

DOING OUR PART

Update to the Danzer Sustainability Report 2016,
April 2021

Air, Climate & Land Stewardship



Hardwood Excellence.



In June 2017, Danzer published its second Sustainability report: *Doing Our Part*. Prior to a next full report, Danzer is preparing subject-specific updates to its Sustainability Report to demonstrate how Danzer is doing our part toward the UN Sustainable Development Goals (SDGs) published in 2015; a personal commitment to operate business in a way that is responsible for the resources we share with the communities we operate in.

This is an update on the segments *Climate Action*, *Land Resource Stewardship*, and *Air Resource Stewardship* found in the Danzer Sustainability Report 2016: *Doing Our Part*, pp. 34, 46, and 50 respectively. The data presented here covers January 1 through December 31, 2020 with summaries from 2019. A 2019 report was not made due to the pandemic situation.

This is a GRI referenced claim, meaning the orange letter references starting with GRI indicate the Global Reporting Initiative Sustainability Reporting Standards were consulted.

Stakeholder interviews were not conducted ahead of this report, in part, due to the pandemic situation. Instead, Danzer will ask stakeholders their impressions of this document and prepare a second report with their reactions including any suggestions for improvement.



The 2030 Agenda for Sustainable Development, through paragraph 31 *calls for the widest possible international cooperation aimed at accelerating the reduction of global greenhouse gas emissions and addressing adaptation to the adverse impacts of climate change*. Both paragraph 31 of Agenda 2030 and paragraph 91 of the Future We Want note *the significant gap between the aggregate effect of Parties' mitigation pledges in terms of global annual emissions of greenhouse gases by 2020 and aggregate emission pathways consistent with having a likely chance of holding the increase in global average temperature below 2 °C or 1.5 °C above pre-industrial levels*.

Danzer demonstrates that its wood is carbon positive: between the forest and the product, more carbon is stored than is released in processing.

Carbon is stored when forests are managed for forest products use because many of these products store carbon for extended periods of time as they are used and after disposal. Recycling is an important part of the carbon cycle because it can help extend the time during which carbon is stored in products.

Direct and Indirect Carbon emissions (see Table 1) at production facilities were calculated for this report. Indirect emissions from third party harvesting and transportation were not included in the Greenhouse Gas Emissions calculations. Given (1) the rough estimate that harvesting and transport make up approximately 26% of CO₂ emissions, (2) the fact that biogenic carbon dioxide from burning biomass fuel is carbon neutral, and (3) the incredible storage capacity of Danzer wood products, **it can be safely assumed that all greenhouse gas emissions generated during harvest, production and transport of Danzer's products is sequestered between forest and product.**

GREENHOUSE GAS EMISSIONS			
Totals for Danzer production*	Scope 1	Scope 2	C stored** Scope 1&2
By Location			
Edinburgh, USA Total (ton CO ₂)	2'199	6'442	13'243
Total (kg CO ₂ /m ²) all species	0.100	0.292	0.6
Williamsport, USA Total (ton CO ₂)	364	3'496	7'322
Total (kg CO ₂ /m ²) all species	0.016	0.158	0.6
Darlington, USA Total (ton CO ₂)	610	2'106	13'976
Total (kg CO ₂ /m ²) all species	0.026	0.002	0.6
Melnik, CZ Total (ton CO ₂)***	691	8'816	14'539
Total (kg CO ₂ /m ²) all species	0.029	0.010	0.6
Raspenava, CZ Total (ton CO ₂)	30	218	608
Total (kg CO ₂ /m ²) all species	0.030	0.006	0.6
Kesselsdorf, DE Total (ton CO ₂)	295	338	144
Total (kg CO ₂ /m ²) all species	1'288	1'727	0.6
Shade Gap, USA Total (ton CO ₂)	160	1'373	10'017
Total (kg CO ₂ /m ³) all species	16'771	143'920	1'050

Table 1. Carbon emitted from Danzer production facilities 2020 and Carbon stored in product (kg CO₂/m² for individual species is also available if requested).

*Forestry, transport and Bradford Forest operations excluded.
 **Carbon sequestered in product (very conservative/low estimate)
 *** purchased lumber C excluded

Across these same Danzer operations in 2019, 382,266 tons of CO₂ Equivalents for Scope 1 Greenhouse Gas were emitted. This compares with 315,499 tons in 2020. Also, in 2019 across these same Danzer operations, Scope 2 Greenhouse Gas Emissions (from third party electricity suppliers) totaled, 23,623 metric tons of CO₂ Equivalents. In 2020, Scope 2 emissions totaled 22,089 tons. These reductions are most likely due to a slowdown in production caused by the pandemic situation.



According to the UN, *the renewable energy share of total final energy consumption gradually increased from 16.6 per cent in 2010 to 17.5 per cent in 2016, though much faster change is required to meet climate goals. Even though the absolute level of renewable energy consumption has grown by more than 18 per cent since 2010, only since 2012 has the growth of renewables outpaced the growth of total energy consumption.* <http://sdgs.un.org>

Most Danzer manufacturing operations generate a significant portion of their energy needs from biomass fuels recovered from processing. Energy-rich biomass is atmospheric carbon dioxide sequestered by trees during growth and transformed into organic carbon substances. When these biomass fuels are burned, the CO₂ emitted during the manufacturing and combustion processes is the atmospheric carbon dioxide that was sequestered during growth of the tree; hence, there is no net contribution to the atmospheric CO₂ level. This carbon cycle is a closed loop. New tree growth keeps absorbing atmospheric carbon dioxide and maintains the cycle. This is the approach generally prescribed for national inventories by the United Nations Framework Convention on Climate Change.

All of Danzer’s biogenic CO₂ emitted from boilers when on-site wood fuel is burned to make production heat is considered to be absorbed by the forests the logs were harvested from. See Table 2.

GREENHOUSE GAS EMISSIONS

Totals for Danzer production* By Location	Biogenic C** (metric ton)
Edinburgh, USA Total (ton CO ₂)	27'758
Total (kg CO ₂ /m ²) all species	1.258
Williamsport, USA Total (ton CO ₂)	5'988
Total (kg CO ₂ /m ²) all species	0.271
Darlington, USA Total (ton CO ₂)	1'194
Total (kg CO ₂ /m ²) all species	0.031
Melnik, CZ Total (ton CO ₂)*"	16'595
Total (kg CO ₂ /m ²) all species	0.411
Raspenava, CZ Total (ton CO ₂)	370
Total (kg CO ₂ /m ²) all species	0.219
Kesselsdorf, DE Total (ton CO ₂)	0
Total (kg CO ₂ /m ²) all species	0.0
Shade Gap, USA Total (ton CO ₂)	2'813
Total (kg CO ₂ /m ³) all species	294.9

Table 2. Biogenic (neutral) CO₂ emissions from Danzer production facilities in 2020.

*Forestry, transport and Bradford Forest operations excluded.

**Biogenic carbon is neutral carbon cycle

Across Danzer in 2019, these same facilities generated 50,038 tons of biogenic CO₂ as compared to the 2020 total of 46,319 tons. This reduction can be attributed to the pandemic situation which slowed production at times.



Sustainable Development Goal 15 aims to *protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.*

Forests have a significant role in reducing the risk of natural disasters, including floods, droughts, landslides and other extreme events. At global level, forests mitigate climate change through carbon sequestration, contribute to the balance of oxygen, carbon dioxide and humidity in the air and protect watersheds, which supply 75% of freshwater worldwide. Forests are the most biologically-diverse ecosystems on land, home to more than 80% of the terrestrial species of animals, plants and insects. They also provide shelter, jobs and security for forest-dependent communities. <http://sdgs.un.org>

In 2020, Danzer sold its Danzer Forestland assets (20,000 hectares of sustainably forested land). The buyer, Jamestown Timberland Funds, was carefully sought by Danzer because it is an open-ended evergreen fund with experience managing timberland for the long term. It is a reputable and responsible company. This reassured Danzer that the forests would remain productive.

Danzer's procurement policy ensures that only sustainable and legal logs are procured, implying that the forests are sustainably managed (for long-term use). **In the USA alone, Danzer procures its raw material (hardwood logs) from approximately, 117,273,112 acres.** Looking at Danzer's biogenic carbon (carbon released from the burning of wood fuel biomass from the production process) alone, only about 78,149 acres would be needed to absorb these CO₂ emissions (see Table 3).

GREENHOUSE GAS EMISSIONS

Totals for Danzer production*	Biogenic C** (metric ton)	Forested Acres to sequester (USA)
By Location		
Edinburgh, USA Total (ton CO ₂)	27'758	57'459
Williamsport, USA Total (ton CO ₂)	5'988	12'395
Darlington, USA Total (ton CO ₂)	1'194	2'472
Shade Gap, USA Total (ton CO ₂)	2'813	5'823

Table 3. Approximate forested acres needed to sequester the quantity of biogenic Carbon emitted in 2020 (a conservative 2.07 acres /ton).

*Forestry, transport and Bradford Forest operations excluded.

**Biogenic carbon is neutral carbon cycle

[GRI 204] Danzer continues to advance its Responsible Purchasing Policy by maintaining its FSC® Chain of Custody and Controlled Wood certificates. In 2020, 75% of Danzer’s purchased logs were FSC Controlled Wood, 20% were FSC Mix Credit and 5% were FSC 100%. Danzer’s due diligence is compliant with both the US Lacey Act and the European Timber Regulation. In North America, procurement activities are certified as compliant with the ANSI LTDD 1.0 2015 Standard titled, “Due Diligence in Procuring/Sourcing Legal Timber.”

Also, in Europe, around 43% of the wood processed by Danzer is procured from local communities, in North America more than 95%. [GRI 204-1] For Danzer, “local community” means within 500 miles (805km) of the production facility

Danzer promotes Life on Land and the consequent Biodiversity by promoting sustainable forestry through responsible economic participation in forest product procurement.

At Danzer, we Do Our Part to influence those Sustainable Development Goals that are linked to our business of bringing the sustainable natural product wood into people’s lives in beautiful and clever ways.