

How Pinovo impacts the SDGs

About Pinovo

Pinovo is a Norwegian company founded in 2009 that supplies innovative and patented technology for dust-free abrasive vacuum blasting of industrial surfaces. Pinovo's solutions offer zero emissions to the environment, recycling of the grit blasting media, reduced waste, and CO₂ emissions.

For an overview of the SDGs and their targets, see sustainabledevelopment.un.org



Microplastics

By capturing 100 % of the removed paint from abrasive blasting, Pinovo's closed circuit sandblasting system eliminates up to 15.5 kg of paint-derived microplastic per 100 m² compared with traditional sand and water blasting methods. Use of Pinovo's technology positively impacts SDG targets 12.4 and 14.1 by avoiding the release of plastic waste to the environment.



	Pinovo	Open sand-blasting	Water jetting	SDG target
Plastic capture rate per system	100%	0-60% ¹	0-30%	12.4, 14.1



Greenhouse gas emissions

Pinovo's closed circuit systems reduces the life-cycle emission of greenhouse gas emissions compared to competing systems due to its reuse of grit. E.g. one Pinovo system avoids the release of 120 tonnes CO₂e per year compared to a traditional open blasting system, equivalent to a reduction of 62 %.

Pinovo's technology positively impacts SDG target 9.4 and 12.5 by making it possible for companies to decrease their carbon footprint and minimize waste generation from blasting of industrial surfaces.



	Pinovo	Open sand-blasting	Relative reduction	SDG target
Life-cycle CO ₂ e emissions per 100 m ² (kg)	187	496	62%	9.4, 12.5



Health and safety

The Pinovo systems reduce exposure to noise and vibration compared to mainstream methods. The Pinovo systems also eliminate the risk of pollution to the air by using High-efficiency particulate air (HEPA) filters, reducing risks of e.g. respiratory and skin sicknesses. All grit used for sandblasting is captured using Pinovo's closed circuit system, resulting in no flying grit or dust at the workspace which reduces the risk of eye injuries for workers. The Pinovo systems thereby positively impact SDG target 8.8 by improving the safety for workers compared to alternative solutions.

	Pinovo	Open sand-blasting	Water jetting	Mechanical	SDG target
Toxic dust released during blasting	No dust	Toxic dust	Contaminated water	Dust	8.8
Average level of noise during blasting (dBA)	80dBA	>110dBA	>110dBA	>90dBA	8.8
Level of vibration during use (average vibration value m/s ²)	3.1	No data	No data	>8	8.8
Physical strain on the operator	Low	Heavy	Heavy	Low	8.8

Source: SDG Analysis of Pinovo as of October 2020. Klinkby Enge has mapped the activities of Pinovo to SDG goals and targets and developed performance metrics to track the contributions of Pinovo to the SDGs.

¹ The plastic capture rate depends on the circumstances that the treatment is conducted under. For treatment done in a controlled environment e.g. inside maintenance halls or similar, the capture rate is higher than when done in an uncontrolled environment e.g. on offshore assets or bridges. The lower estimated capture rate for water jetting and mechanical are due to differences in the typical circumstances that open sandblasting, water jetting and mechanical treatment are conducted under. The capture rates come from Pinovo estimates based on industry knowledge.