

# The Big Picture

Peatland, Development, Forestry  
& Conservation

# Global demand for fibre is increasing

- The World's population could reach 9.2 billion people by 2050 (UN)
- Fibre from planted forests will need to increase from 800 million cubic metres to 2.7 billion cubic metres by 2050 (WBCSD Vision 2050)
- Responsible plantation development now - sustainable fibre for the future
- Indonesia – a real opportunity to lead the World in this sector: tree growth rates, land availability, cost of production, ability to invest in technology and capacity, productivity and proximity to key growth markets



# Riau – driver of national development

- Riau accounted for 6.5% of Indonesia's national GDP in 2010
- Population in 2010 of 6 million, up almost 100% in 20 years
- Private sector – key to increasing Riau's GDP by 250% in the past 5 years
- Poverty as a % of the population reduced by almost 30% since 2007



# Forestry – helping the economy

- RAPP has contributed IDR 196 trillion (USD 21.7 billion) to the National Output
- 6.9% of Riau Province's economic output
- 6.1% of Riau's gross regional domestic product (GRDP)
- 5.4% of all household income in Riau
- Employment opportunities in Riau for 90,000 people in 2010
- Multiplier on Provincial output of 2.29 times, 2.36 times on household income and 5.7 times on employment

**Source:** 2010 University of Indonesia study covering 1999 – 2010



# Forestry – helping people

**Focused on education, health and infrastructure – covering 140 villages and 3,000 families**

- Free medical treatment for 36,700 people
- 500 farmers trained in integrated farming
- 76,000Ha of community livelihood projects
- 5,000 local community jobs through SMEs
- 2,800 scholarships up to senior high school
- Training activities for 150 teachers
- Constructed and renovated 20 school buildings since 2008



# A key question - answered

## Why we operate on peatland...

- We saw a commercial opportunity 20 years ago to become a key plantation-based fibre supplier
- Riau had a development imperative
- Government concessions on peatland were available
- A profitable business – that supports investment in science and development of responsible land management



# The most important questions

## Consider that:

- 40% of Riau is on peatland - mineral soil developed first and now scarce
- 85% of that peatland is already degraded or converted for agricultural uses
- Just 15% of peatland remains intact and of strong conservation value

## The real questions to our mind are therefore:

- How can the areas of peat already converted or degraded be best managed - to further Riau's agenda AND contribute to environmental goals?
- How can the peatland forest in good condition be conserved and protected – real time, real world?

# Conservation – key learnings

- A journey of almost 20 years
- Our model has evolved – starting with a “Western Model” e.g. contribute land to national parks
- We’ve learned over time that doesn’t always work
- Then we adopted HCVF – and have learned that only works under certain conditions
- Now our focus is on:
  - Conservation areas that we can protect
  - Multiple buffer zones protecting the core
  - Water management to maintain/improve water levels



# Our plantations in practice

- Conserving forest since 2005
- 36 HCV assessments
- 200,000 hectares of forest conserved
- Added 35% to existing natural forest protected by government in Riau
- Continuous community development
- No-burn policy and active fire management
- Energy self-sufficiency and chemical use reduction
- Continual improvement of water, soil and crop management based on science
- Plantations used as buffers to protect peat dome



# The alternatives are stark

## Unmanaged Land

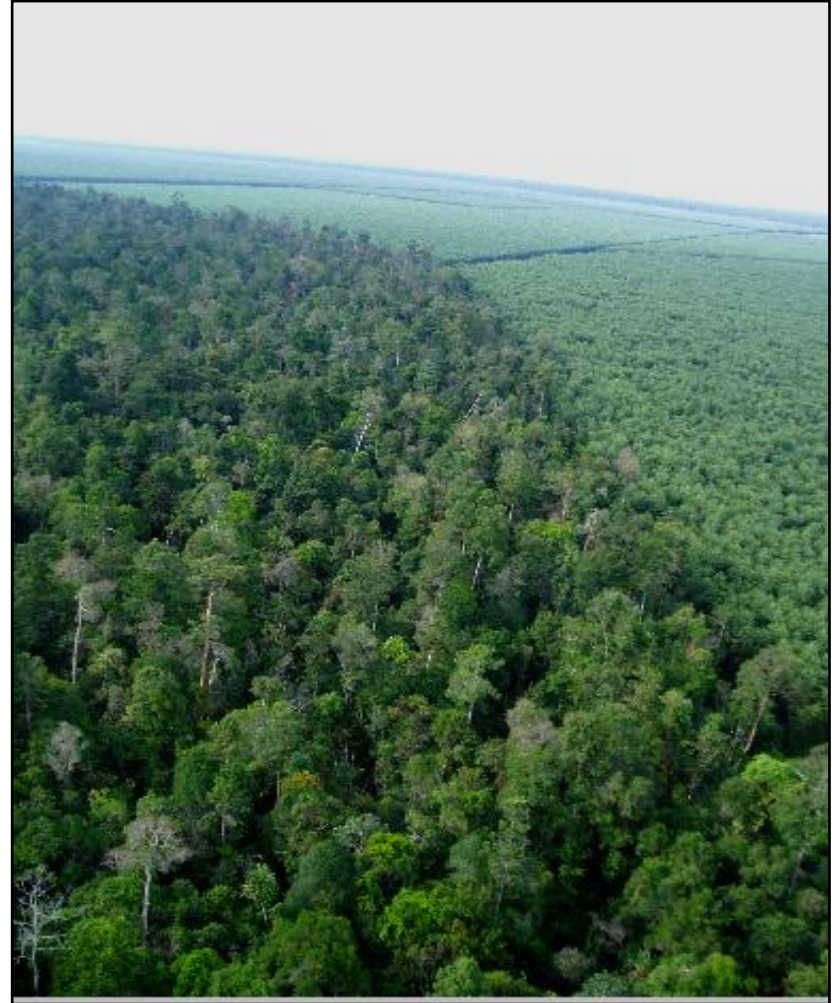
- Poverty and population pressures drive encroachment
- Highly organised illegal logging
- Slash & burn farming
- No designated conservation areas
- Unregulated development
- No sustainability planning
- Zero care for workers/community development
- Loss of export income

## RAPP Sustainable Land Management

- Adhere to regulations
- Protect conservation forests
- Rapidly replanted trees
- Active fire fighting - “no burn”
- Sophisticated water management
- Infrastructure for communities
- Significant international scrutiny
- Jobs instead of illegal logging

# RAPP peatland management

- Protection of critical headwater peat areas to maintain the integrity of the peat dome
- Water management practices that ensure water levels compared to “At Take Over” levels are managed
- Plantations that ring conservation areas discouraging encroachment, illegal logging, unmanaged drainage
- Continually treed buffer zone between our plantation and natural forest to further influence water levels
- Review and adjust plantation practices to maximise tree canopy cover, improve soil and water protection



# Peatland & Carbon

Overall goals in regard to carbon emissions and peatland:

- Establish a verifiable baseline range of carbon emissions from the concessions at the point at which we took them over and variations to current emissions levels
- Establish a total carbon emissions footprint from all of our current operations and activities combined
- Measure and progressively improve effectiveness of carbon emission reduction initiatives
- Determine a carbon emissions mitigation plan for the long term, towards stable, sustainable land use – now and for the future

# More work to be done

- Embarked on a comprehensive and long-range programme with a number of third-party experts to build knowledge about carbon emission
- Commissioned or participating in a number of scientific projects to gain a more complete picture of the relationships between peatland, carbon and forestry activities
- Activities include:
  - Pioneering participation in a Monitoring, Reporting and Verification (MRV) programme undertaken by independent third parties on behalf of the Indonesia government measuring against 19 indicators relevant to peatland
  - Facilitating field work and other scientific study by the Bogor Institute, Hokkaido University and other academic bodies focused on peatland

## In summary...

- Some see plantations and effective peatland management as contradictory
- We see responsible plantation development as a real-world solution – balancing development, sustainability and conservation
- The alternatives are stark
- We continue to develop knowledge and best practices
- John Bathgate will provide detail

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