

# Greenhouse gas reduction policy of company SEKO Aerospace, a.s.

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# Management of SEKO Aerospace, a.s., ID No.: 25446592, commits to the following policy to reduce the company's greenhouse gas emissions:

- We recognise the **value of the environment** and the importance of changing the Earth's climate system.
- We commits to **reducing greenhouse gas emissions** in Scope 1 and Scope 2 through improving energy efficiency and installing own renewable sources of electricity
- We comply with **legislative requirements** related to environmental and climate protection.
- We continue to take environmentally friendly measures such as using surplus heat from machines for heating, using our own water sources, maintaining greenery and other ecological features in the company's outdoor areas
- We **communicate** our climate change mitigation measures publicly and to all relevant stakeholders

Tomáš Sedláček Director of plant Louny Vlastimil Sedláček CEO, SEKO Aerospace, a.s. Pavel Klar Director of plant Olomouc



# Introduction

- This document is for plant in Olomouc of company SEKO Aerospace, a.s. (further SEKO Aerospace)
- Base year of company carbon footprint calculation and GHG reduction targets is 2023
- Company carbon footprint and its reduction were calculated using GHG Protocol methodology
- Scope 2 figure was calculated by market-based method.



# Company carbon footprint of SEKO Aerospace (plant Olomouc, Czechia)

## Base year (2023)

#### **Division of emissions by Scopes**

Scope	location based		market based	
Scope 1	74.485 t CO <sub>2</sub> e	4.4 %	74.485 t CO <sub>2</sub> e	3.7 %
Scope 2	1 635.473 t CO <sub>2</sub> e	95.6 %	1 928.169 t CO <sub>2</sub> e	96.3 %
Total	1 709.958 t CO <sub>2</sub> e	100.0 %	2 002.654 t CO <sub>2</sub> e	100.0 %
Scope 1+2	1 709.958 t CO <sub>2</sub> e	100.0 %	2 002.654 t CO <sub>2</sub> e	100.0 %

#### **Market-based emissions**





# GHG reduction targets of SEKO Aerospace plant Olomouc, Czechia

- Reduction of the company carbon footprint in Scope 1 and 2 by 30 % by 2030
- 2. Use 25 % renewable electricity by 2030
- 3. Increasing energy efficiency in our processes



# **Planned actions for reducing GHG emissions**

#### Installation of own photovoltaic plant

- Yearly generation of 359–395 MWh of own renewable electricity
- Yearly reduction of **250–275 t CO<sub>2</sub>e** (**12.5 13.75%** of Scope 1&2)

#### **Replacement of lightning**

- Reduction of power consumption of lighting from 24 534 W to 9 694 W
- Estimated yearly reduction of consumption 14 840 kWh of electricity
- Yearly reduction of **16.7 t CO<sub>2</sub>e** (**0.8%** of Scope 1&2)



# Other possible actions for future

#### Improving electricity efficiency

• Lowering electricity consumption in appliances, air conditioning and lighting

#### Improving heating efficiency

• Lowering consumption of natural gas, insultation

#### Lower fosil fuel consumption in company cars

• Better efficiency, switching to plug-in hybrids or fully electrici cars

Machinery used has the highest possible energy standards, for further GHG reduction it is possible to **purchase guarantees of origin for electricity from renewable or low-carbon sources** 



# Summary

Base year of GHG reduction targets is 2023

SEKO Aerospace s.r.o. is planning GHG reduction actions in the coming years

 Specifically actions: own electricity generation from photovoltaics, using energy saving lightning

**Further GHG reduction** in Scope 1 & 2 may be possible via purchase of guarantees of origin for electricity from renewable or low-carbon sources (up to 96 % possible reduction of Scope 1&2)

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# Possible actions to achieve GHG reduction targets

More detailed

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# 1. Emission reductions in Scope 1

Main actions:

Emissions in Scope 1: **74.49** t CO<sub>2</sub>e

- Increasing energy efficiency
  - Reducing natural gas consumption for heating
  - Lowering consumption of fuel for company cars
- Lowering amount of refrigerant leakages



# 1. Emission reductions in Scope 1

Other possible actions

- Switch heating to heat pumps
- Using plug-in hybrids or fully electric company cars
- Using air-conditioning with different refrigerants with lower GWP
- Employee training



## **1.1 Increasing energy efficiency**

An energy audit of the technologies used can be carried out to identify opportunities to save energy consumption.

Recommendations from an energy audit may include replacing energy consuming appliances, identifying and avoiding energy losses or accurately metering and timing energy use. Providers of these services advertise 10-30% savings in energy consumption

#### Possible greenhouse gas savings: $3 - 9 t CO_2 e$



## **1.2 Lowering amount of refrigerant leakages**

In 2023 GHG emissions from regrigerant leakages accounted for 22.9 t  $CO_2e$  (30 % of Scope 1 emissions)

Avoiding leakages or using refrigerants with lower GWP (e.g. R32, R152a) would lower GHG emissions in Scope 1

Possible greenhouse gas savings: up to 22.9 t  $CO_2e$ 



#### **1.3 Switch heating to heat pumps**

SEKO Aerospace in 2023 consumed natural gas for heating which generated 7.4 t  $CO_2e$ 

Switching heating to electricity powered heat pumps would reduce GHG emissions in Scope 1, but without further actions will increase emissions from consumed electricity in Scope 2 (lower GHG saving estimation)

Higher GHG saving estimation assume using electricity from renewable source for heat pumps

#### Possible greenhouse gas savings: $2.1 - 7.4 \text{ t CO}_2\text{e}$



## 1.4 Using plug-in hybrids or fully electric company cars

GHG emissions from fuel combustion in company cars accounted for 44.2 t  $CO_2e$ 

- We estimate 20 % lower emissions from plug-in hybrid cars than ones with combustion engine (with electricity in Czechia)
- We estimate 35 % lower emissions from fully electric cars than ones with combustion engine (with electricity in Czechia)

#### Possible greenhouse gas savings: up to 44.2 t $CO_2e^*$

\* (when using renewable electricity for electric cars)



# 2. Emission reductions in Scope 2

#### Main actions:

- Installation of photovoltaics
- Replacement of lightning
- Increasing electricity efficiency

#### Other possible actions:

• Purchase of guarantees of origin for electricity from renewable sources or other instruments (Power Purchase Agreements)

Emissions in Scope 2	1 0 2 17 + 00
(market-based):	<b>1 320.17</b> tCO <sub>2</sub> e



#### **2.1 Installation of photovoltaics**

Installing new photovoltaic system with installed capacity 359.26 kWp would annually produce 359–395 MWh of electricity

Generated electricity which will not be consumed by SEKO Aerospace will help to avoid emissions in Czech electricity grid

#### Estimated greenhouse gas savings: 250–275 t CO<sub>2</sub>e\*

\* All of generated electricity would be used for own purposes



## 2.2 Replacement of lightning

Installation of new LED lightning will lower power consumption of from 24 534 W to 9 694 W

- In production processes reduction will be 9 760 W, we estimate 2 000 hours of lightning yearly
- In offices and other areas reduction will be 5 080 W, we estimate 1 000 hours of lightning yearly

Estimation of total yearly electricity consumption is 24 600 kWh

Estimated greenhouse gas savings: 16.7 t CO<sub>2</sub>e



## 2.3 Increasing electricity efficiency

An energy audit of the technologies used can be carried out to identify opportunities to save energy consumption

We estimate similar results as in Scope 1, main sources of reduction might be:

- More efficient appliances
- Precise measures of electricity consumption and its optimalization

#### Possible greenhouse gas savings: 96.4 t $CO_2e^*$

\* 10% reduction of electricity consumption



# 2.4 Guarantees of origin for electricity from renewable sources

In cases when SEKO Aerospace will have to buy electricity from supplier, certificates of origin for renewable electricity can be purchased to reduce emissions in Scope 2

#### Estimated greenhouse gas savings: up to 1 928.17 t CO<sub>2</sub>e\*

\* The case if all the electricity consumed in the base year had certificates of origin

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# 3. Next steps

• Perform carbon footprint calculations on an annual basis

• Evaluate after 12 months GHG reduction actions conducted in 2023

• Update the Greenhouse gas reduction policy of company SEKO Aerospace, a.s.



# 4. Notes

- Scope 1 and 2 GHG reduction targets are based on SEKO Aerospace carbon footprint calculation in 2023
- SEKO Aerospace calculated its carbon footprint in years 2021 and 2022 but with different methodology and before a significant expansion of production
- The estimated savings have been calculated relative to the situation in 2023, external influences (weather, accidents, etc.) are not taken into account
- Carbon footprint of SEKO Aerospace is havily linked with electricity consumption. On the basis of the State Energy Concept of the Czech Republic we assume an increase in the share of renewable sources in the fuel mix from 5.5% to 14.0%