

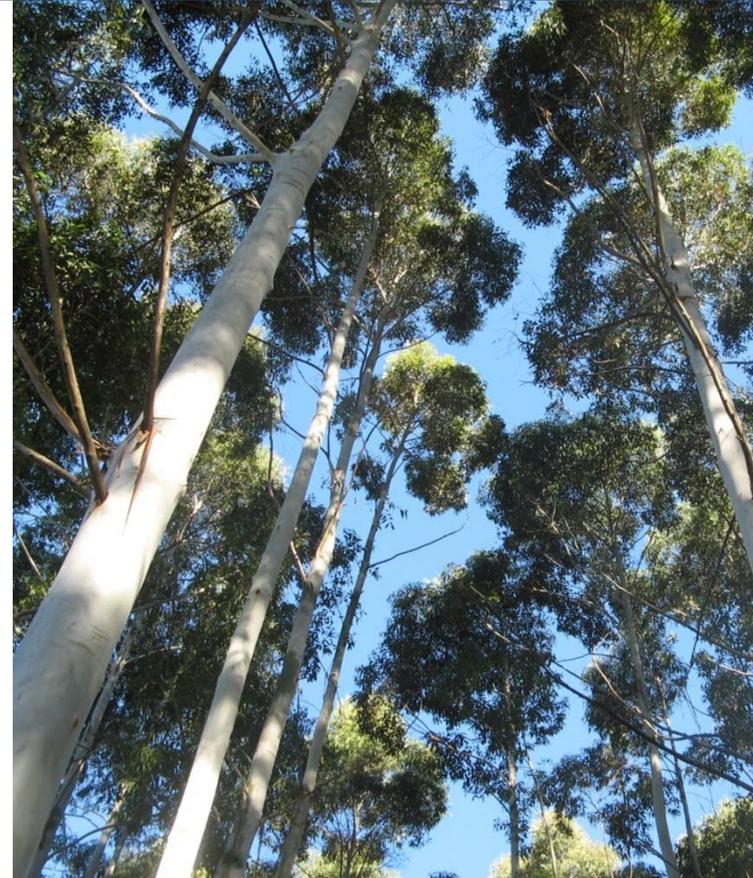
## Emerging Markets in Timberland Investment

Forestry, Biomass & Sustainability  
Conference, London

12& 13 May 2011

**For further information please contact:**

**Marko Katila**  
Dasos Capital Oy  
Tel: +358 40 9001689  
E-mail: [marko.katila@dasos.fi](mailto:marko.katila@dasos.fi)



This document has been drafted by Dasos Capital Oy ("Dasos") for the use of Dasos SA, Luxembourg. This document is for information and convenient reference, and does not constitute an offer or solicitation for, or advice that you should enter into, the purchase or sale of any security or other investment product or investment agreement, or any other contract agreement or structure whatsoever. Please refer to the appendices for further important information

# Dasos Capital Oy: Sustainable Timberland Investment for Profit

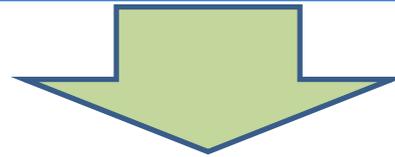


- We are an investment advisor for institutional investors and private equity clients interested in sustainable timberland and SRI investment
- We manage a Luxembourg-based Dasos Timberland Fund I
  - ✓ only unlisted fund with focus solely on Europe and **emerging markets**
  - ✓ strong sustainability focus; all assets are to be certified
  - ✓ value added created via improved sustainable forest management, forest certification, utilising identified inefficiencies, and upside from delivery of ecosystem services
- We manage at present five assets in Europe and emerging markets

# Emerging Trends in Timberland Investment

## MACRO TRENDS

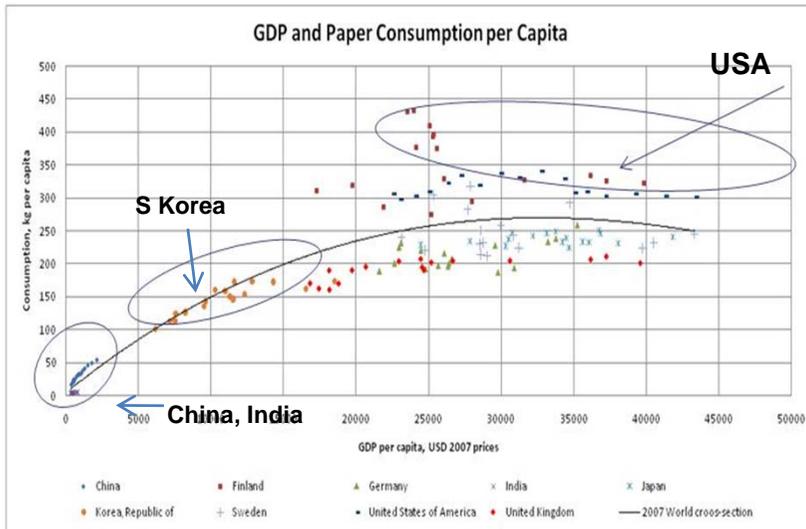
- A shift from the traditional fossil-based society towards a biomass-based economy, driven by climate change, environmental policies and reduced stocks of traditional energy
- Growing economic importance of emerging markets, with China and India at the forefront



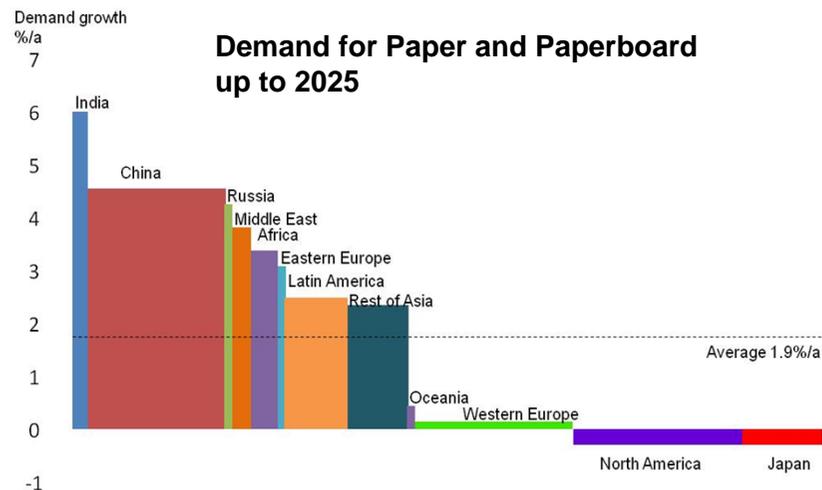
**New investment opportunities in emerging markets and diversified products based on bioenergy and ecosystem services (CDM, REDD+)**

**At the same time, increasing amounts of private capital available for forestry investments → new global forestry funds**

# Why Emerging Markets? - Push Factors



Source: Dasos, based on FAO and UN data 2009

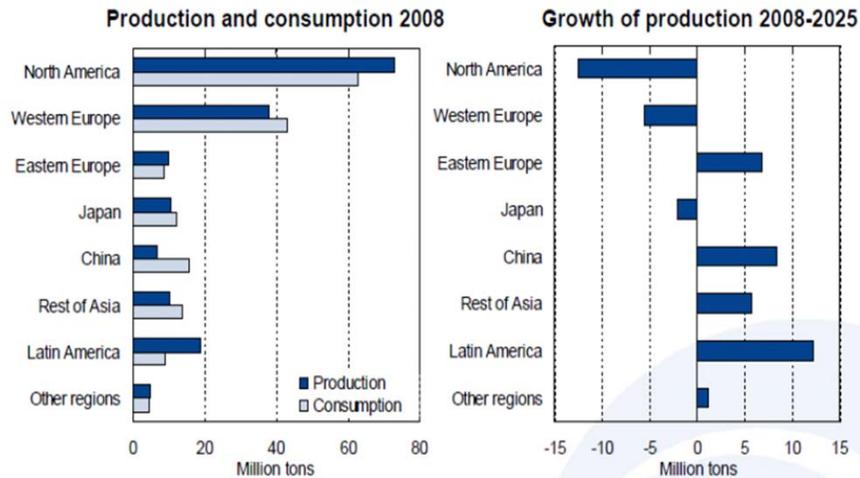


Source: Pöyry 2009

- ICT/electronic media and demographics reduce demand for paper in developed markets → mill closures in Europe and USA → downward price pressure
- New investments in paper production shifting closer to growing end-use markets such as China
- Pulp expansion close to fibre sources and low-cost production countries in LA and Asia
- US timberland market efficient with a large number of players competing for a limited number of deals → **downward pressure on returns**
- Investors looking for new markets to achieve higher risk-adjusted returns and portfolio diversification

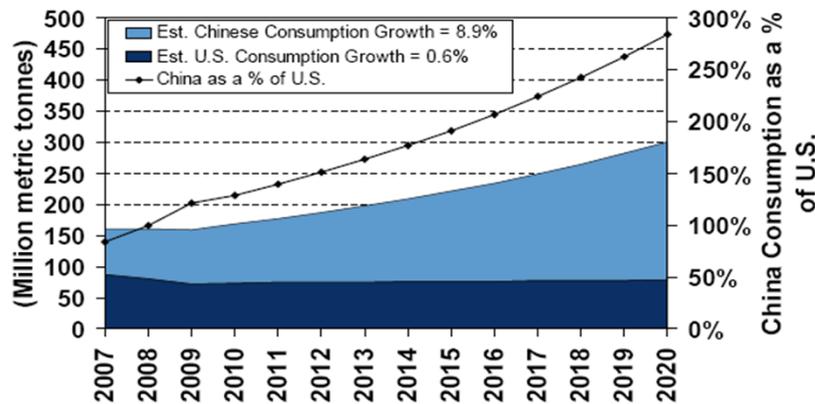
# Why Emerging Markets? - Pull Factors

## Pulp Production Trends up to 2025



Source: Pöyry 2010

## Est. Consumption Growth of Paper & Paperboard of U.S. & China 2007 - 2020



Source: Barclays Capital Estimates, China Paper Association

- Population and GDP growing the fastest in Asia
- Increasing per capita demand for paper and wood products in emerging markets
- Major shift in production and consumption patterns favoring emerging economies
  - ✓ Asia: a major consumption and production center of paper
  - ✓ LA: a major center for pulp production and large-scale fast growing plantations
- Demand for bioenergy increasing in emerging countries incl. China and Brazil
- REDD investments will increase and by definition they will take place in developing tropical countries

## Impact of China and India

- China and India are seriously short of fibre with implications on wood production extending beyond Asia
  - ✓ already at present China is by far the world's largest importer of round wood and 2<sup>nd</sup> largest importer of wood chips influencing global wood flows and prices; India is following China's developments
  - ✓ log, sawnwood, wood chip imports up by 22%, 48%, and 70% in 2010
  - ✓ consumption of forest products and exports from China is on the rise while capacity to meet fibre requirements domestically is limited
  - ✓ demand supply gap continues to widen resulting in increasing imports
- Plantation investments outside China to supply fibre to Chinese industry e.g. in Indonesia, Latin America and in future even Africa
  - ✓ major industry players such as APP, April and StoraEnso have established themselves in China and source fibre from the region
- The high productivity wood growing areas –such as SE Asia - with good access to China and also to India are to benefit the most

# Timberland Investment in Developed vs. Emerging Countries I

	Developed Countries	Emerging (Tropical and Sub-Tropical) Countries
Nature of forest	Primarily mixed natural forest; also monoculture plantations	Primarily plantation forests, monocultures
Maturity of forest	Mainly mature, “brownfield”	Often greenfield
Productivity/Costs	Slow-growing, most land plantable/High costs	Fast growing; great potential to increase yields manyfold at low cost
Land ownership	Private (freehold)	Private in LA, state in Africa and Asia
Competition for land	Not a major issues, sometimes a return driver	Increasing competition between production forestry, agriculture, bioenergy and conservation
Availability & quality of service providers	Plenty of high quality managers, technicians workers	Situation good in Brazil, Chile and Uruguay; a constraint in many other countries
Availability & reliability of information	Excellent; growth & related wood flows can be predicted well	Often weak → adds to DD and managements costs
Deepness of domestic market/Industrial capacity	Deep competitive markets with alarge number of buyers; markets not growing and even declining	Domestic market/ industrial structure often still undeveloped →sometimes difficult to establish a market price; markets are growing rapidly

## Timberland Investment in Developed vs. Emerging Countries II

	Developed Countries	Emerging (Tropical and Sub-Tropical) Countries
Overall investment environment	Good	Problems with governance, bureaucracy and corruption in many countries
Policy and regulatory environment	Generally stable and clear and enforced	In some countries weak (e.g. contract law); problems with land tenure
Social and environmental risks	Social risks limited; some environmental risks (storms, fire, water)	Environmental and social issues can be complex and their mgmt. costly; conversion of natural forest issue
Operational risks	Low	In some countries low and in others higher due to limited local management capacity → manager selection crucial
Maturity of investment platform/Exit opportunities	Well established in US; emerging in Europe; market efficient, valuations maybe too high → downward pressure on returns Secondary markets exist	Not developed with great potential for high returns but more challenging exists because weak secondary markets

# How to Make REDD More Attractive to Private Sector?

REDD mainstreaming and **scaling-up** require:

- Enough clients who want to invest into sustainable forest management and REDD
  - ✓ despite of progressive companies investing into REDD projects, there is not yet enough appetite amongst institutional investors for this type alternative, exotic and risky products
- Real and perceived investor risks must be reduced:
  - ✓ REDD policies and rules at global and national level must be instituted and made transparent and clear
  - ✓ host countries must ensure that property rights related to forest land and carbon, incl. carbon credit ownership and transfer, are clear, transparent and enforceable
  - ✓ risk mitigation instruments such as standards, insurances, guarantees must be introduced
- A clear product for which there is market demand, liquidity and an established secondary market; there must be efficient mechanisms to link buyers and sellers
  - ✓ REDD-based credits must be integrated into a global trading scheme
- “REDD companies” with a track record and demonstrated management capacity and enough “quality” projects on a large-enough scale to justify high upfront and transaction costs and enable benchmarking

## Take-Home Pointers

- Most of the untapped timberland investment universe is in the emerging markets with attractive expected returns associated with higher risks and more demanding due diligence, governance and risk management systems
- Institutional investors must pay special attention to manager selection to ensure that local/regional conditions influencing the returns are well understood and that managers can perform on the ground
- New models are needed for emerging market and REDD investments
- REDD will expand investment opportunities in emerging countries but it will take several years; until that pioneering projects based on voluntary markets dominate
- **For most capital market investors REDD sounds far too complicated** → REDD must be turned into investable, preferably liquid assets with secondary markets, that generate real cash flow and returns, and whose performance and risks can be measured and compared to other asset classes