



#### Forests continue to attract attention







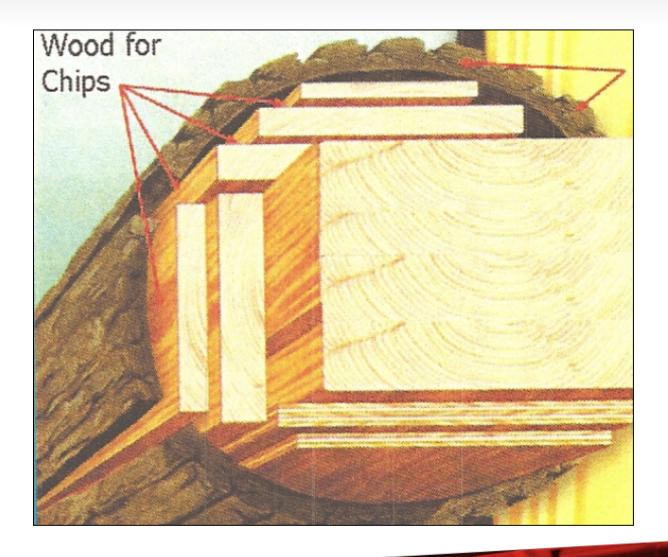
- 1) Trees are cut down to make paper
- 2) Papermaking is a polluting industry
- 3) Avoiding paper consumption is good
- 4) More recycle content in paper is better
- 5) Fiber certification is good



- 1) Trees are cut down to make paper
- 2) Papermaking is a polluting industry
- 3) Avoiding paper consumption is good
- 4) More recycle content in paper is better
- 5) Fiber certification is good



#### Trees are cut down to make paper



- 1) Trees are cut down to make paper
- 2) Papermaking is a polluting industry
- 3) Avoiding paper consumption is good
- 4) More recycle content in paper is better
- 5) Fiber certification is good



# Papermaking is a polluting industry

#### resources

water 28.2 billion gallons

energy 40 million GJ

fiber 1.7 million tonnes

#### water emissions

BOD 1,200 tonnes

AOX 163 tonnes

#### solid waste

landfill 71,000 tonnes

#### air emissions

GHGs 215,000 tonnes

SO2 2,800 tonnes

N0x 1,875 tonnes

Particulate 464 tonnes



- 1) Trees are cut down to make paper
- 2) Papermaking is a polluting industry
- 3) Avoiding paper consumption is good
- 4) More recycle content in paper is better
- 5) Fiber certification is good



#### Avoiding paper consumption is good



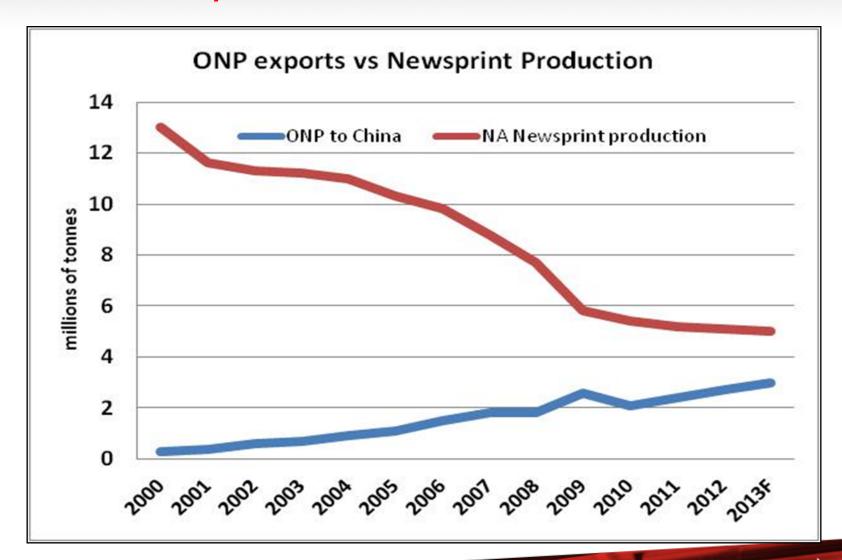
- Only if the alternative is better
- Renewability? Recyclability?
- Your iPhone likely uses more power than your refrigerator



- 1) Trees are cut down to make paper
- 2) Papermaking is a polluting industry
- 3) Avoiding paper consumption is good
- 4) More recycle content in paper is better
- 5) Fiber certification is good



#### More Recycle is better

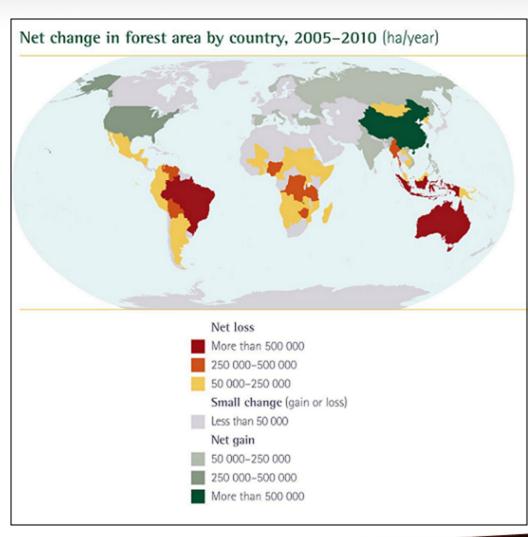


- 1) Trees are cut down to make paper
- 2) Papermaking is a polluting industry
- 3) Avoiding paper consumption is good
- 4) More recycle content in paper is better
- 5) Fiber certification is good



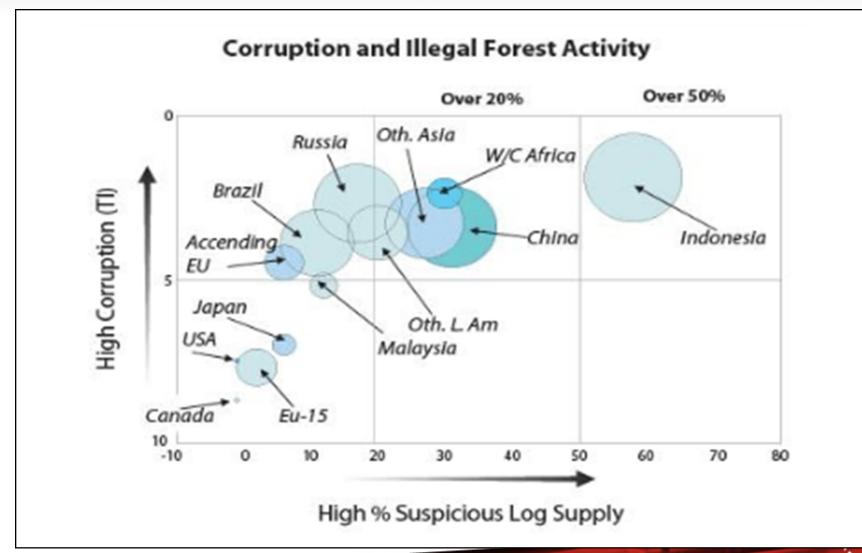
## Certification is good

- Certification first introduced to combat deforestation, illegal logging and social injustice
- Now provides rigor to forest management
- **2**012,
  - 10% of the world's forests
  - 85% of Canada
  - 22% of US
  - 1% of South America / Asia / Africa
- Those places with the least certification need it most





#### Certification is good



## Catalyst's Certification Experience

- FSC chain of custody and controlled wood
- PEFC chain of custody Canada and EU
- SFI chain of custody US
- 15 year participant in Great Bear Rainforest and co-holder of one of the few FSC certificates in BC
- Certification has moved in the past 5 years from a differentiator to a gate score
- Virtually all of our customers now "just want to tick the box"
- Only those with preference ask for FSC



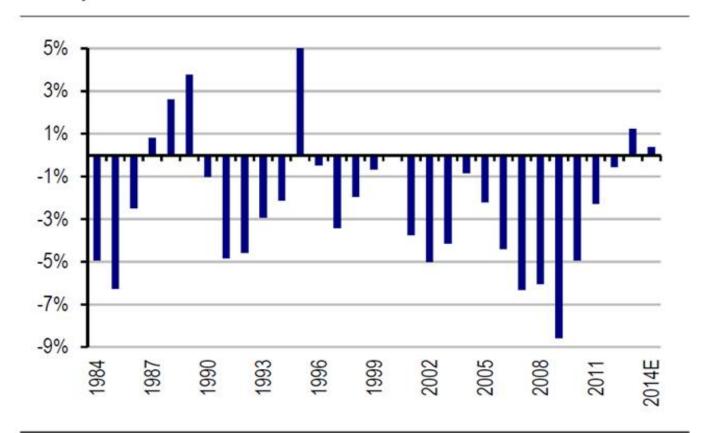
The mark of responsible forestry





#### The business of paper

UBS US Paper & Forest Universe, Return on Capital-Cost of Capital



Source: Company reports and UBS estimates



# The business of paper

- Commodity product pricing set internationally
- 99% of purchase decision is price / attributes
- 1% of purchase decision is on other factors like fiber pedigree and environmental
- Producers can't pass on incremental local costs relating to certification
- Virtually no producers recoup the costs of their certification and chain of custody programs
- The market won't pay for certification yet demands it.
- Such a model is not sustainable long term



# Improving certification & COC

- Goal increase certification everywhere
- Stop the certification war and attacks
  - The prime business of certification should be to protect forests and people; not to build brands
- Make it affordable
  - Simplify and streamline standards (small landholders)
  - Reduce licensing & member fees positive return
- Make it flexible
  - Create compatibility across standards
  - Create flexibility based on performance & need
    - auditing frequency and metrics based on local risk
- Make it happen in Asia, Africa, and South America where its really needed





Why digital technology will never entirely replace paper



