European Short Sea: Future Opportunities and Cargoes

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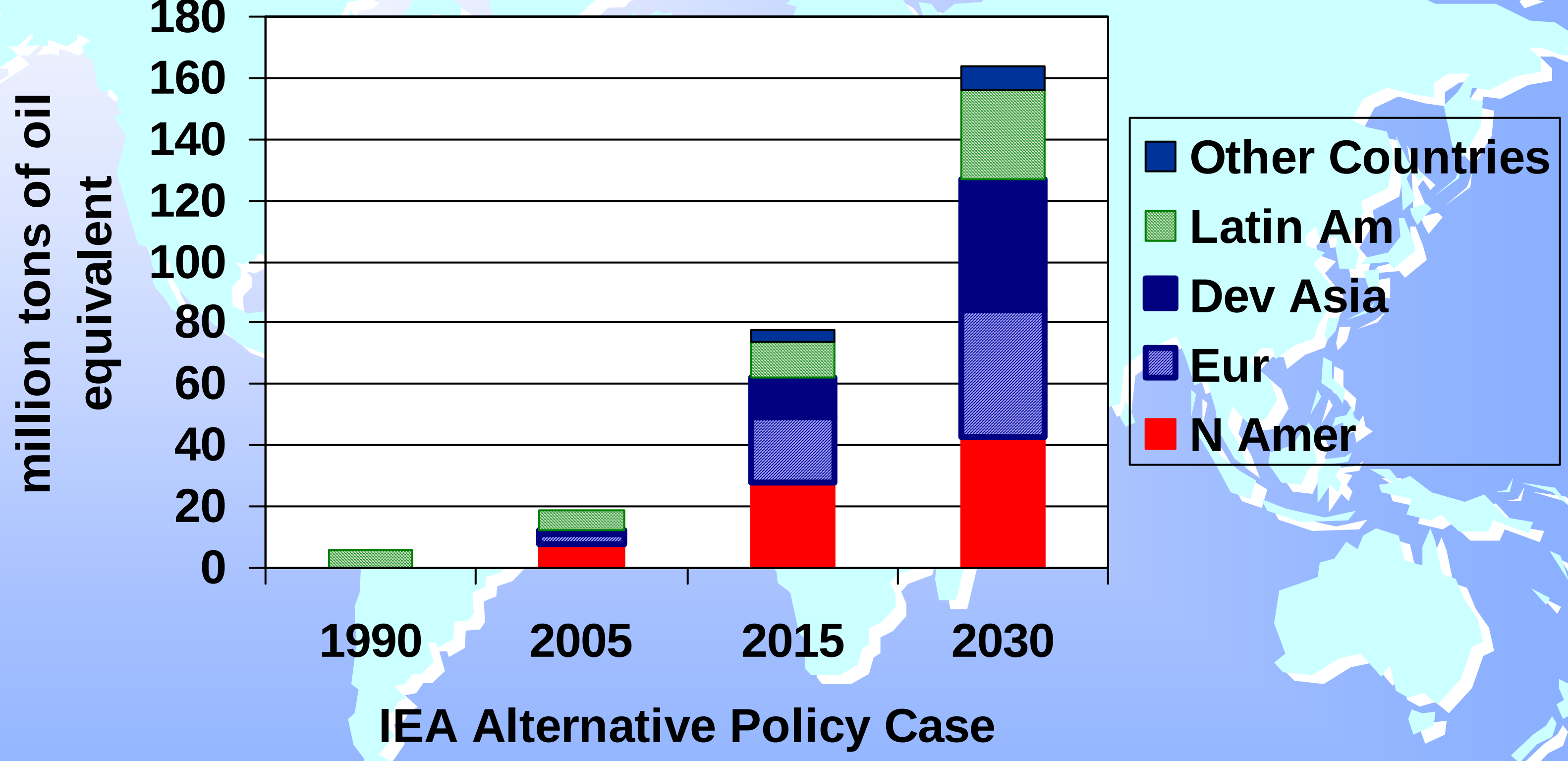
Doll Shipping Consultancy
June 2008

Future Cargoes

- Biofuels and vegoils
- Steel

IEA Forecast Demand for Biofuels: Strong Government Support for Biofuels



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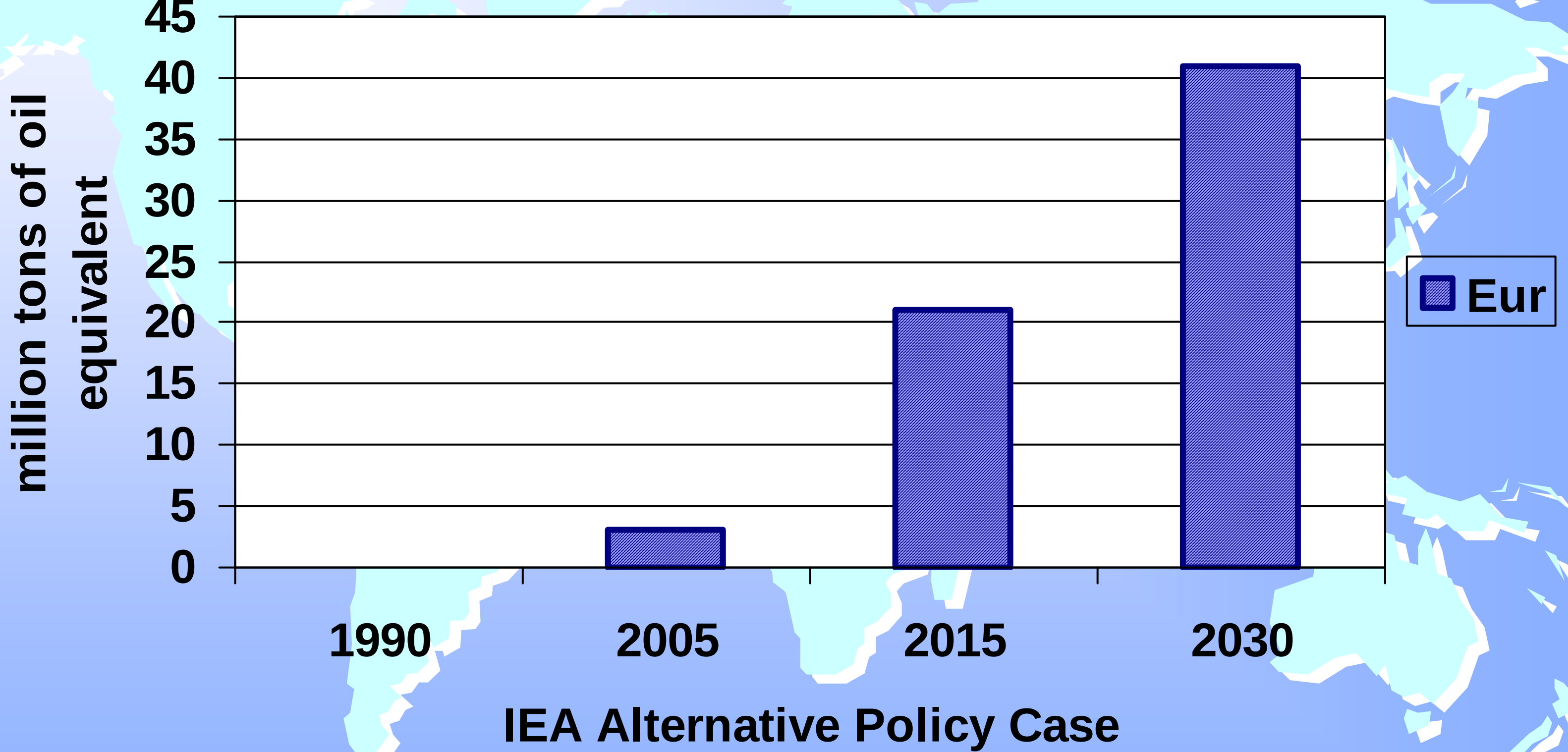

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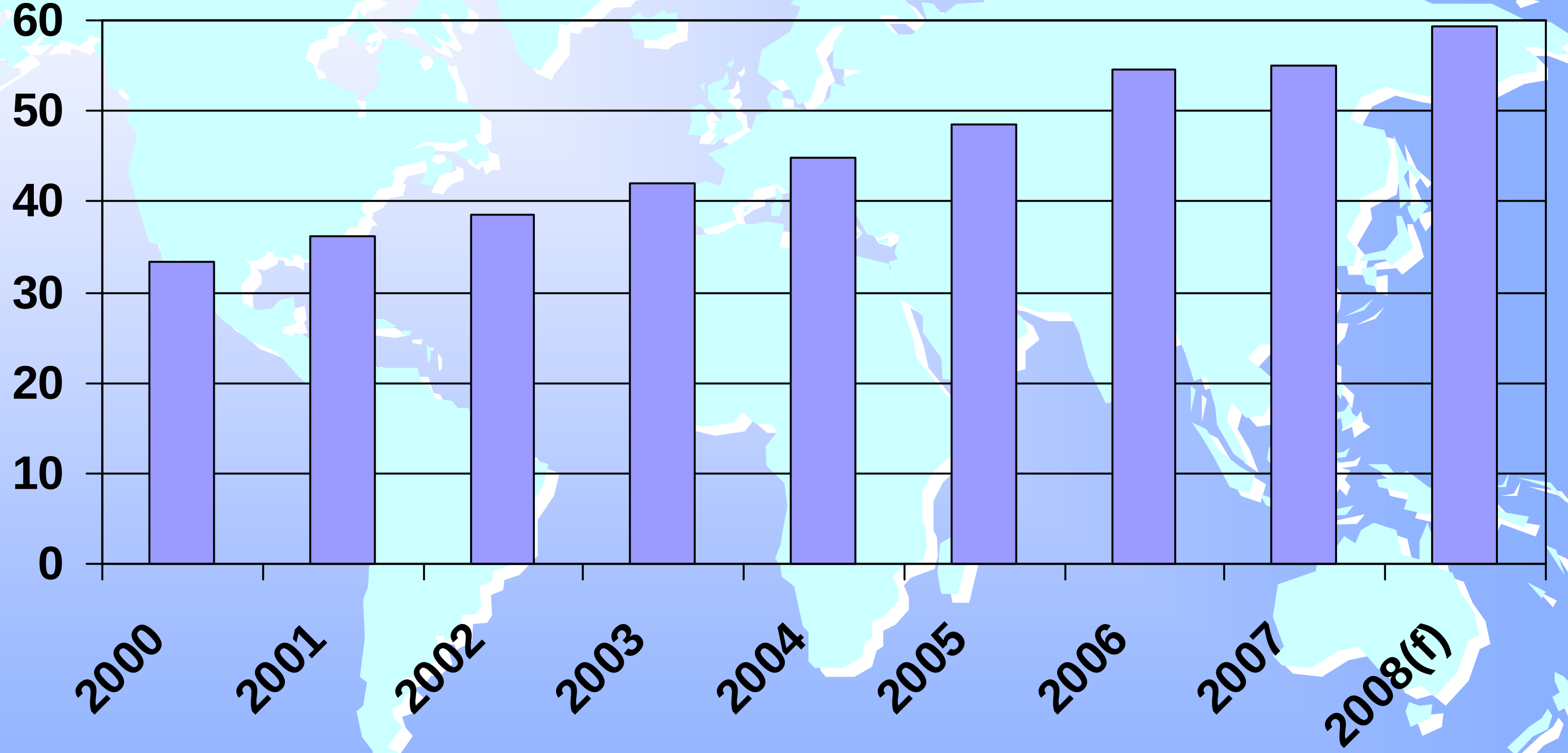
Biofuels and Europe

- 2015 EU Biofuel consumption reaches 30 mtpy
  - 50:50 Ethanol:Biodiesel
  - Biofuels imports (% total biofuels) at 50%
    - 45% from S America, 33% SE Asia
- 2030 EU Biofuels use up to 55 mtpy
  - Biofuels imports at 50%
    - 55% of imports from S. America, 20% from SE Asia
  - Would require second generation (waste materials) and third generation (transgenic materials w/improved yield) biofuels technology
- Growth in short haul and transhipment requirements
  - Economic ship size for long haul: Handymax, Panamax
  - Smaller vessels for transhipment

Vegoil trends

- Vegoils about 34% of chemical tanker trade
- “Traditional” usage has had strong growth
  - Food use
  - Oleochemical use
  - Driven by population growth, income growth and related improvements to diet and consumer products consumption
- Biofuel usage growing
  - Strong government support
  - High petroleum prices
  - However, high vegoil prices hurting economics as more capacity
- Very high vegoil prices in response to high demand, affecting demand

Seaborne vegoil trade mtpy



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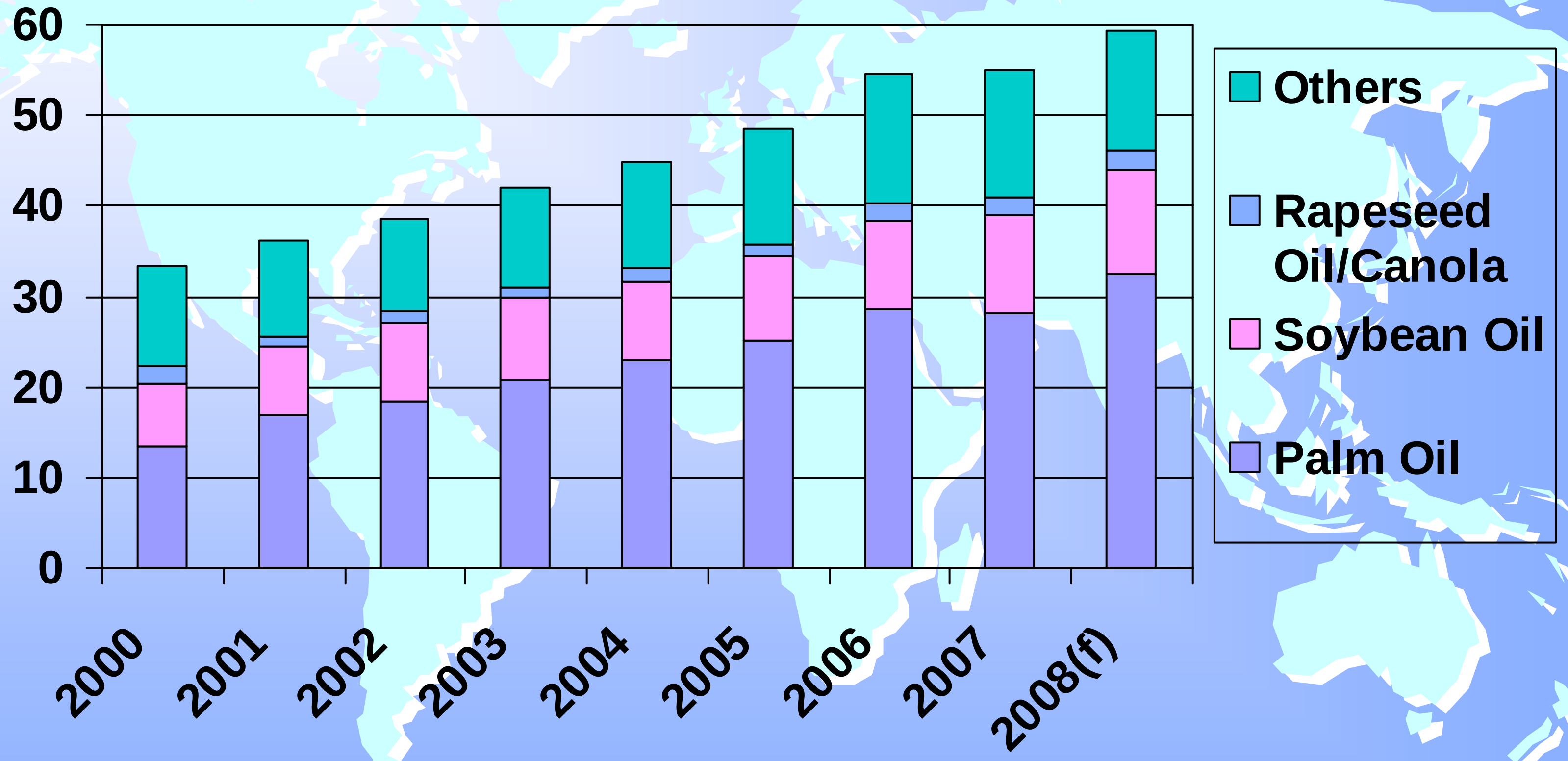
Seaborne vegoil trade mtpy



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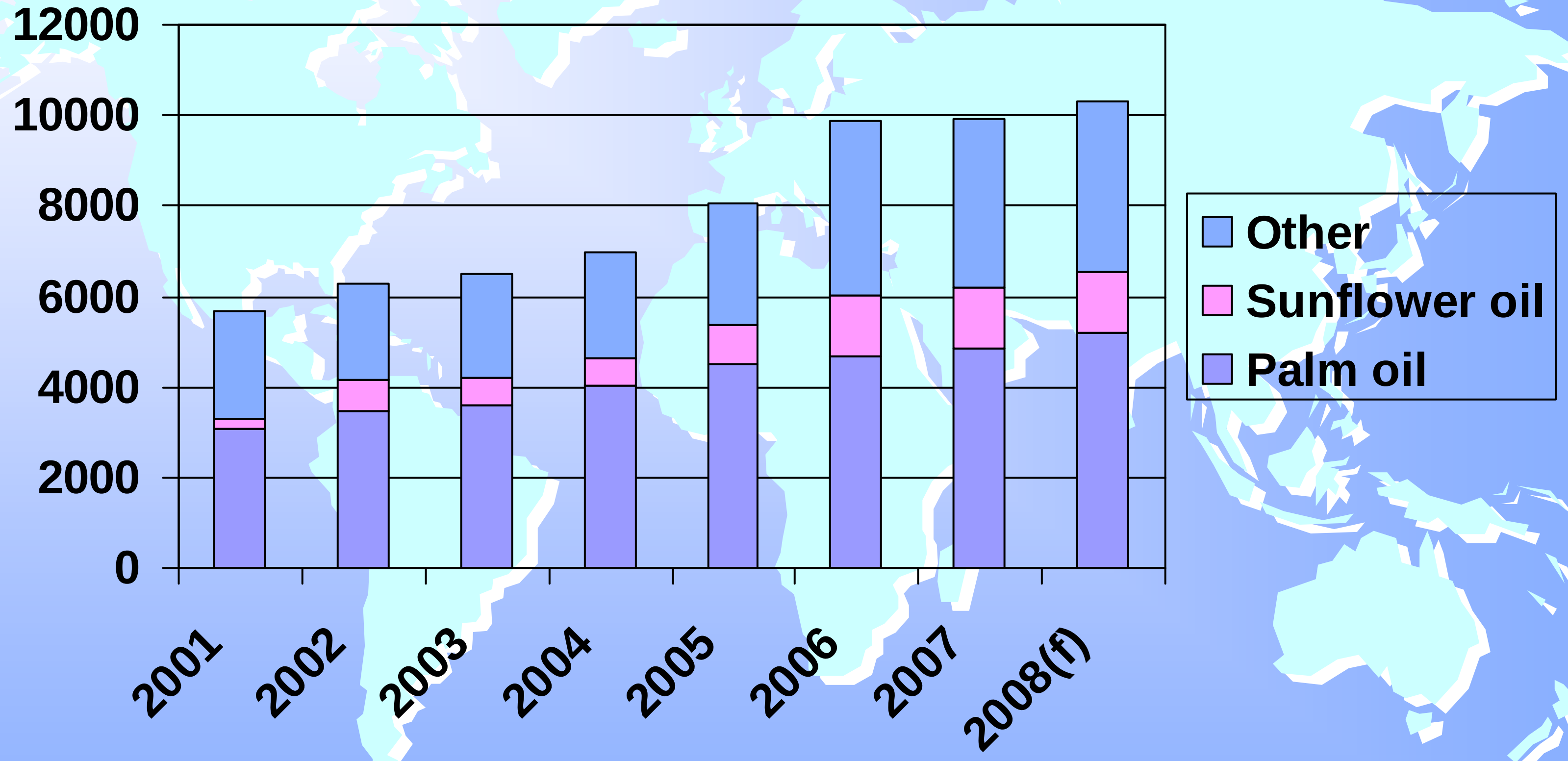
Seaborne vegoil trade

- Seaborne vegoil trade grew from 33 mt in 2000 to a 55 mt in 2007 with forecast growth to 59 mt in 2008
- Primarily food and oleochemical use until 2005
- Palm oil trade has grown from 13 mt in 2000 to 28 mt in 2997 with 32 mt forecast in 2008
- Soybean oil has grown from 7 mt in 2000 to 11 mt in 2007 with 11.5 mt projected for 2008
- Rapeseed (canola) oil trade decreased from 2 mt in 2000 to 1 mt in 2003 and grew to 2.0-2.2 mt in 2006-2008 due to biofuels demand
  - High yield of oil
- Remaining vegoils have grown from about 11 mt in 2000 to 15 mt in 2007

EU Vegoil Imports '000 tpy



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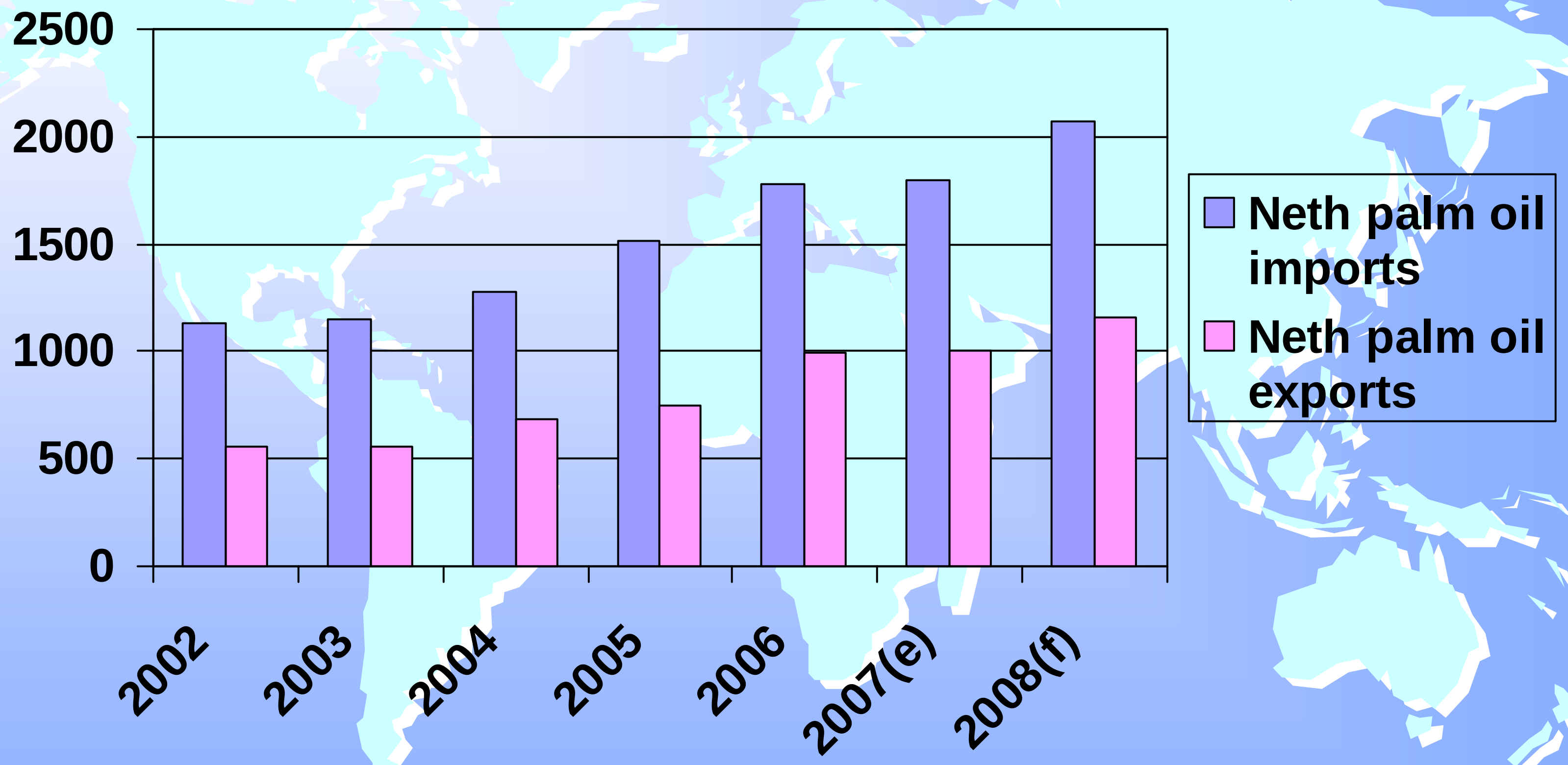
EU vegoil imports

- EU vegoil imports have grown from 5.7 mt in 2001 to 9.9 mt in 2006-200 with forecast 10.3 mt in 2008
  - "2 yrs in 1" in 2006, pause in 2007, resume growth in 2008
- Palm oil imports have grown from 3.1mt in 2000 to 4.9 mt in 2007 with 5.2 mt forecast for 2008
- Sunflower oil imports have grown from 0.2 mt in 2001 to 1.3 mt in 2006-2008
  - High rapeseed oil biofuel usage pushed up prices
  - Sun oil cheaper was cheaper but now also high
  - Russia and Ukraine hit by drought
- Total of remaining vegoils grew from 2.1 to 3.8 mt
  - Soybean oil up 1 mt
  - Rapeseed oil up 0.5 mt

EU Palm Oil Imports ‘000 tpy



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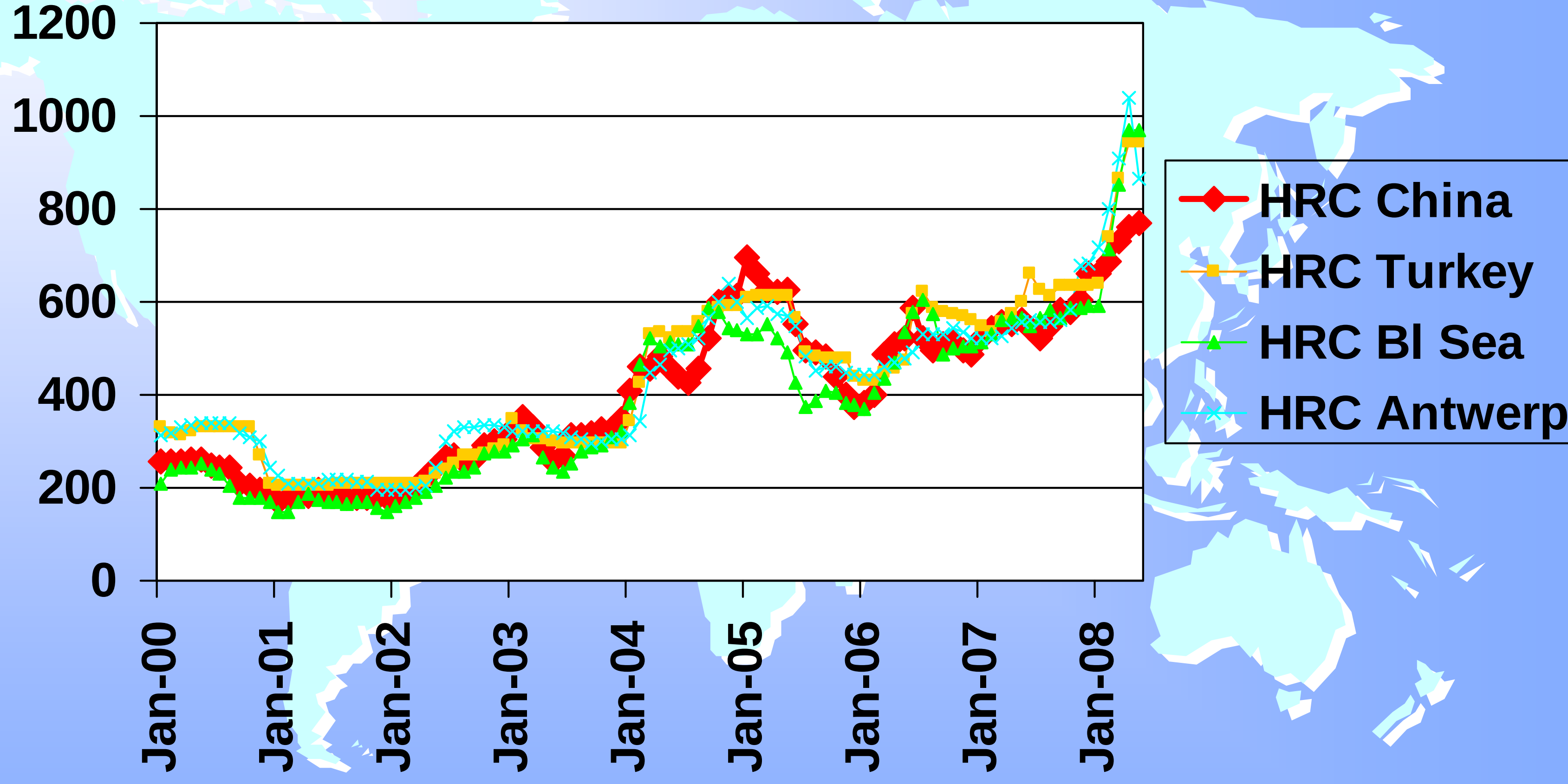
Transhipment

- EU palm oil exports comprise 56% of EU palm oil imports
- Exact split of seaborne versus land exports not available
- However, 30-50% appears seaborne
- Proportion should grow as long haul shipments and overall requirements grow
- 10 mtpy additional EU biofuel palm oil requirements forecast by 2015
    - 5 mtpy short sea re-exports probable

Biomass

- Biomass so far primarily wood pellets or chips
  - Compressing into pellets to solve low density problem
  - However, paper and particle board producers more economic than fuels markets in many cases
  - UK power plants importing biomass
- Various Netherlands parties (ports of Amsterdam and Rotterdam, power companies) working on projects with Scandinavian/Baltic forest product producers
- Statistical information hard to find

Hot rolled coil $/t



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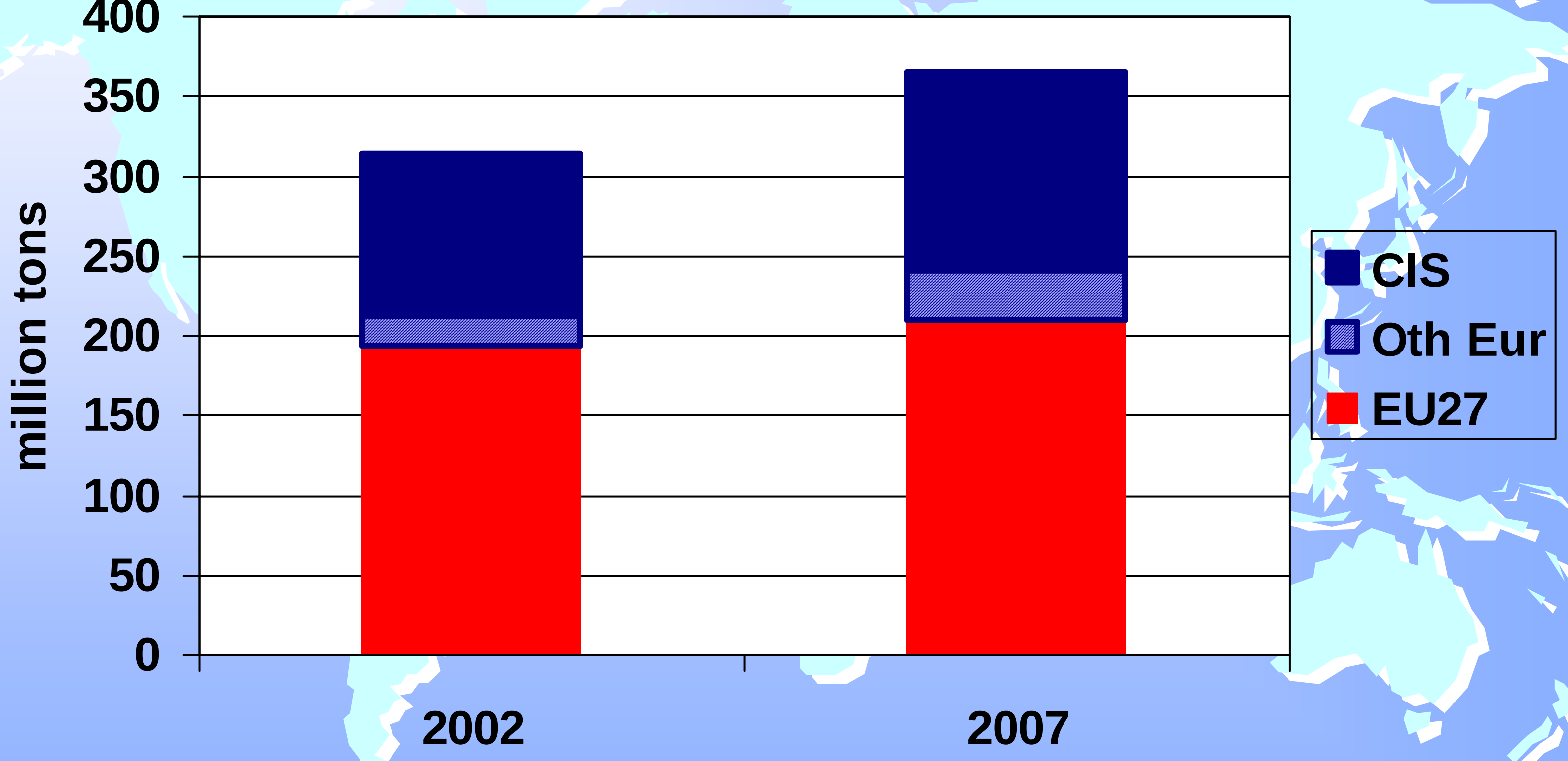
Crude Steel Production



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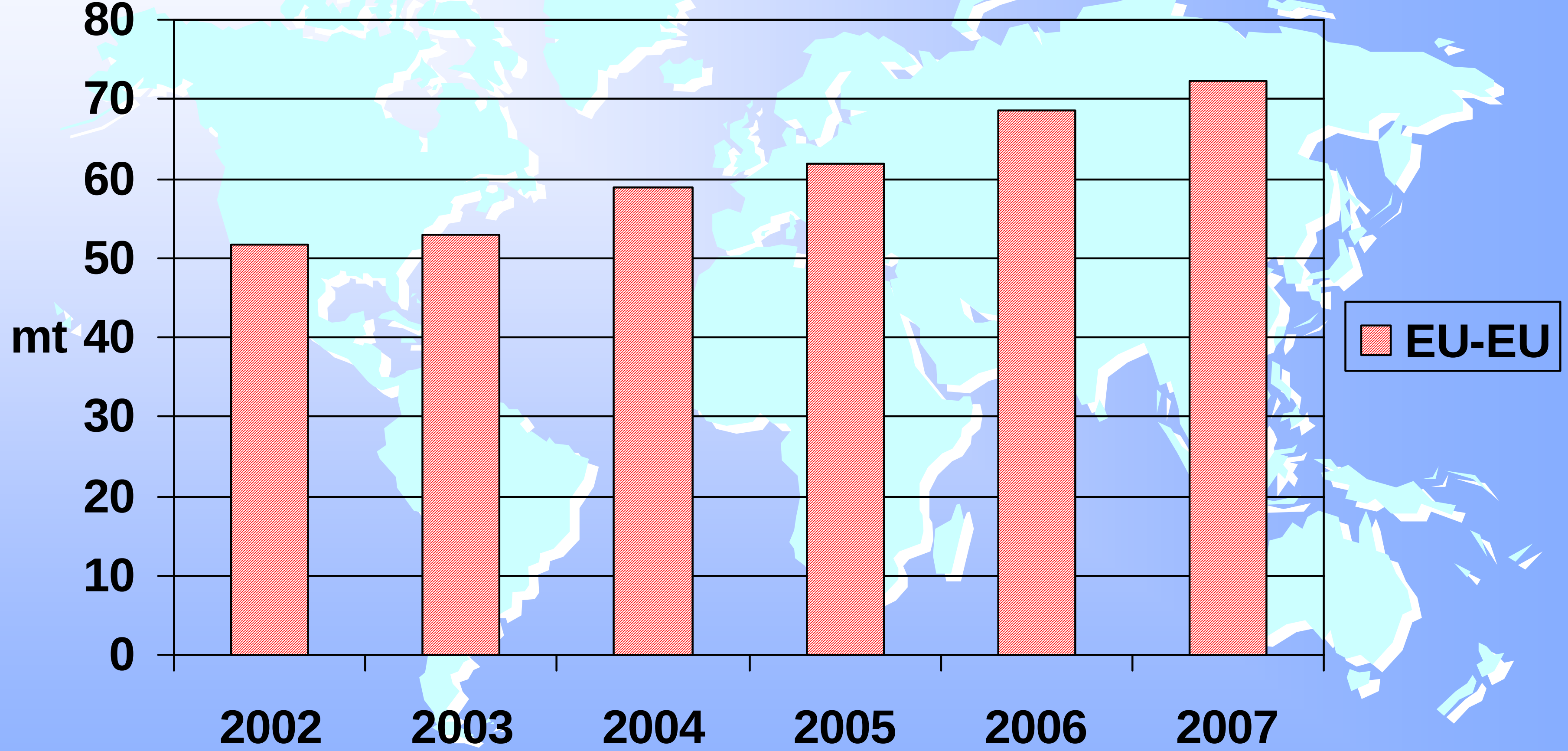
Est. EU-EU Seaborne Steel Products Trade



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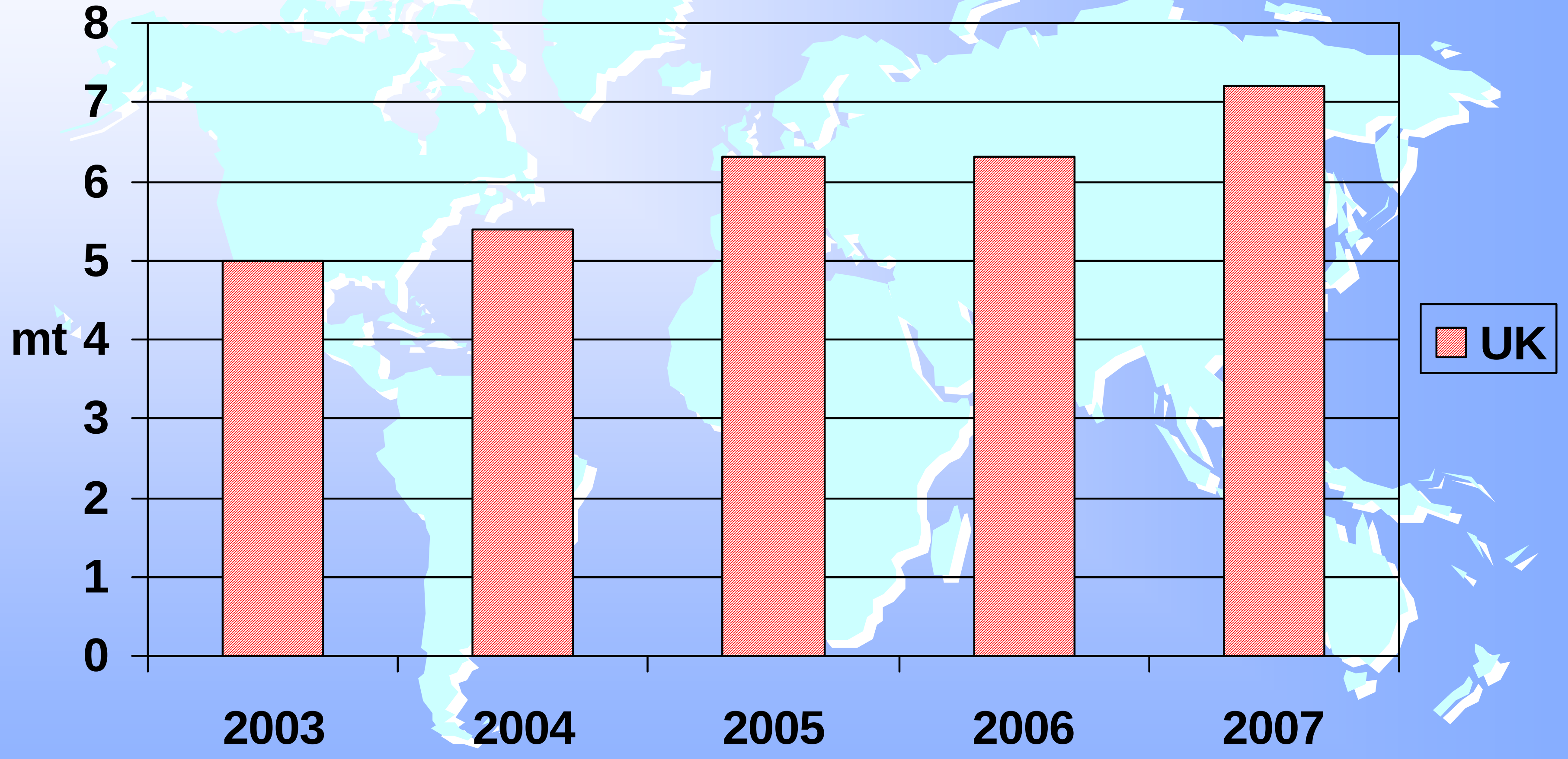
UK Steel Products Exports



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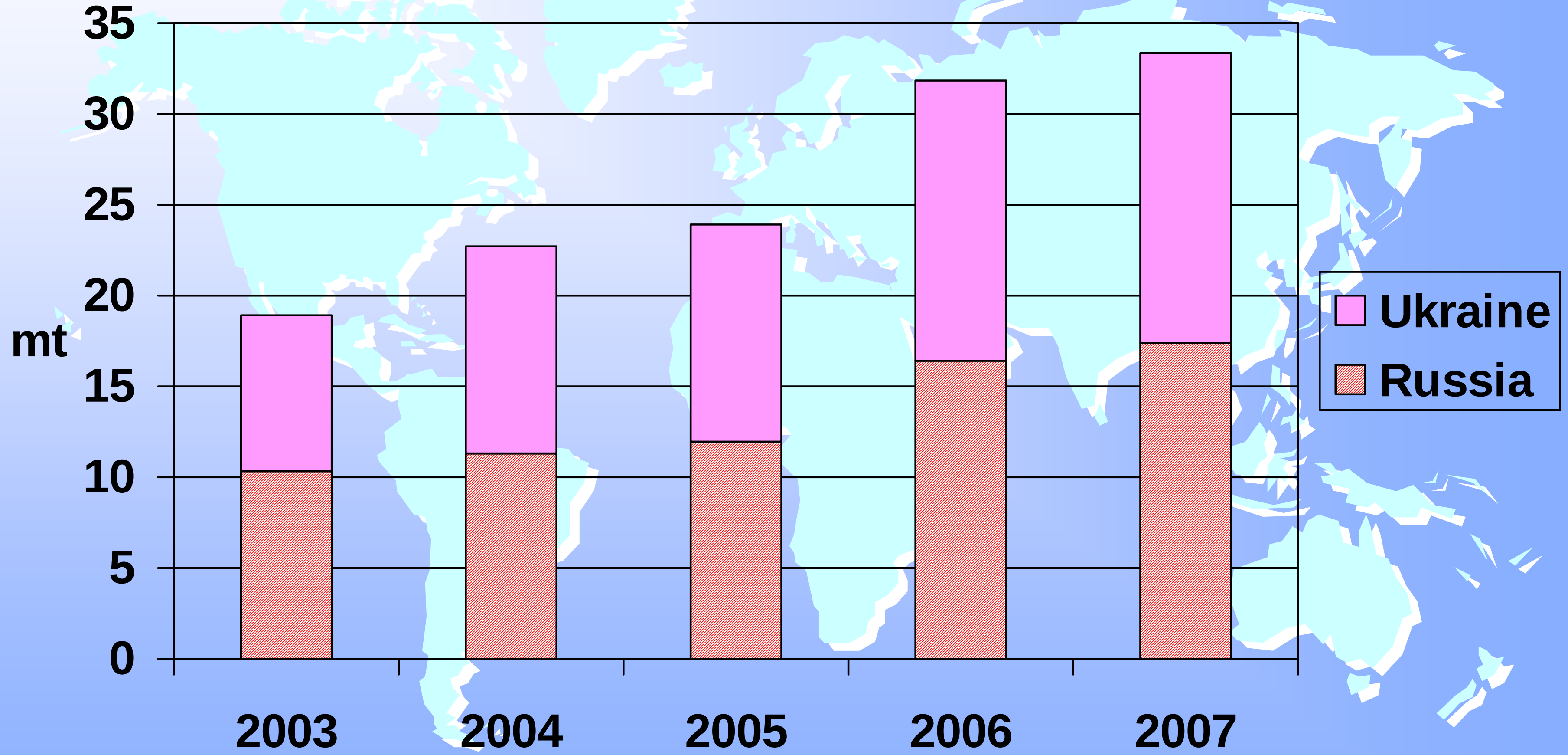
EU Steel Products Trade

- High steel demand and sector consolidation providing trading opportunities
  - Steel prices at record highs
- EU-27 steel production 2002-2007 up by 17 mt to 210 mt (1.8% average annual growth)
- EU-27 steel products exports up 7%
  - Higher proportion of exporting of steel products
  - More growth in intraregional trade than extraregional trade
- Estimated EU-EU seaborne steel exports products trade up from 51.6 mt in 2002 to 72 mt in 2007
  - EU 5 mos 2008 steel production stable versus 5 mos 2007
- However, trends supporting steel product trade growth continue
  - Note: Figures from Dollship analysis of IISI, ISSB and Metal Bulletin information

Russia and Ukraine Steel Product Exports to Europe/CIS



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Regional Steel Products Trade

- 2002-2007 CIS steel production up by 23 mt to 124 mt (4.5% average annual growth)
  - Led by Russia and Ukraine
- Total Russian and Ukraine estimated steel product exports up by 5% per year
- Russian and Ukraine estimated steel product exports to Europe and CIS up from 19 mt in 2003 to 33 mt in 2007 (15% pe/year)
  - Affected by reduction of exports to China and Middle East
  - Black Sea and Turkish exports shifted to Europe including Northwest Europe
- Other Europe steel production 2002-2007 up by 11 mt (11.5% per year)
  - Led by Turkey (up 9 mt)
  - Exports up from 12.4 mt to 17.6 mt but more up-down volatility

Opportunities

- Biofuels creating new opportunities for IMO classed tankers and dry bulk carriers
- High steel demand leading to opportunities for trading
    - Steel trading patterns changing, favouring short sea trading

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