New Truths for 2035

Transformational Changes That Will Reshape the Forest Bioproducts Industry

John B. Mahaffie, Leading Futurists LLC, April 18, 2013
Potential and demand for change

Consider what we:
• Must change
• Are under pressure to change
• Have opportunity to change

A New Integrated Forest Industry
The emerging global middle class

- **Billions**
  - Middle East & No. Africa
  - Sub-Saharan Africa
  - Asia Pacific
  - Central and So. America
  - Europe
  - North America

- **Years**
  - 2009
  - 2020
  - 2030

- **Regions**
  - North America
  - Europe
  - Central and So. America
  - Sub-Saharan Africa
  - Asia Pacific
  - Middle East & No. Africa
The emerging global middle class

This means:

• Un-ending demand for the sector’s **critical resources**: water, energy, land

• Fast-rising demand, but fast-rising **competition** in the forest products sector
Rethinking production

Printing wood with varying temperatures
http://betterprinter.blogspot.com
Rethinking production

This means:

- New opportunities at new scales
- Re-localization of production
- Blurring of disciplines in the sector
- Demand for new science

Demands post-industrial thinking
How technology can pay off
How technology can pay off

This means:

• More collaboration, harnessing technology
• Putting our materials mastery to work
• Blurring the boundaries of paper science
The future of global commerce: Competitive edge

Developed markets
- Customization
- On-demand
- Innovative products, services
- Local production
- Scale down

Developing markets
- Market share expansion
- Market penetration
- Mass production efficiencies
- Cultural fit
- Brand and marketing
- Scale up

Developed: Niche and craft market growth

Emerging markets: Mass market growth
The future of global commerce

Developed:
Niche and craft market growth

Emerging markets:
Mass market growth

This means:

• **New competition** on the commodity side, rising on the value-added side

• Highest new potential in **value-added**, innovative products for new growth

Where can you *invest, innovate, and win?*
Conclusion: Tough changes, plenty of opportunity

Low-Hanging Fruit

Big Systems

Getting serious

Low-Hanging Fruit

You!
Tough changes, plenty of opportunity

Confronting the big systems
- Costs money
- Demands new skills
- Demands new R&D
- Challenge to vested interests, sunk investment
- Scary!

This means:

You have to build your sector’s future, starting now...

...or someone else will, and they may be in Asia!
QUESTIONS AND REACTIONS?