

Climate strategy 2017 for NLMK DanSteel A/S

NLMK DanSteel A/S intends to take part of the responsibility for a better climate and will continue having the climate on the agenda. The consequence of excessive CO2 emission leads to the climate imbalance causing hurricanes, floods and drought in the world our children shall inherit.

NLMK DanSteel A/S has outlined the climate strategy for the Kyoto period until the year 2020 as the basis for more specific initiatives. NLMK DanSteel A/S is an ETC company, who has signed an agreement on energy savings with the Danish Energy Agency. We strive to achieve our goals and maintain our energy management system certified according to DS/EN ISO 5001:2011. Besides the general saving of natural gas and electricity in the production, which we are working on constantly, we intend to make the steel production CO2 data transparent to show the impact of CO2 emission on Frederiksværk's environment. The climate strategy is published on www.dansteel.dk

The climate strategy is a part of NLMK DanSteel A/S general environment and energy policy and is to be revised every year. While the environmental strategy focuses on items like water, energy and waste, a separate climate strategy will help to reduce CO2 emission in the areas of production and transport and therefore goes a step further and beyond energy savings.

NLMK DanSteel A/S CO2 emission and the climate impact have comprised 101.389 tons of CO2 in 2016. The energy distribution is shown in the table below together with the planned targets for the yearly reduction until 2020:

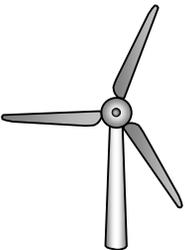
ENERGY CONSUMPTION 2016 Produceret: 479.501 t	Emission total: 101.382 ton CO2 pr. år	Emission: kg CO2 per ton steel plates produced	Emission target: kg CO2 pr. ton normalized steel plate	Reduction target: kg CO2 pr. ton normalized steel plate/ year
Gas consumption, report	79.254	165	69	1
Electricity consumption, calculated	20.896	44	-	1
Internal transport consumption, hydraulic oil etc.	1.192	2	-	-

NLMK DanSteel A/S produces high quality steel plates by hot rolling combined with other energy intensive heat treatments of steel plates at high temperatures. A strong demand on the world market for these products makes it necessary for NLMK DanSteel A/S to invest in new energy-consuming machinery. The new machinery ensures energy efficiency while the carried out fine-tuning allows better energy recovery. Although the total production process demands more energy supply due to increasing production, new investments and applied new technological processes makes a little decline in the consumption of natural gas feasible. Continuous optimisation of the process and energy saving through implementation of energy efficiency projects are the goals to which we aspire. Reduction target = CO2 benchmarks is set for normalized steel plates with the possibility to be compared over the period.

A reduction of 2 kg CO2 per ton steel plate per year will be equal to a total reduction of app.1.000 tons CO2 per year provided that the production capacity of NLMK DanSteel A/S is fully exploited.

NLMK DanSteel A/S is a company of NLMK Group

Focus areas of the climate strategy:

	<p>Steel plates – all kind</p> <ul style="list-style-type: none"> - Increase of the yield percentage - Effective use of natural gas in the slab and normalization furnaces - Lower degree of re-milling
	<p>Steel plates – normalised, hot levelled</p> <ul style="list-style-type: none"> - Investment in better and new technology - Continuing optimisation of normalization process through normalizing rolling - Higher percentage of plates to undergo normalizing rolling
	<p>Transport</p> <ul style="list-style-type: none"> - Applying more shipping and rail transport - Education in more environmentally friendly driving - Improved driving pattern internally - Transition to usage of electric vehicles
	<p>Other climate acts</p> <ul style="list-style-type: none"> - Courses in low energy consumption for the furnace workers - On-line registration of energy consumption - Isolation of buildings and machinery - Using the waste heat from furnaces to bathing and rooms - Participation in climate campaigns (1 ton less a.o.)
	<p>Products</p> <ul style="list-style-type: none"> - Wind mill production must be part of NLMK DanSteel A/S image - Cooperation in the field of development of wind energy and windmills