

Papering Over Reality and Risk in Uruguay

Forest and bioenergy company UPM-Kymmene Oyj, and its claims of social and environmental leadership

A discussion document

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INTRODUCTION

This briefing discusses the social and environmental risks associated with the company UPM-Kymmene Oyj [HEL:UPM] (UPM) and its operations in Uruguay, and highlights the importance of strong social and environmental risk management policies and close scrutiny of individual investments. The Finnish company is one of the world's largest producers of pulp and bioenergy, producing in 12 countries¹ and with forestry operations in Finland and Uruguay.

UPM recently announced to the public and investors that CDP, formerly Carbon Disclosure Project, had recognised "UPM's exceptional leadership for its environmental performances, for its actions to mitigate climate risk".² CDP is an international non-profit organization supporting companies to voluntarily disclose their environmental impact, and in this year's report scored UPM as one of the six leading companies worldwide for its actions to mitigate climate change risk, prevent deforestation and improve water security.³ UPM claims that "these ratings are not based on what companies say but what they actually do,"⁴ but in fact the rankings produced by CDP are based on self-reporting by the companies on their policies and their commitments, based on three questionnaires⁵, and CDP does not monitor actual practices or conduct third-party verification of the company responses. In the case of UPM, a closer investigation and a consideration of their claims alongside numerous scientific studies, finds that these claims of exemplary performance do not match reality, and are papering over social conflicts and climate impacts that undermine the company's assertions of leadership.

CLIMATE CHANGE

UPM plantations and mills: sinks or sources?

UPM has stated that it has committed to the United Nations Global Compact's Business Ambition for 1.5° "joining leading companies in a promise to pursue science-based measures to limit global temperature rise to 1.5°C." A commitment to reduce CO₂ emissions by 65% by 2030 is laudable. However, the focus of UPM's commitment would be based on improving "forests' growth and ability to absorb more carbon".⁶ In its annual report the company claims that its exotic tree plantations established in Uruguay constitute a carbon sink of approximately 24 million tonnes "that did not exist 30 years ago".⁷

¹ UPM, About Us, <https://www.upm.com/about-us/>

² UPM, CDP recognizes UPM with an exceptional AAA leadership position for its environmental performance, February 2020, <https://www.upm.com/about-us/for-media/releases/2020/02/cdp-recognises-upm-with-an-exceptional-aaa-leadership-position-for-its-environmental-performance/>

³ CDP, UPM scoring, <https://www.cdp.net/en/companies/companies-scores>

⁴ UPM, On greenwashing and responsible dialogue, March 2020, <https://www.upm.com/news-and-stories/blogs/2020/03/on-greenwashing-and-responsible-dialogue/>

⁵ CDP, Guidance for companies, <https://www.cdp.net/en/guidance/guidance-for-companies>

⁶ UPM, UPM commits to UN Business Ambition for 1.5°C to mitigate climate change, January 2019, <https://www.upm.com/about-us/for-media/releases/2020/01/upm-commits-to-un-business-ambition-for-1.5c-to-mitigate-climate-change/>

⁷ UPM, Annual Report 2018, https://www.upm.com/siteassets/asset/investors/2018/upm_ar18_en_190227_web_secured.pdf

In truth, the scale of the claims of the climate benefit of UPM's exotic plantations are not supported by current science. The 24 million tonne carbon sink exists only in theory, not in reality. The trees planted by UPM in Uruguay will not store carbon indefinitely, but will be intensively managed, extracted and used to produce paper, while part of it is immediately burned to generate electricity. Paper is a product with a very short lifespan, in large majority products end up disposed of within a few hours after its first use.⁸ While some wood products do store a portion of their carbon in long-term carbon 'pools,' for paper products, this is simply not the case.⁹

Claims that the UPM plantations in Uruguay represent a permanent carbon sink may not be accurate, as the company is responsible for large emissions of greenhouse gases. The production of pulp and paper requires massive amounts of energy, in fact making a tonne of paper uses as much energy as making a tonne of steel.¹⁰ Furthermore, when disposed in landfills, paper produces methane, a greenhouse gas much more powerful than CO₂.

The replacement of historical natural grasslands through the development of eucalyptus plantations has eroded biodiversity and carbon storage. For centuries, natural grassland, partially used as traditional extensive pasture, extended in the areas now occupied by UPM plantations. The subtropical Campos savannah in Uruguay, not only hosts unique biodiversity, with thousands of species of plants, including more than 550 species of grass, 500 bird species, and nearly 100 mammals (some of which are considered globally threatened¹¹), but also stores large amounts of carbon in their extensive root systems under the ground. This is also true for the grasslands used as traditional pasture. A large part of this stored carbon has been released from the soil where eucalyptus plantations substituted the natural grasslands.

A recent scientific study from Uruguay measured the loss of 16.6 tonnes of soil organic carbon per hectare in soils under 20 year-old Eucalyptus sp. Plantations.¹² Across the country, UPM controls around 184,000 hectares of land planted with Eucalyptus sp. and Pinus Radiata.¹³ By making a simple calculation of the research's conclusion (16.6 tonnes/ha) and multiplying it by UPM's land base, (154,800 ha of Eucalyptus spp. plantations) results in an estimated loss of more than three million (3,054,400) tonnes of soil organic carbon degraded by UPM in establishing its plantations. The inclusion of those plantations managed by UPM's 600 independent suppliers in Uruguay would further increase the amount of attributable soil carbon loss.

⁸ While it is obvious that packaging and tissue products are discarded in the very moment of their use, also graphic papers follow the same destiny: a behavioural research for the printer manufacturer Xerox found office workers throw away 45 per cent of everything they print within a day, equivalent to more than a trillion pages every year: Paul Smith, a laboratory manager at Xerox's research centre in Toronto, Canada, said: "some people use what they've printed only for a minute". See The Guardian, October 2007, <https://www.theguardian.com/money/2007/oct/14/workandcareers.news>

⁹ Smith, James, et al. "Methods for Calculating Forest Ecosystem and Harvested Carbon with Standard Estimates for Forest Types of the United States." US Forest Service. General Technical Report NE-343. 2007.

¹⁰ Making 1 tonne of paper and steel requires 8,000-11,000kWh. USA Environmental Protection Agency

¹¹ Convention on Biological Diversity, Uruguay - Main Details, <https://www.cbd.int/countries/profile/?country=uy>

¹² Carrasco-Letelier, L., et al. "Preliminary study of prairies forested with Eucalyptus sp. at the northwestern Uruguayan soils". (2003)

https://www.researchgate.net/publication/9054561_Preliminary_study_of_prairies_forested_with_Eucalyptus_sp_at_the_northwestern_Uruguayan_soils/link/5a6b8e48a6fdcc317b159a21/download

¹³ SGS Qualifor, SGS-FM/COC-000606, Doc n. AD 36 A 19.1, June 2019, <http://fsc.force.com/servlet/servlet.FileDownload?file=00Pf300000zbI0XEAY>

Recently UPM claimed that IPCC, the scientific authority on climate change, has stated that tree plantations have much higher carbon stocks than grasslands.¹⁴ Upon examination, it does not appear that the IPCC makes this determination in the reference cited by UPM.

We haven't found on the quoted document any mention about plantations having higher carbon stocks than grasslands.¹⁵ There is however a mention of afforestation as an option with large potential for carbon dioxide removal (medium confidence).¹⁶ But the same sentence also mentions soil carbon sequestration in croplands and grasslands as a high confidence option.¹⁶ The report also makes it clear that "maintaining and increasing forest area, in particular native forests rather than monoculture and short-rotation plantations, contributes to the maintenance of global forest carbon stocks"¹⁷ and that "short-rotation plantations where the harvested wood is used for short-lived products" is not the right solution. Paper for packaging and hygiene use is exactly a short-lived product. Furthermore, IPCC warns that "planting of fast-growing species in semi-arid regions or replacing natural grasslands with forest plantations can divert soil water resources to evapotranspiration from groundwater recharge"¹⁸

WATER SECURITY

Eucalyptus plantations drain entire landscapes and mills pollute the remaining water

The case of Uruguay demonstrates multiple reasons to look further into UPM's score on in the CDP report. UPM plantations in Uruguay are based on Eucalyptus, which is notorious for its intensive impacts on the water table, based on numerous cases and scientific studies. In order to grow quickly, a single Eucalyptus tree requires an average of 30 litres of water every day.¹⁹ As a result, rivers and lakes disappear in savannah lands that have become dominated by extended Eucalyptus sp. plantations. One scientific study concluded that Eucalyptus sp. plantations cause a reduction of 75% of annual water runoff, compared with the previous grasslands ecosystem they replaced.²⁰ Another study carried out in the same environment, but on the Argentinian side of the border, noted that in Eucalyptus sp. plantations water evaporation is on average 80% higher than in grasslands.²¹

Furthermore, mill's effluents, as well as its massive water need, threaten water quality and availability for local communities. These issues were a driving force behind controversy over

¹⁴ "This brings us to the specific claim that plantations are worse carbon sinks than grasslands, though this is not the view commonly accepted by IPCC, an internationally recognised authority on climate change." UPM, see footnote 4

¹⁵ IPCC, Climate Change and Land, Special report, <https://www.ipcc.ch/srcccl/>

¹⁶ IPCC, Climate Change and Land, Special report, page 49 https://www.ipcc.ch/site/assets/uploads/sites/4/2019/11/03_Technical-Summary-TS.pdf

¹⁷ IPCC, Climate Change and Land, Special report, page https://www.ipcc.ch/site/assets/uploads/sites/4/2019/11/07_Chapter-4.pdf

¹⁸ IPCC, Climate Change and Land, Special report, page 98, https://www.ipcc.ch/site/assets/uploads/sites/4/2019/11/04_Chapter-1.pdf

¹⁹ Albaugh, Janine M. et al., Eucalyptus and Water Use in South Africa, 2013, <http://www.hindawi.com/journals/ijfr/2013/852540/>, https://www.researchgate.net/publication/227862602_Effects_of_Afforestation_on_Water_Yield_A_Global_Synthesis_With_Implications_for_Policy

²⁰ Farley Kathleen et al., Effects of Afforestation on Water Yield: A Global Synthesis With Implications for Policy, October 2005, https://www.researchgate.net/publication/227862602_Effects_of_Afforestation_on_Water_Yield_A_Global_Synthesis_With_Implications_for_Policy

²¹ Nosetto, Marcelo D. et al., Land-use change and water losses: the case of grassland afforestation across a soil textural gradient in central Argentina, July 2005, <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1365-2486.2005.00975.x>

another recently constructed UPM mill in Fray Bentos, which caused massive protests and a diplomatic conflict between Uruguay and Argentina which was brought to the International Court of Justice (ICJ).²²

SOCIAL IMPACTS

Are UPM's social impacts a forgotten story?

While the CDP scoring and recent statements claiming leadership on climate, forests on water stewardship do not specifically address social impacts, it is important to include in this briefing that UPM's activities have created impacts and discontent among the population.

The Fray Bentos (ex-Botnia) pulp mill in Uruguay has a long heritage of social conflicts and impacts on local communities, including water pollution.²³ This is despite having been largely financed by public banks as a development project.²⁴ The woodfibre-plantations have also caused serious problems for rural communities in Uruguay, such as water scarcity and air/water pollution.²⁵ The pulp mill, which was inaugurated in 2007, considered by UPM as being "among the best pulp mills in the world when it comes to environmental performance"²⁶, caused massive protests on both sides of the border between Uruguay and Argentina and a cross-border dispute was brought to the International Court of Justice.²⁷ A study in 2013 revealed endocrine disruptors in the Uruguay River.²⁸ If in the meantime the performances of the Fray Bentos mill improved, why has independent data on water pollution not been publicly available?

In 2017, UPM signed an agreement with the Republic of Uruguay for the construction of a new pulp mill to be located in Paso de los Toros.²⁹ In the agreement, Uruguay commits to a series of significant legislative changes and investments worth between \$1 and \$1.8 billion (USD). The only commitment from UPM's side was to decide in 2020 if the governments many obligations have been met, and whether it will proceed to invest in a new pulp mill in Paso de los Toros. Critics have pointed out that the agreement is not beneficial for the people of Uruguay, and that it was signed

²² International Court of Justice, Pulp Mills on the River Uruguay (Argentina v. Uruguay), May 2006, <https://www.icj-cij.org/en/case/135>

²³ Lang, Chris, Plantations, poverty and power: Europe's role in the expansion of the pulp industry in the South, December 2008, https://www.researchgate.net/publication/242610965_Plantations_poverty_and_power_Europe's_role_in_the_expansion_of_the_pulp_industry_in_the_South

²⁴ US\$170 million from the International Finance Corporation;
US\$350 million guarantee from the Multilateral Investment Guarantee Agency;
US\$100 million reinsurance from Finnvera of MIGA's guarantee;
US\$70 million from the Nordic Investment Bank; zUS\$230 million buyer credit guarantee from Finnvera;
US\$7 million from Finnfund to Botnia's plantation subsidiary Forestal Oriental

²⁵ Pierrri , Raúl "Uruguay: Pulp Factions: Uruguay's Environmentalists v. Big Paper", CorpWatch, January 2006. <http://www.corpwatch.org/article.php?id=13111>

²⁶ UPM, see footnote 4

²⁷ See footnote 22

²⁸ Miguez Carames, Diana Margarita, Integrated risk assessment of endocrine disruptors in the Uruguay River, March 2013, <https://dspace.lib.cranfield.ac.uk/handle/1826/8201>

²⁹ BankTrack, Dodgy Deal: Paso de los Toros pulp mill, https://www.banktrack.org/project/paso_de_los_toros_pulp_mill

before any Environmental Impact Assessment was made. It has been challenged as an illegal agreement, as it was not approved by Congress.³⁰

The mill will also discharge chlorine containing contaminants, as it will use Elemental Chlorine Free technology, rather than the Totally Chlorine Free technology, for its bleaching process. Chlorine is an endocrine disrupter. A 2013 PhD thesis which assessed the impacts of endocrine disruptors in the lower Uruguay river, found that when *Astyanax fasciatus*, a wild fish, were exposed to pulp mill effluent, their egg production decreased by half and their testes were smaller.³¹

The contract between the government of Uruguay and UPM even includes a commitment to change legislation related to worker's rights, especially those that apply to the right of workers to strike, if the legislation is not "fully satisfactory to the needs of UPM, it could prevent UPM from issuing a positive FID".³² This meddling of a corporation in a country's labour laws is seen by critics as highly undemocratic and going against the Conventions of the International Labour Organization, which guarantee the right to strike.³³ Sadly, while claiming to follow "strict national legislation and regulation in Uruguay"³⁴ UPM actually used its economic power to overrule national legislation and communities' and workers' rights.

People directly affected by the project, and those concerned about its social, environmental and health impacts, are protesting against a new railway constructed by the government for use by the proposed mill, as there was not adequate and proper information provided or consultation with the affected communities, and numerous flaws in the Environmental Licensing Process.³⁵

UPM has engaged in a pattern of behaviour that shows little consideration for local communities and civil society, including UPM declining the request to organize a public meeting with local NGOs on the Paso de los Toros mill. This continues with UPM's choice to only address Friends of the Earth Finland in a public response to an open letter in February 2020 signed by many groups from Uruguay as well.

PROMOTING OVER-CONSUMPTION

Finally, UPM seems to believe that its mission is assuring people well-being and sustainability by increasing consumption of throw-away single-use products: "Should the 2 billion new people entering the global middle class by 2030 be denied hygiene products we take for granted, like tissues and toilet paper?" asks UPM in its response to the Uruguayan coalition of NGOs.³⁶ We consider however that we should eliminate unnecessary wasteful paper consumption, instead of encouraging billions of people to adopt an over-consumption pattern. We want to promote fair

³⁰ Juristas opinan que el acuerdo ROU/ UPM es inconstitucional, no tiene base legal y no ha seguido el debido proceso administrativo, January 2018, <http://infoposta.com.ar/notas/9190/uruguay-opinion-de-juristas-sobre-el-contrato-rou-upm/>

³¹ Carames, Miguez et al., Integrated risk assessment of endocrine disruptors in the Uruguay River, March 2013, <https://dspace.lib.cranfield.ac.uk/handle/1826/8201>

³² Republic of Uruguay and UPM, CONTRATO ROU – UPM, November 2017, https://medios.presidencia.gub.uy/tav_portal/2017/noticias/NO_Y823/contrato_final.pdf

³³ El Pais, UPM condiciona inversión a que se regulen ocupaciones, November 2017, <https://www.elpais.com.uy/informacion/upm-condiciona-inversion-regulen-ocupaciones.html>

³⁴ UPM, see footnote 4

³⁵ BankTrack, Dodgy Deal: Paso de los Toros pulp mill, https://www.banktrack.org/project/paso_de_los_toros_pulp_mill

³⁶ UPM, see footnote 4

access to paper, including for hygiene and educational purposes. This can be achieved sustainably not by producing more, but by radically reducing the consumption in the high consuming countries and by progressively eliminating wasteful products, such as single-use applications and packaging.³⁷

Question: Environmental leadership or just greenwashing

Recent UPM claims to leadership in mitigating climate change risk, preventing deforestation and improving water security require additional scrutiny and are inconsistent with a closer look at the facts. The activities carried on by this company, including the further expansion of eucalyptus plantations, and the building of a new pulp mill in Paso de los Toros, Uruguay threaten the global climate and pose a serious risk to water security, while also creating intense conflict with civil society.

These claims by UPM to the leadership in mitigating climate change risk, preventing deforestation and improving water security do not match reality and they may therefore be defined as “greenwashing”.³⁸ It’s projects in Uruguay, which include the further expansion of eucalyptus plantations, and the building of a new pulp mill in Paso de los Toros, present the risk of serious impacts on water resources and climate protection, as well as other environmental and social impacts.

While the social and environmental risks presented in this briefing are dangerous and problematic, there have been indications that the company has the ability to implement needed reforms. A wider look at the history and global operations of the company shows examples of improvements from past practices. As an example, after once aggressively promoting clear-cutting of intact forest landscapes in Finland, this company has shown more responsibility. Also, in its Environmental Paper Company Index 2019, WWF suggests that UPM shows an improvement in clean manufacturing for the three product categories (pulp, newsprint and graphic paper).³⁹ However, its projects in Uruguay, which include the further expansion or intensification of eucalyptus plantations, and the building of a new pulp mill in Paso de los Toros, present the risk of serious impacts on water resources and climate protection, as well as other environmental and social impacts.⁴⁰

Issues for Discussion and Recommendations

We suggest that UPM seriously revise the Paso de los Toros project and the substance of the contract signed with the government of Uruguay, after meaningful consultation with local communities and other stakeholders in Uruguay, in a transparent and public process, taking onboard their concerns regarding the mill.

³⁷ EPN, Global Paper Vision, March 2014, https://environmentalpaper.org/wp-content/uploads/2017/08/EPN_Vision_FINAL_English_JUNE17.pdf

³⁸ “Greenwashing, a form of deceptive marketing in which a company, product, or business practice is falsely or excessively promoted as being environmentally friendly” See, Encyclopedia Britannica, <https://www.britannica.com/topic/greenwashing>

³⁹ WWF, Environmental Paper Company Index 2019, UPM, <https://epci.panda.org/results/upm>

⁴⁰ See footnote 29

We strongly encourage all financiers and investors reduce their social and environmental risk in the pulp and paper industry by strengthening their institutional policies to the recommended standards of the Environmental Paper Network that can be found in the publication, *Green Paper, Red Lines*, listing the minimum requirements for pulp and paper industry projects to avoid harm to people and the environment.⁴¹

⁴¹ EPN, Green Paper, Red Lines Requirements for pulp and paper industry finance, June 2016, <https://environmentalpaper.org/wp-content/uploads/2017/11/Green-Paper-Red-Lines.pdf>