IWC's 2018 ESG Report

IWC Investment Partners A/S

Reminder: The sustainable global agenda

and the key role of the natural resources in a low-carbon future

In 2015, the Paris Agreement set in motion a global action plan to prevent climate change by limiting global warming[1]. The direction was clear – **we need to transition to a carbon-neutral, circular bio-economy if we want to limit a dangerous change in climate and achieve sustainable development by mid-century.** The alternative is a 2°C warmer world, where 28% of the world's population is exposed to extreme heatwaves, 18% of the insects, 16% of the plants, and 8% of the animals are adversely affected[2], and the economic growth is reduced[3].

Current governmental pledges to cut emissions, however, represent only about half of what would be required to avoid a 2˚C temperature rise, and just one third of what is required to limit global warming to 1.5˚C. While this "emissions gap" is significant[4], there are some practical and cost-effective options available to lessen it. Scientists suggest that more than 40% of the emissions could be reduced from just six relatively standardized categories: solar and wind energy, efficient appliances, efficient passenger cars, afforestation, and from stopping deforestation[5]. **Of these, forest and other land-use related options make up more than half the potential mitigation effect.**

Forests not only "inhale" CO_2 (ca. 2 bln tCO_2 p.a.) and regulate climate (SDG 13). They also provide goods and services such as clean water (SDG 6) – 75% of the world's accessible freshwater comes from forested watersheds – and healthy soils (SDG 15), worth USD 75-100 billion per year[6]. Forests are also home to 80% of the world's terrestrial biodiversity and provide livelihood to 1.6 billion people globally, many of whom are the world's poorest (SDG 15, 2, 7, 1)[7]. According to the UN Environment Programme, land resources are essential for achieving 10 of the 17 Sustainable Development Goals (SDGs)[8].

In 2019, the UN declared 2021 to 2030 to be the "Decade for Ecosystem Restoration", **a decade of job creation, food security, and climate change to be addressed through massive restoration of degraded and destroyed ecosystems.** The "Decade plans" will accelerate existing global restoration goals of 500 million hectares of deforested and degraded land[9] and will combat the loss of species and ecosystem services, that are costing 10% of the annual global GDP and undermining the well-being of 3.2 billion people. Today, nearly two billion hectares of the world's deforested and degraded forestlands contain opportunities for restoration.

Today, nearly two billion hectares – an area larger than South America – of the world's deforested and degraded forestlands contain opportunities for restoration.

Land-oriented climate change solutions and the SDGs are currently hindered by a significant financial gap. However, tackling climate change could unlock USD 23 trillion in investment opportunities by 2030 in emerging markets alone – a third of the global 2018 GDP, and achieving the SDGs could create USD 12 trillion in market opportunities as well as 380 million new jobs by 2030[10]. This strong business case is already attracting long-sighted capital – **nearly 420 investors, representing USD 32 trillion in assets under management, are acting to speed up the transition to a low-carbon economy**[11]. Globally, a third of the 10,000 collective and individual actions towards climate change[12] are led by investors and companies. These are mostly oriented towards emissions reduction, including through investments in sustainable landscapes. While scale is increasing, pace is critical when all we have is a decade to close a gap equal to the combined annual emissions of China and the USA.

> ***"Superhero: From tackling poverty and hunger to mitigating climate change and conserving biodiversity, the positive impacts of forests and trees are fundamental to our existence."***
>
> Food and Agriculture Organization of the United Nations

Population, economic, and environmental protection growth are driving demand for sustainable forestry products, ecosystem restoration and conservation

By 2050, the world's population is expected to reach 9.8 billion people. With more people comes an additional demand for resources and waste absorption. Worldwide, 2.4 billion people and 29 countries still make use of wood to provide basic energy services. **Overall, woodfuel is about 40% of the global renewable energy supply – as much as solar, hydroelectric, and wind power combined (SDG 7)**[13]. Biomass, however, is practically carbon-neutral, if not produced through land conversion, as no more carbon is released than was absorbed during the lifetime of the biomass[14].

Forests also supply us with construction lumber and everyday products. **Between 2000 and 2015, the global consumption of wood-based panels per capita grew by 80%**, while the use of global industrial roundwood, and the consumption of sawnwood and panels increased by 1.9 and 8.2% p.a., respectively. In fact, the ongoing storage of carbon in forest products, combined with the emissions avoided by using these products as substitutes for other materials (i.e. steel, concrete, plastic), results in a permanent displacement of fossil fuel emissions. Conceptually, substitution represents the largest carbon pool and increases with every rotation because it is permanent. In many countries, the substitution effect of harvested wood products is seen as a key contributor to climate change mitigation.

Today, almost no resources are wasted. Mills transform by-stream timber products into energy, feedstock, biofuels, or a source of minerals, recycled from sludge ash. Wood residues are also used in the construction, pharmaceutical, clothing, and food industries. Contrary to buildings constructed from concrete, wood buildings and furniture can easily be adapted or reconstructed and reused. Furthermore, post-used wood, pulp, and paper products are recycled.

Not only do we need to plant more trees to tackle climate change, but we also need to scale-up sustainably managed timber plantations, if we are to meet a tripling demand for timber[15], non-timber forest products, and ecosystem services, without environmental and social compromises. In this way, we will also safeguard the existence of natural forests and halt deforestation practices that today are putting at risk the dependent people and biodiversity.

As of mid-2018, only 20% of the global forestland managed under a long-term management plan (2.1 billion hectares) are under an independently-verified forest management certification scheme. Sustainably harvested timber accounted for 38% of the global industrial roundwood production in 2016[13]. Forest certification and voluntary codes of conduct are key tools for promoting sustainable consumption and production (SDG 12) and are often used as a proxy to track the progress towards reaching the goal of zero deforestation (SDG 15). But **credible forest certification** covers much more than just logging practices. It also **ensures environmentally responsible, socially beneficial, and economically viable management of forests, thus safeguarding the social and economic well-being of workers and local communities.**

The sustainable business case: Doing good is good business

Responsible forest management is an important solution for operating forestland sustainably, but it is not a universal tool, especially for investors dealing with a broader set of asset classes. Environmental, social, and governance ("ESG") factors often represent risks and opportunities to the performance of a financial asset that may otherwise not be reflected through traditional financial indicators. **An increasing number of reports provide evidence that companies delivering value for the people, the planet, and a profit, also outperform their competitors.** The integration of ESG factors in a financial analysis can lead to better risk-adjusted returns and long-term value creation, as 40-year academic and empirical evidence suggests[16].

Today, a quarter of all professionally managed assets around the world (USD 23 trillion) wear the ESG investing label and the PRI has more than 2,000 signatories[17]. Sustainable business is increasingly gaining traction and is high on investors' and asset managers' agendas.

Regulations on ESG integration and disclosure are exponentially growing – almost 300 policy instruments in 50 of the largest economies in the world are supporting investors to consider long-term value drivers, including ESG factors[18].

Perhaps the most imminent and important for European investors is the EU Regulatory Framework on Sustainable Finance, part of the European Commission's Action Plan for Financing Sustainable Growth. The first legislative measures to be adopted from this framework in 2019 are: (i) establishing a green taxonomy of what constitutes an environmentally sustainable economic activity; (ii) clarifying fiduciary duty of asset managers and institutional investors to take sustainability into account during the investment process and enhance disclosure requirements (including non-financial, climate-related disclosure aligned with the TCFD's recommendations[19])[20]; (iii) introducing low-carbon and positive carbon impact benchmarks; and (iv) incorporating sustainability (ESG considerations) into the advice that investment firms and insurance distributors offer to their clients[21].

"In essence, sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development; and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations."

Our Common Future (a.k.a. The Brundtland Report), 1987, World Commission on Environment and Development (WCED)

Signatory of:

IWC is a signatory of the UN Principles for Responsible Investment (PRI), a member of the Forest Stewardship Council (FSC), participates in the stakeholder consultation forum of the Programme for Endorsement of Forest Certification (PEFC), and the Danish Forum for Responsible and Sustainable Investment (DanSIF).

IWC and ESG

With close to three decades of investment activity in sustainable natural resources and a robust ESG framework at hand, IWC and our clients are contributing to a global sustainable transition

Since establishment, IWC has worked towards securing the sustainability of our clients' investments. We believe we have laid down the right principles towards investing in sustainably managed natural resources that would otherwise have negatively impacted the global issues of deforestation, biodiversity loss, and climate change. Adaptability and long-sightedness are today more important than ever, why we strive to continuously improve our internal ESG framework, a process continuing in 2019 onwards.

Today, our clients' trust and our ESG approach have resulted in:

Over a million of sustainably managed forest hectares globally (of which, 35,000 ha are permanently conserved). Thus helping the prevention of global deforestation, land degradation, and biodiversity loss (SDG 15.1-5, 15.A).

Around 212 million tCO_2e stored in forest vegetation (of which, 1.5 $mtCO_2e$ are under permanent protection) and 10 million tCO_2e sequestered in 2018. An amount that could mitigate the annual emissions of about 1.6 million EU citizens.Thus aiding the fight against climate change (SDG 13).

Around 6 million m^3 of sustainable timber production in 2018 (82% of which is certified), primarily used for construction material and interior design. Thus contributing to the sustainable management and efficient use of natural resources (12.2), reduction of materials footprint (12.2.1), and storing carbon permanently.

Around 4,500 hectares of wetlands and 140 kilometers of streams restored and protected so far, in addition to the forested watersheds protected from development (ca. 10,000 ha). Thus improving water quality by reducing pollution (SDG 6.3), and protecting and restoring water-related ecosystems (SDG 6.6).

Over a thousand hectares of sustainable Danish farmland – in one of the most productive and environmentally friendly sectors in the world. Thus contributing to a sustainable agriculture (SDG 2).

15 LIFE ON LAND · 13 CLIMATE ACTION · 12 RESPONSIBLE CONSUMPTION AND PRODUCTION · 6 CLEAN WATER AND SANITATION · 2 ZERO HUNGER

In the next pages, you will find the 2018 ESG performance of our clients' portfolio.

As always, we welcome comments for improvement and questions in relation to this report.

Sincerely,
The IWC team

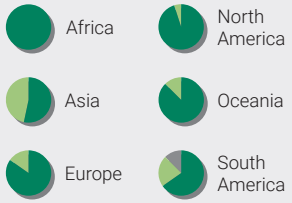
International Woodland Company (IWC) - 2018 ESG Performance

Certification and timber

Forest certification status [i]

- Certified
- In the process of being certified
- Not certified

Certification status per geography



15 LIFE ON LAND

- **~ 1.1 million ha** of productive forestland managed sustainably [ii]
- **~ 35,000 ha** preserved and managed for conservation purposes
- **~ 4.1 million** trees planted in 2018
- **~ 70** terrestrial species and their habitat protected
- **~ 26** main tree species managed sustainably

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

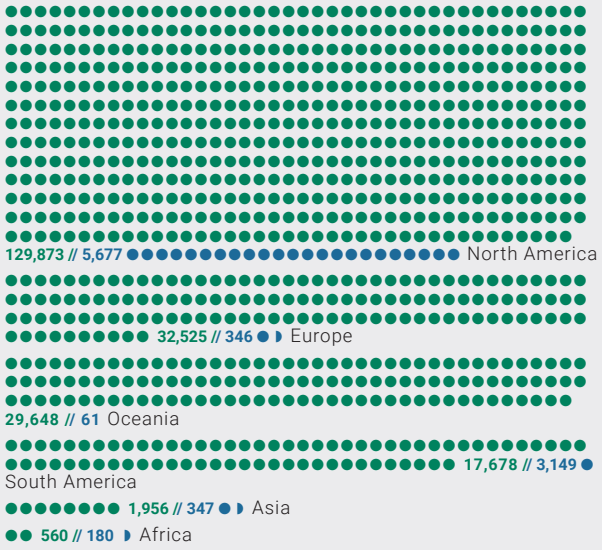
- **~ 5.7 million m³** of sustainable timber production, of which:
- **~ 4.7 million m³** are certified
- **~ 52%** of the certified timber ending as construction material, furniture, and other indoor appliances [iii]
- **~ 48%** of the certified timber ending as paper and paper-related products [iv]

6 CLEAN WATER AND SANITATION

- **~ 850 ha** of wetlands restored and protected in 2018
- **~ 5 km** of streams restored and protected in 2018
- **~ 9,300 ha** of forested watersheds and
- **~ 1,800 km** of streams and rivers protected

Carbon stock and sequestration

- $ktCO_2e$ stored in trees' biomass
- $ktCO_2e$ sequestered in 2018
- Negative $ktCO_2e$ sequestered in 2018



13 CLIMATE ACTION

- **~ 212 $mtCO_2e$** stored in the forest vegetation [v]
- **~ 58 $mtCO_2e$** kept in the forest soil [vi]
- **~ 10 $mtCO_2e$** sequestered in 2018
- **~ 1.5 $mtCO_2e$** under permanent protection

5 % DECREASE IN THE CARBON STOCK [vii]

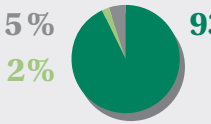
24 % INCREASE IN THE CARBON SEQUESTERED [viii]

10 $mtCO_2e$ = 1.6 million EU CITIZENS' ANNUAL CO_2 EMISSIONS [ix]

ESG integration

Managers having ESG policy, or similar, in place [x]

- Yes
- In process
- No



Managers integrating ESG in the investment process

- Pre-investment
- Holding period
- Reporting

Managers allocating ESG resources [xi]

- ESG specific role
- ESG role embedded in others
- No ESG role

i. The timberland portfolio under IWC's advice or management has slightly changed its certification status compared to last year (-4.8% in certified areas, +4.5 and 0.3% in areas under certification process and not certified, respectively), primarily because of assets and funds disposition. Nevertheless, all assets are managed under sustainable forestry principles and, after year-end, some of the newly acquired assets have already been certified. Assets that are not certified are of small size or in wind-down mode.

ii. Overall, the productive forestland area has decreased (ca. 10% compared to 2017), though post YE, new acquisitions have been made or are in process.

iii. Sufficient for ca. 74,000 houses (i.e. 100 m²) Construction timber substitutes the use of three times more energy-intensive materials, like concrete and steel.

iv. The majority of the pulpwood is produced in North and South America – some of the most sophisticated pulp industries in the world.

v. IWC changed its carbon methodology in 2018, to account for above- and below-ground biomass' carbon pools, and, where relevant and mentioned, for the CO_2 stored in soils (per the 2006 IPCC Guidelines for National GHG Inventories, Tier 1 Approach).

vi. Upper soil layer estimates, 0-30 cm (per IPCC and FAO scientific resources). No changes should be expected in this pool, unless pro-active, sustainable soil management is applied, or if the land use is changed /asset is divested.

vii. Due to partial / full asset sales or investment vehicles dissolution.

viii. Mainly due to assets, biological characteristics and IWC's carbon methodology change, now accounting for a larger carbon pool (see note v).

ix. The World Bank Group Data, 2014. CO_2 emissions stemming from the burning of fossil fuels and the manufacture of cement. (CO_2 produced during consumption of solid, liquid, and gas fuels and gas flaring).

x. A few managers are formalizing their responsible investing policies. Those are, nevertheless, applying sustainable forestry principles and other policies and procedures pertaining to responsible business conduct. Some are structured to deliver positive environmental benefits, that also indirectly benefit local communities and where ESG integration is not entirely applicable the same way.

xi. Where ESG roles are not specifically dedicated, such responsibilities are integrated in senior staff roles (oversight), investment teams and committees (implementation and oversight), and forest/asset management (implementation and oversight).

ESG Example

Fund location: North America

ESG monitoring (2018):
No significant events during the year
ESG engagement (2019):
Business-as-usual

"The future of our forests depends on strengthening the connections between sustainable forests, thriving communities, and responsible purchasing," Sustainable Forestry Initiative (SFI).

Total area (ha): 82,000
Planted area (ha): 64,600 (2,200 planted in 2018)
Certification status: SFI [i] certified

"Protect, restore and promote sustainable use of all terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss", Sustainable Development Goal No.15.

tCO_2e stored: 18,100,000
tCO_2e sequestered (2018): 47,000
Change in tCO_2e sequestration (YoY): -93 %
Reason for change: Data availability improvement

"In the long term, a sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks, while producing an annual sustained yield of timber, fibre or energy from forest, will generate the largest sustained [climate change] mitigation benefit", IPCC's fifth report.

Main species: Western Hemlock and Douglas fir
Main end-product: Sawlogs
Main end-market: USA
Sustainable harvest: 321,000 m^3

"Ensure sustainable consumption and production patterns", Sustainable Development Goal No. 12.
"By 2030, achieve the sustainable management and efficient use of natural resources", SDG 12.2.
Timber is a sustainable, durable, and with a low environmental footprint material [ii] – the investment's main species are widely used for general construction lumber and finishing products.

Protected watersheds (ha): 8,000
Protected streams (km): 1,500

"Ensure availability and sustainable management of water and sanitation for all", Sustainable Development Goal No 6.
"By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, acquifers and lakes", SDG 6.6.

i. SFI is a North American certification system with 120 million hectares of forestland certified and is PEFC endorsed

ii. The net CO_2 emissions difference of a 20-story wooden building is 4,360 tCO_2e compared to a concrete one, as the concrete emits 1,215 tCO_2e, while the wood sequesters 3,150 tCO_2e.

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Endnotes

1. At the COP 21 in Paris, parties to the UNFCCC reached a landmark agreement on 12 December 2015 to combat climate change and to accelerate and intensify the actions and investments needed for a sustainable low-carbon future. The Paris Agreement's central aim is to strengthen the global response to the threat of climate change by keeping the rise in global temperature this century well below 2 degrees Celsius above pre-industrial levels, and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. The "Rulebook" to achieving the Paris Agreement was formalized three years later in 2018 in Katowice, Poland.
2. IPCC's special report (SR1.5) on "impacts of global warming of 1.5°C pre-industrial levels and related GHG emissions pathways". Available at: https://www.ipcc.ch/sr15/
3. Especially for low-income countries which will be exposed to a 25%-larger GDP gap compared to developed countries in a climate-safe world. Global warming has increased global economic inequality. Department of Earth System Science, Stanford University 2018. Available at: https://www.pnas.org/content/pnas/116/20/9808.full.pdf
4. Around 11 to 19 of annual GtCO2e, respectively – roughly the combined emissions of China and the USA, (15 $GtCO_2e$ in 2016).
5. UN Environment Programme. Emissions Gap Report, 2017. Available at: https://www.unenvironment.org/resources/emissions-gap-report-2017.
6. Millennium Ecosystem Assessment, 2005.
7. United Nations strategic plan for forests, 2017-2030.
8. UN Environment Programme. Forests provide a critical short-term solution to climate change. Available at: https://www.unenvironment.org/news-and-stories/story/forests-provide-critical-short-term-solution-climate-change
9. World Resource Institute. Global Restoration Initiative – platform for the Bonn Challenge (150 million hectares of deforested and degraded forest land restored globally by 2020) and the New York Declaration on Forests (350 million hectares restored by 2030).
10. Better Business, Better World. A report by the Business and Sustainable Development Commission. Available at: http://report.businesscommission.org/report
11. Ceres. The Investor Agenda (https://theinvestoragenda.org/)
12. NAZCA. A Global Climate Action online platform where non-party stakeholders from around the globe – companies, cities, subnational regions, investors, and civil society organizations - can display their commitments to act on climate change. Launched by the UN Climate Change in 2014.
13. FAO. 2018. The State of the World's Forests 2018 - Forest pathways to sustainable development. Rome. Licence: CC BY-NC-SA 3.0 IGO. Available at: http://www.fao.org/3/I9535EN/i9535en.pdf (689 million m^3, both FSC- and PEFC-certified).
14. The International Panel on Climate Change (IPPC) and other climate experts have concluded that the CO2 emissions from biomass are part of the natural carbon cycle.
15. By 2050, rising population and demand, as well as an increase in use of wood for bioenergy, could triple the amount of wood that society consumes from forests and plantations per year, according to the latest installment of WWF's Living Forests Report. Available here: http://wwf.panda.org/our_work/forests/forest_publications_news_and_reports/living_forests_report/
16. Cappucci, Michael, The ESG Integration Paradox (June 8, 2017). Available at SSRN: https://ssrn.com/abstract=2983227
17. Global Sustainable Investment Review, 2016. Global Sustainable Investment Alliance (GSIA). Available at: http://www.gsi-alliance.org/wp-content/uploads/2017/03/GSIR_Review2016.F.pdf)
18. Global Guide to Responsible Investment Regulation, 2016. PRI and MSCI. Available at: https://www.unpri.org/download?ac=325
19. Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD), established in 2015 to develop recommendations for more efficient and effective climate-related disclosures. EU will first regulate disclosure per these to the listed companies, banks, insurance undertakings, and entities with more than 500 employees.
20. Amending delegated acts, Directive EU 2016/2341 (IORP 2 – Pensions), Solvency II, and AIFMD.
21. Directive 2004/39/EC (Markets in Financial Instruments, MiFID II) and Insurance Distribution Directive (IDD) delegated acts.

Legal Disclaimer

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