capital letters across the left and center of the banner.

**EUROPEAN ENERGY
VENTURE FAIR 2002**

Zurich - October 28th 2002

The logo for SkySails, featuring a stylized orange and white icon of a sail or wing to the left of the company name "SkySails" in a bold, italicized, orange sans-serif font.

SkySails

Shipping

- *World's merchant Fleet: 88.000 vessels*
- *Fuel consumption: 180 million tons p.a.*
- *Fuel costs: > 23 billions € p.a.*

Mission



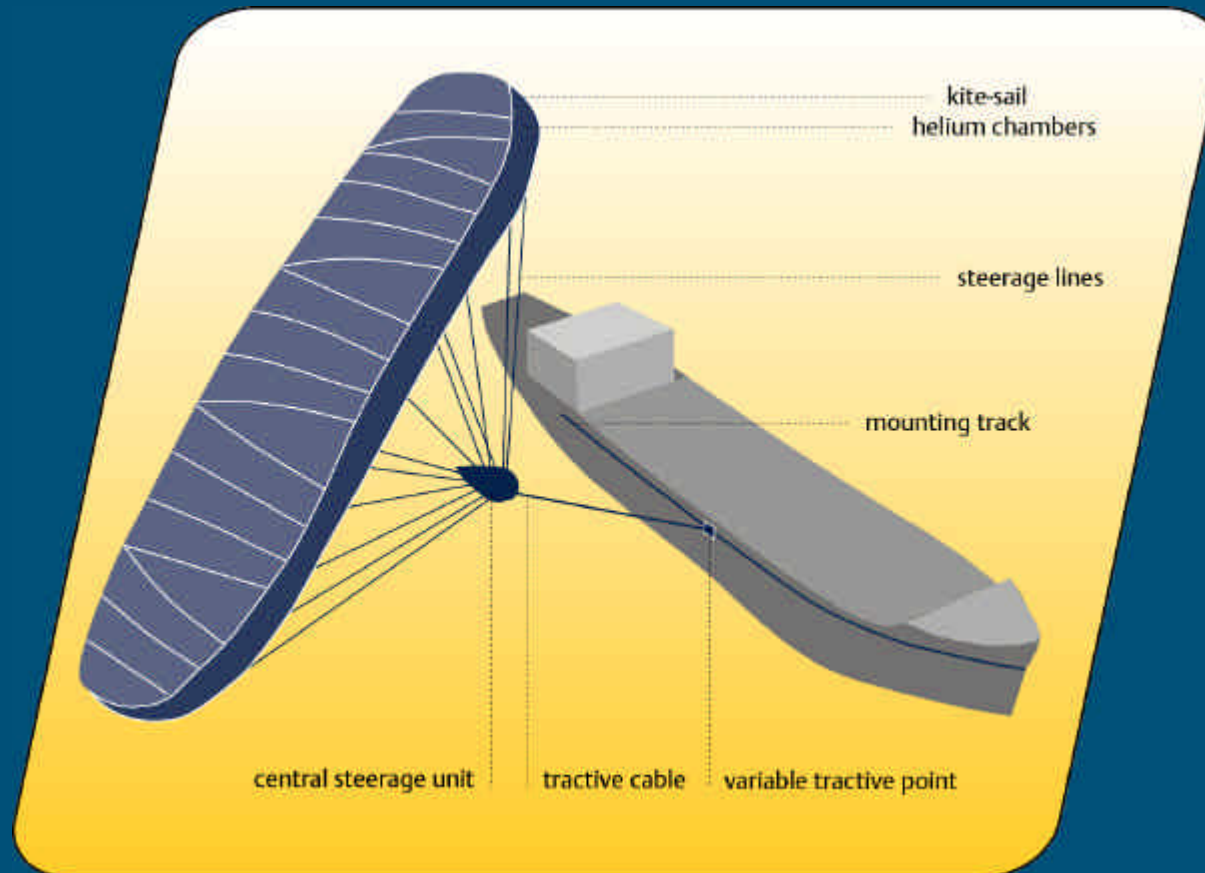
 SkySails

Introduction

- *SkySails GmbH was founded in Hamburg in 2001*
- *Business is led by
Stephan Wrage (industrial engineer) and
Susanne Moecks-Carone (business economist)*
- *First company to be sponsored with € 50.000 by the
IdeenFONDS of the City of Hamburg*



Product



Hardware:

- Software:**
- **Autopilot**
 - **Route Management, optimized for kite-sailing**

Customer Benefits

- Higher **Return on Investment**
 - Saving up to 50% fuel costs
 - Saving on emission charges
- **Competitive Advantage**
- **Image-building**
- **Reduction of environmental pollution**
- **Retrofitting-System**

Market

- *40,000 vessels relevant for SkySails*
- *Fuel costs > 12 billions € p.a.*
- *Portion of the worlds pollutant emission of NO_x/SO₂: 4% p.a.*
- *Turnover 1 billion € p.a.*
if 1.2% of the relevant ships will be retrofitted

(Source: Annual Report 2001 VSM, VDR, Lloyd's Register of Shipping)


Product Development

- *Prototyp No. 1 Test satisfactory*
- *Cooperation with research facilities*
- *Real-time simulation to calculate the fuel reduction with a SkySail:*
 - *Oldendorff Carriers, Indotransroute*
 - *Rickmers Reederei, Perl-String-Routes*

Advisory Board

- **Shipowners:**
 - *Jan Hagemann, Oldendorff Carriers, Luebeck*
 - *Bertram R.C. Rickmers, Rickmers-Linien, Hamburg*
- **Technology:** *Peter Schenzle, Hamburg Ship Model Basin*
- **Meteorology:** *Dr. Meeno Schrader, WetterWelt, Kiel*
- **Law:** *Dr. Michael Baumhauer (VSM), Hamburg*
- **Sustainability:** *Prof. Dr. F. Schmidt-Bleek, Carnoules/F*

Milestones



<i>Milestone</i>	<i>Month / Year</i>
- <i>Funding (Round 2)</i>	<i>12 / 2002</i>
- <i>Prototype No. 2</i>	<i>01 / 2003</i>
- <i>Prototype No. 5</i>	<i>06 / 2005</i>
- <i>Start Serial Production</i>	<i>01 / 2006</i>
- <i>Break Even</i>	<i>12 / 2006</i>

Capital Investment

- *Capital required till Break-Even: 21 Mio. €*
- *Break-Even after 5 years*
- *3 financing rounds:*
 - *Technology development*
 - *Product development*
 - *Product rollout*
- *Private, strategical and institutional investors*
- *Co-financed with public subsidies*



Summary

- *High propulsion power and speed*
- *High dependability and adherence to schedule*
- *Maximum safety*
- *Low space required*
- *No additional crew*
- *Retrofitting-System*

Wind Power for fuel reduction!

Any questions welcome...



 SkySails