



NAFICI ENVIRONMENTAL RESEARCH LTD'S ANCIENT FOREST FRIENDLY AND NEXT GENERATION SOLUTION POLICY FEBRUARY 29TH 2020

Nafici Environmental Research Ltd (NER) is committed to sustainability and playing a leadership role in developing and scaling pulping technology for next generation and circular cellulose production for packaging, paper and molded fibre, that also provides an alternative feedstock for products all too often sourced from ancient and endangered forests. We are also committed to supporting supply chain solutions that promote responsible environmental and ethical practices in manufacturing, and the protection of global ecosystems including ancient and endangered forests.

NER recognizes that business leadership and long-term success must consider the environment. Consequently, NER is dedicated to building environmental awareness about these issues among customers, employees, suppliers and peers.

Conserving Ancient and Endangered Forests and Ecosystems

NER provides a clear solution to pulp, paper and packaging inputs originating from the world's ancient and endangered forests, by scaling low footprint pulping technology designed to process agricultural waste and residues into pulp for paper and packaging. As such we are helping to protect the world's remaining ancient and endangeredⁱ forests including the Canadian and Russian Boreal Forests; Coastal Temperate Rainforestsⁱⁱ; tropical forests and peat lands of Indonesiaⁱⁱⁱ, the Amazon and West Africa, and the protection of biodiversity and ecosystems contained within these forests.

As the issue of ancient and endangered forest fibre in packaging, paper and cellulosic fabrics gains increasing awareness among global retailers, brands, designers and producers, NER will work with suppliers, Canopy and businesses that have Canopy policies in place to support the protection of ancient and endangered forests and forward solutions to reduce demand on our forests.

Innovation and Development

NER has designed 'EcoPulping' with a vision to a perfect circular economy where sustainable material is used, energy is reduced, effluents are eliminated and the product created is sustainable and can be brought back into the economic cycle. This provides NER's customers with a guarantee that the company is not sourcing from controversial sources including wood from: illegal logging^{iv}, wood logged in contravention of First Nations/indigenous peoples' rights or in contravention of Free, Prior or Informed Consent (FPIC) or endangered species habitat.

NER is able to supply pulps and pulping technology using agricultural waste^v to companies that do not want to source from ancient and endangered forests.

Advance Joint Conservation Solutions

NER supports the implementation of visionary agreements in key forest areas, such as the Canadian Boreal Forests^{vi}, Coastal Temperate Rainforests and Indonesia. We look to Canopy to identify opportunities to encourage existing and new initiatives that seek to protect the

world's remaining ancient and endangered forests.

Reduced our Carbon Footprint

NER aims to reduce the company's own greenhouse gas emissions and where possible will play a role in mitigating climate change by participating in initiatives that reduce the loss of carbon-rich forests (e.g. ancient old growth temperate rainforests and forests growing on peat lands) and by encouraging the development of products made with agricultural residue fibres.

Pollution Prevention

Pulp production is a resource-intensive process that can lead to air and water emissions that impact overall environmental quality. NER has designed technology for pulp production that reduces overall emissions, does not use harmful chemicals that cannot be recycled in a closed process, minimizes air and water pollution, and water use.

Paper and Packaging

Recognizing that avoiding impacts to the world's forests is also tied to NER's own use of paper and packaging, NER is committed to improved efficiency in paper use in its own operations, and to reduce waste. We are committed to ensuring that any paper and packaging we use does not include fibre sourced from Ancient and Endangered Forests^{vii} and to achieve this by the end of year 2022. In line with NER's own business production, we source agricultural residue and/or 100% post recycled content paper and packaging products.^{viii} If any of our paper and packaging suppliers are found to be sourcing from ancient and endangered forests we will engage them to change practices and/or re-evaluate our relationship with them.

Promote Industry Leadership

NER recognizes the benefit of creating environmental awareness amongst its team, customers, and partners. The company will work to highlight our environmental efforts on our website, in public communications and social media, and in partnership with stakeholders.

Strong Certification and Forest Management Standards

NER fully supports responsible forest management practices that protect biodiversity and ecosystem integrity, provide long-term social and economic benefits to communities, and facilitate a stable, sustainable supply chain and climate of operational certainty. We encourage our supply chain partners to preference fibre certified to the Forest Stewardship Council (FSC) standard outside of ancient and endangered forests where virgin fibre is needed.

We also support the adoption of Roundtable on Sustainable Biomaterials certification throughout our entire alternative fibre supply chain.

CEO



Date: 29th February 2020

ⁱ Ancient and endangered forests are defined as intact forest landscape mosaics, naturally rare forest types, forest types that have been made rare due to human activity, and/or other forests that are ecologically critical for the protection of biological diversity. Ecological components of endangered forests are: Intact forest landscapes; Remnant forests and restoration cores; Landscape connectivity; Rare forest types; Forests of high species richness; Forests containing high concentrations of rare and endangered species; Forests of high endemism; Core habitat for focal species; Forests exhibiting rare ecological and evolutionary phenomena. As a starting point to geographically locate ancient and endangered forests, maps of High Conservation Value Forests (HCVF), as defined by the Forest Stewardship Council (FSC), and of intact forest landscapes (IFL), can be used and paired with maps of other key ecological values like the habitat range of key endangered species and forests containing high concentrations of terrestrial carbon and High Carbon Stocks (HCS). (The Wye River Coalition's Endangered Forests: High Conservation Value Forests Protection – Guidance for Corporate Commitments. This has been reviewed by conservation groups, corporations, and scientists such as Dr. Jim Stritholt, President and Executive Director of the Conservation Biology Institute, and has been adopted by corporations for their forest sourcing policies). Key endangered forests globally are the Canadian and Russian Boreal Forests; Coastal Temperate Rainforests of British Columbia, Alaska and Chile; Tropical forests and peat lands of Indonesia, the Amazon and West Africa. For more information on the definitions of ancient and endangered forests, please go to: <http://canopyplanet.org/solutions/ancient-forest-friendly/the-science-behind-the-ancient-forest-friendly-brand/>

ⁱⁱ Conservation solutions are now finalized in the Great Bear Rainforest, located in coastal temperate rainforests that originally covered 0.2% of the planet, and where now less than 25% of the original forests remain. On February 1st, 2016 the Government of British Columbia, First Nations, environmental

organizations and the forest industry announced 38% protection in the Great Bear Rainforest and an ecosystem-based management approach that will see 85% of this region off limits to logging. Provided these agreements hold – sustainable sourcing has been accomplished in this ancient and endangered forest. We encourage ongoing verification of this through renewal of Forest Stewardship Council certification. British Columbia's last stands of coastal temperate rainforests on Vancouver Island are not currently afforded the same future. We look forward to supporting and encouraging protection for landscapes of hope on BC's Vancouver Island.

ⁱⁱⁱ Indonesia experiences the second highest rate of deforestation among tropical countries, with the island of Sumatra standing out due to the intensive forest clearing that has resulted in the conversion of 70% of the island's forested area (FAO Forest Assessment 2010; Margono, B.A. et al. 2012)

^{iv} Legal forest management is management that complies with all applicable international, national, and local laws, including environmental, forestry, and civil rights laws and treaties.

^v Agricultural Residues are residues left over from food production or other processes and using them maximizes the lifecycle of the fibre. Fibres used for pulp and paper products include cereal straws like wheat straw, rice straw, seed flax straw, corn stalks, sorghum stalks, sugar cane bagasse, and rye seed grass straw. Textiles also utilize hemp and flax straw. Where the LCA shows environmental benefits and conversion of forest land to on purpose crops is not an issue, kenaf can also be included here. (Agricultural residues are not from on purpose crops that replace forest stands or food crops.)

^{vi} Protection of Boreal Forests where the largest remaining tracts of forests are located worldwide is critical and dissolving pulp is becoming an increasing threat. Canada's Boreal Forest contain the largest source of unfrozen freshwater world wide and are part of the world's largest terrestrial carbon sink – equivalent to 26 years worth of global fossil fuel use. Canopy is committed to working collaboratively on the establishment of new protected areas, the protection of endangered species and the implementation of sustainable harvesting in Canada's Boreal Forest.

^{vii} <https://canopyplanet.org/tools/forestmapper/>

^{viii} See Canopy's Paper Steps: <http://canopyplanet.org/resources/the-paper-steps/>