ENVIRONMENTAL FINANCE

Forestry, Biomass & Sustainability 2012

Innovative financing mechanisms to drive large-scale public-private investments

May 2012
Irbaris is a specialist strategy and sustainability consulting firm working internationally with major companies, investors and policy makers.
Panel session on innovative forestry finance – some key questions

- The need for innovative forestry finance – *what is missing and why is it ‘innovative’?*
- Mechanisms for financing forests – *what different models might be commercially viable?*
- Environmental risk modelling for forestry finance – *can the particular risks be mitigated?*
- The role of government, multilaterals and private investors – *how might risks be shared?*
- Valuing natural capital – *can forestry finance capture the broader value of ecosystems?*
- Investment initiatives across different markets – *what activities have there been in practice?*

*Can innovative finance make a difference given the risks involved, the lack of demand and the challenging economy?*
There is increasing recognition of the need for public and private investment in forestry given the particular market factors

- Significant investment is needed to address global deforestation and secure related mitigation
  - Estimated USD 17-33bn per year to half emissions by 2030 (Eliasch)
  - But only between USD 2.5 to USD 5bn pledged with investment in forest carbon USD 178M in 2010
  - Shortfall suggests combination of public and private sector investment required to achieve scalability

- There is considerable uncertainty around future developments in forestry regulation, particularly on the links between forestry and other carbon or environmental markets
  - Lack of commercial certainty under UNFCCC CDM and REDD+
  - Limited compliance based recognition and variable emerging regional and voluntary markets
  - Lack of market demand constraining investor interest

- There are specific market, project and reputational risks for business as well as important overlaps with biofuels and agriculture
  - Risk of inappropriate assets and/or regulatory change including around standards and land tenure
  - Increasing potential for links to other commercial and environmental services markets
  - Scope for sharing of risks to leverage investment
There is a patchwork of existing and emerging emissions trading schemes - some of which could recognize forestry

INTERNATIONAL: KYOTO PROTOCOL AND VOLUNTARY MARKETS

KEY: Emerging  Existing
Investors in forestry face an extended range of risks that affect potential returns in the current constrained market.

Various risk factors will affect a forestry project...

- Regulatory
  - Carbon ownership
  - Land tenure
  - International and local policy/law
  - No REDD+ market
  - No EU ETS recognition
  - Limited voluntary market
  - Nascent ecosystem service markets
  - Other commercial markets (biofuel)

- Operational
  - Methodologies
  - Standards
  - Natural events
  - Country risk
  - MRV

- Reputational
  - CSR
  - NGOs and local communities
  - Co-benefits

... and so affect investor interests

- Risks
- Returns
- Timescales
- Geographies
- Compliance
- Diversification
- Sustainability

© Irbaris LLP 2012
There are a range of actors looking at financial approaches to help manage the risks and incentivise investment

<table>
<thead>
<tr>
<th>ORGANISATIONS</th>
<th>MECHANISMS</th>
<th>OUTCOMES?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governments</td>
<td>• Grants/loans – S2S and demonstration activities</td>
<td>• optimal sharing of risks</td>
</tr>
<tr>
<td></td>
<td>• Bonds – robust ratings and coupon levels</td>
<td>• acceptance of losses</td>
</tr>
<tr>
<td></td>
<td>• Guarantees – default credit buyer</td>
<td>• maximum leverage of funds</td>
</tr>
<tr>
<td></td>
<td>• Tax – hypothecation and financial instruments</td>
<td>• flexibility for varied assets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• improved project viability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• enhanced project transparency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• beyond demonstration activities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• bridge to compliance market</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• increased market development</td>
</tr>
<tr>
<td>Financial Institutions</td>
<td>• Investor and lender – structured debt and equity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Intermediaries – product arrangement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Funds – management and product protection</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Bonds and Securitisation – underwriting returns</td>
<td></td>
</tr>
<tr>
<td>Business and Industry</td>
<td>• Supply chain management – certification</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Portfolio diversification – market support</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Compliance – market demand</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• ESS – recognition of value</td>
<td></td>
</tr>
<tr>
<td>Insurers</td>
<td>• Carbon credit issuance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Operations and natural catastrophe</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Governmental/policy risk</td>
<td></td>
</tr>
</tbody>
</table>
Main contact details

Michael Woods  
michael.woods@irbaris.com

David Lyon  
david.lyon@irbaris.com

www.irbaris.com

LONDON  
Irbaris LLP  
Centre Point  
103 New Oxford Street  
London, WC1A 1DD  
England  
Office: +44 20 3102 5455

WASHINGTON DC  
Irbaris (US) LLP  
1875 Eye Street  
Washington  
DC 20006  
United States of America  
Office: +1 (202) 429 8424

© Irbaris LLP 2012