

# **Chem-Tec Plating A/S**

ESG / Environmental report 2023



# Management report

Chem-Tec Plating A/S (CTP) is a company specialising in surface treatment, that adds value and properties to metal components by electrolytic or chemical plating. CTP is creating functional and decorative metal coatings on metal.

From the beginning of CTP to today, we've grown and received two "Gazelles", which is a Danish award for fast growing companies. By working in close cooperation with our customers, we're keeping the innovative spirit alive that's always been a part of CTP.

Along with growth and progress follows a responsibility to the public from the company, and therefore we publish environmental statement. CTP is voluntarily preparing and publishing an environmental statement, because it's CTP's belief that it will add value for not only our stakeholders but also for the company itself. The goal of the environmental statement is to give investors, authorities, customers, neighbours, and other business partners easily accessible information about the company's environmental statements -policies and goals.

Furthermore, the goal of this report is to show that CTP is working with defined measurements to decrease its environmental impact, while creating an even better work environment for its employees. CTP believes that growth and expansion equals a green production and excellent working conditions.

Because of this we have started a series of initiatives to reduce our carbon footprint and encourage our already excellent colleagues to think about ways to improve and optimise the production in order to reduce our energy consumption.

We plan to obtain an ISO 14001 certification latest in 2025, this means that we'll have a description about how the entire organization takes responsibility for – and works with – the environmental initiatives.

The employees are our biggest asset. Their dedication and engagement in the daily work with plating ensures that we always deliver an excellent product with and excellent service.

This environmental statement is the second published environmental statement from CTP and covers the year 2023. Compared to the 2022 edition we have expanded contents on Social and Governance.

Uldum, April 2024	
CEO:	Environmental responsible:
Bo Hvid Mikkelsen	Nils Ebbe Hansen



# **Table of contents**

Management report	
Basic informations	
Business field	
Main activity	
Board of directors	3
Activities	4
Certificates	4
Listing items	4
Environmental certification	4
Wastewater permit	4
Environmental contact person	4
Environmental policies and objectives	5
Environmental objectives	6
Social / Work environment	14
Governance	15



## **Basic informations**

Chem-Tec Plating A/S Kærvejen 13 7171 Uldum

Tlf.: 75 67 92 92

E-mail: <u>info@chemtec.dk</u>
Website: <u>www.chemtec.dk</u>
CVR – number: 26 99 16 68
P-number: 1.000.084.633

# **Environmental agency**

Hedensted Kommune Niels Espesvej 8 8722 Hedensted

## **Business field**

285100: Surface treatment of metal; chemical and electrolytic surface treatment of metal on a contract basis

# **Main activity**

Subcontractor of metallic surface treatment of metal parts.

## **Board of directors**

CEO: Bo Hvid Mikkelsen

Chairman of the board: Poul Michael Bjørnskov

Vice-chairman: Else Mogensen

Board member: Thorkild Arenskov Mikkelsen

Board member: Ole Bjøvlund Smed

Board member: Brian Ølgård Thomsen



## **Activities**

CTP is a Danish company with 31 employees in 2023.

CTP is doing electrolytic surface treatment of metal parts. A significant activity at the company is treatment of process wastewater, that is cleaned at the site before sending it to the state-owned wastewater treatment plant.

It's essential for good results, that the tasks are carried out in a timely manner after the customer's wishes and with the agreed upon resources. To facilitate this, we prioritise continuous dialogue with our customers.

To ensure the best service for our customers, generally one employee will follow an order from delivery through the entire process and packaging. This gives more flexibility and allows the customers and staff to form a close dialog. Furthermore, this structure increases the expertise of the employees.

## **Certificates**

ISO9001: Certificat number: 168080-2014-AQ-DEN-DANAK.

First certification: 26th October 2009

# **Listing items**

According to the law about approval for listed companies, CTP is covered by the approval order appendix 2 point 2.6 – Companies that carry out surface treatment by electrolytic or chemical process. The total volume of treatment vessels (exclusive washing vessels) above 30m<sup>3</sup>.

# **Environmental certification**

Latest environmental certification: 20th August 2020

# Wastewater permit

Latest wastewater permit: 20<sup>th</sup> September 2000

# **Environmental contact person**

Nils Ebbe Hansen

Telephone: 24 88 47 55

E-mail: neh@chemtec.dk



# **Environmental policies and objectives**

CTP monitors all significant environmental impacts at appropriate intervals, and continuously minimizes the consumption of raw materials, energy, water, and emissions from processes, especially wastewater and chemical waste. CTP wants all waste products to be recycled and reused where possible. Today metal waste and solids from the internal wastewater treatment plant is recycled. A project has been launched to investigate if it's possible to recycle the chemical waste that is being produced.

Processes and equipment are continuously being improved, benefitting both the environment and the work environment. CTP believes that projects should always benefit the environment and the working environment, therefore all new projects will carry out an environmental assessment before it's started.

CTP works with yearly environmental objectives through continuous improvements of the environmental management system. This is done to ensure a positive development of the environment at CTP.

CTP constantly seeks to replace dangerous chemicals with less harmful chemicals, to benefit both the employees and the environment. This is carried out in close cooperation with the suppliers. As a natural part of this we require our suppliers of conflict materials (3TG), that the materials are not extracted from mines in DR Congo and surrounding countries affected by conflict.

CTP ensures that pollution is prevented by physical measures, establishment of contingency plans and training of employees in how to act in the event of an environmental accident.

CTP meets all relevant authority requirements and at the same time strives to be at the forefront of new requirements through an open dialogue with authorities.

We wish to communicate openly about environmental conditions with all our stakeholders. Therefore, we publish a yearly environmental report about the CTP's environmental progress, which is public on the website.

In 2023, CTP has implemented that on each sales invoice the climate footprint is calculated as emitted kg CO2 equivalents.

# **Environmental management system**

CTP's environmental management system, which also includes working environment to some extent, is integrated with the company's quality management system. Currently, CTP is certified according to ISO 9001, and is working on achieving certification according to ISO 14001.

#### Organisation of environmental and work environment

The environmental manager has the day-to-day responsibility for coordination, maintenance, and development of the environmental management system, as well as taking care of the overall environmental conditions.

The daily work environment and safety is handled by the work environment organisation. Tasks and projects relating to the working environment are coordinated with the environmental manager.



## Information/communication

Information/communication about the company's environmental and work environment efforts are included in internal meetings and on notice boards. Furthermore, all interested parties can contact CTP and obtain the annual environmental report, or use the company's website www.chemtec.dk, where the environmental report is available. CTP wants to be an attractive business partner, also in the environmental area, and therefore we are always available to our customers and other stakeholders regarding the company's environmental conditions.

# **Environmental objectives**

The environmental impacts will be compared to the turnover, as a higher turnover means more total emitted  $CO_2$  as well as larger amounts of waste generated. The comparison will equalize the difference in turnover between the years, so that the different years can be compared.

## UN global goals

At CPT, we take society's and the world's challenges seriously. We contribute to a better environment and society and a better workplace for our employees. In order to make a real difference with value and effect, we've decided to actively work with the standards in the UN's 17 Global Goals.

The SDG oblige the 193 member countries to create sustainable development both globally and nationally, i.e., by reducing water consumption, reducing water pollution by cleaning, introducing green measures to create better conditions for our nature and wildlife. It is not possible to work intensively with all 17 goals, therefore we've chosen to focus our efforts and work directly on 3 of the 17 world goals:







#### Clean water and sanitation

Water is an essential part of our production. It's therefore natural for us to ensure, that we only use the amount of water required for the production, and that the wastewater we send back to the nature complies with all regulations. At CTP we've decided to work specifically with the following UN targets:

Target 6.3.: By 2030, improve water quality by reducing pollution, eliminating dumping, and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater, and substantially increasing recycling and safe reuse globally.

#### **Initiatives**

#### Heavy metals in the wastewater

Although we at CTP comply with all requirements for the discharge of wastewater, we want to be even better and minimize the quantity of heavy metals in the wastewater that we send to the public wastewater treatment plant. A project has therefore been launched to identify how the amounts of heavy metals in the wastewater can be reduced.

#### • Reuse of wastewater

All wastewater is treated at our internal wastewater treatment plant before it is sent to the municipal treatment plant. In order to become even better at handling the wastewater and spare the municipal wastewater treatment plant, a project has begun to investigate how the wastewater can be reused.





## Industry, innovation, and infrastructure

At CTP, we continually work to reduce our  $CO_2$  footprint by upgrading our processes to more energy-efficient processes. We track our progress by comparing our emitted  $CO_2$  amount every year. Based on this we're working on the following target:

Target 9.4.: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.

#### Initiatives

#### Vessel insulation

There are many vessels in CTP that are heated, some of the vessels are not insulated, which means that some of the heat will go to heating up the room they are standing in instead of the liquid in the vessel.

By insulating the vessels, part of the energy that previously went to space heating will remain in the vessel and thus it will require less energy to keep the temperature of the vessels at the desired temperature.

#### Temperature reduction

We have implemented a new type of degreaser, which has been developed to be able to last longer and at a lower temperature than our normal degreaser.

This results in reduced energy consumption, but also a reduction in waste, as the degreaser needs to be changed less frequently.

#### Reduce evaporation from process vessels

The liquid in the heated process vessels will evaporate over time, which costs extra energy. In order to reduce the amount of energy that goes into evaporation, all new lines will be built with methods to reduce evaporation. It's being investigated if the process temperature can be lowered on existing lines.





## Responsable consumption and production

We are very aware that we work with chemicals and rare metals, we're also aware that we generate chemical waste. Therefore, it is of utmost importance to minimize waste and to recycle as much waste as possible. Therefore we've decided to work with the following three targets:

Target 12.2.: By 2030, achieve the sustainable management and efficient use of natural resources

Target 12.4.: By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

Target 12.5.: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

#### **Initiatives**

#### New degreasser

We expect the new degreaser to not only to save energy, but also to reduce our amount of chemical waste. The first tests show that it is not only the new degreaser that does not need to be replaced as often as the old one, but also the subsequent degreasers on the line that can be replaced less frequently.

#### Waste recycling

A project has been initiated in collaboration with our waste recipient to investigate whether it is possible to recycle our chemical waste.



# Direct environmental impact

Below, CTP's  $CO_2$  emissions are reviewed for scope 1 + 2 + 3 (water and waste).  $CO_2$  emissions are measured in tonnes of  $CO_2$ e, which is equivalent to 1 tonne of pure  $CO_2$  released to the atmosphere. The emissions will be compared to the turnover for the respective year.

## Scope 1

Scope 1 contains direct CO<sub>2</sub>e emissions from CTP. Since all process vessels are heated by electricity and the facility is heated by district heating, the only direct emission is; transportation. This covers all business transportation in company-owned and privately owned cars, i.e., driving to customers/suppliers but not employees' daily commute to and from work.



Figure 1  $CO_2e$  emissions under scope 1 – transportation

The amount of emitted CO<sub>2</sub> related to transportation is decreasing from 2020. Changes are closely linked to turnover while the total kilometres driven are at a constant level.

#### Scope 2

Scope 2 contains indirect emissions, in our case that's electricity and district heating consumed at the site.

With the increasing focus on sustainability and rising energy prices, energy consumption is particularly important to work with.

Electricity is mainly used for the electrolytic process itself, for heating process vessels, to a temperature where the chemical reactions can take place, as well as various equipment (ventilation, pumps, etc.). District heating is only used to heat the facility as well as sanitary water.

The energy consumption for the energy sources used is calculated by reading the consumption of meters for the accounting period. CO₂e emissions related to electricity and district heating are shown below in relation to turnover.



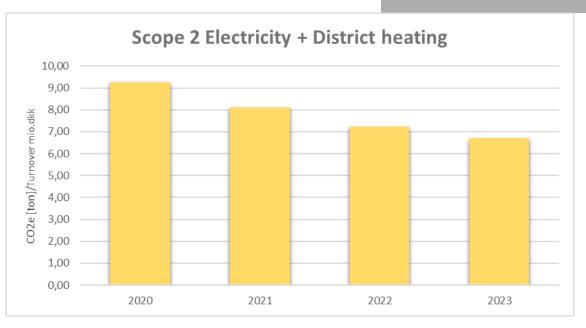


Figure 2 CO₂e per turnover related to energy consumption during the period 2020-2022

The development reflects our focus on optimizing energy consumption. The development is also closely linked to turnover, because a substantial part of electricity and heating is independent of the activity. Also emission factors for energy is being reduced due to increased share of green energy. And shift in productmix has had positive effect, with less chemical nickel surfaces which is a more electricity consuming process.

## Scope 3 - Water consumption and water discharge

Water is an essential resource for CTP's production. The water is primarily used as rinsing water between processes, for cleaning and when mixing process vessels. Water consumption is calculated here by reading meters for the accounting period. The calculation includes a small consumption of water for canteens, bathrooms etc. in connection with the production.



Figure 3 Amount of emitted CO₂e per turnover related to water consumption for the period 2020-2022



The amount of water used is decreasing per turnover, this is due to implemented measures to save water and better utilisation of the production lines' capacity. Also a shift in productmix has had positive effect, with less chemical nickel surfaces which is a more water consuming process.

The water discharge is seen as being the same as the amount that is fed in. All wastewater is treated at an internal treatment plant before it is sent to the public treatment plant.

A very important environmental parameter for CTP is the amount of heavy metals in the process wastewater. The wastewater quality is monitored daily in the company's own laboratory and samples are taken quarterly by an accredited third party to ensure the quality of the discharged process wastewater meets the specifications.

Below are the measures, carried out by the accredited third party, compared to the limits set by the local environmental agency.

Table 1 Measurements conducted by an accredited third party compared to the limits set by the local environmental agency.

Metal	2022 [μg/L]	2023 [μg/L]	Limit [µg/L]
Cyanid, total	4	3	500
Chrome (Cr)	43	44	500
Nickel (Ni)	55	11	500
Silver (Ag)	6	10	500
Tin (Sn)	118	64	5000
Zink (Zn)	105	67	3000

Table 1 shows the various metals in the process wastewater discharge from 2022 and 2023, and the concentration limits permitted by the environmental authorities. The table shows that CTP is far below the permitted concentration requirements, and with reductions from 2022 to 2023.

#### Scope 3 - Waste

CTP aims to, as far as possible, recycle the waste from the processes. This means that all metal waste is sent to places where it can be recycled, this applies to both direct metal waste from maintenance and production, but also dry matter from the wastewater treatment that contains metals. All waste is handled and disposed of in accordance with the terms of the environmental agencies.

The waste quantities are reported by the waste recipients to the authorities and CTP.

The  $CO_2e$  emission in relation to waste management is shown below. The  $CO_2e$  values include both  $CO_2e$  emitted during recycling/destruction as well as the transportation to waste management.



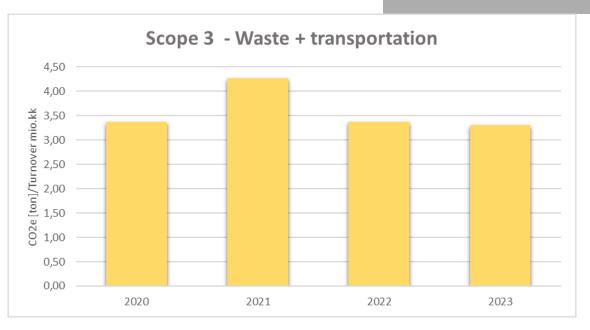


Figure 4 CO₂e per turnover in relation to waste quantities for 2020-2022

The amount of waste varies over time, this is due to the fact that some types of waste are only disposed of every two years. Therefore, the value for 2021 and 2023 contain some amounts of waste generated in the previous years. But overall a decrease in emissions from waste.

## Combined CO2e emissions

Figure 5 shows the combined  $CO_2e$  emissions per turnover for 2020-2023. The combined values contain the following data:

- Scope 1: CO<sub>2</sub>e emitted by transportation.
- Scope 2: CO<sub>2</sub>e emitted by electricity and district heating.
- Scope 3: CO<sub>2</sub>e emitted by waste handling and water.

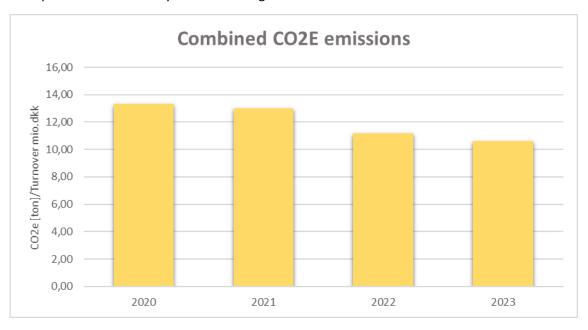


Figure 5 Combined  $CO_2e$  emissions for Chem-Tec Plating



Despite lower turnover in 2023,  $CO_2e$  has fallen from 2022, and we can see an improvement each of the last 4 years.

The distribution of CO<sub>2</sub>e in the categories Scope 1, Scope 2, and Scope 3:

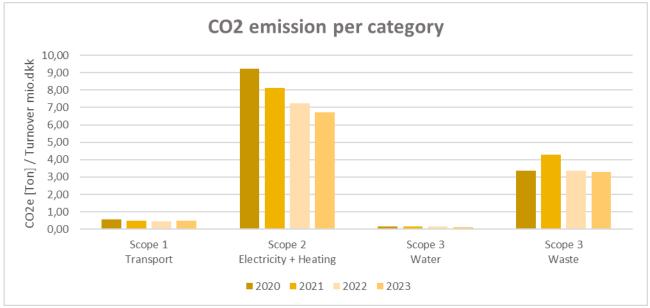


Figure 6  $CO_2e$  the emissions per category for the years 2020-2022.

By far the largest amount of  $CO_2$ e emissions comes from electricity consumption, while the second largest is from waste. Therefore, CTP's environmental plan focuses on both reducing the use of electricity as well as the amount of process waste.

# Social / Work environment

At CTP, we value our employees very much, so everyone feels like part of a strong team.

Working environment is a constant focus point, work is always being done to make CTP an even greater workplace. The following are CTP's core values to ensure a good working environment.

## Responsibility

We comply with agreements and take responsibility for tasks and the customers' issues. Therefore, it is our main rule that there is one operator who follows an order from the time it enters the house until it is packaged and sent back to the customer.

#### **Positivity**

We have a good and positive tone where everyone is heard. Because of this we've introduced several optimisations on the lines based on wishes from the operators.

#### **Flexibility**

At CPT, we have a flat management structure, which means that there is a short path to management, and the employees experience great responsiveness to wishes and suggestions for improvements. We trust each other's skills and words, which is why we give freedom for everyone to solve their tasks to the best of their ability.



#### Well-being

The staff association The Golden Club holds several social events and a weekend stay during the year, as well as marking anniversaries and round birthdays.

All employees are covered by the same company pension scheme, which in addition to pension savings also includes health insurance and insurance cover in relation to loss of working capacity, critical illness and death.

Personal employee development talks are held every year for all employees.

	2022	2023
Number of employees, FTE	32,4	30,8
Absence due to illness, blue collar	6,7%	5,4%
Absence due to illness, white collar	2,9%	2,0%
Absence due to illness, all	5,4%	4,3%
Work accidents with absence	0	0
Employee turnover	0%	28%
Gender diversity, blue collar (share of females)	58%	61%
Gender diversity, white collar (share of females)	45%	42%
Salary gender difference blue collar Male vs Female	1,02	1,02

For absence due to illness, long term illness and absence connected to dismissals are the main part. Apart from that, absence is on a satisfactory low level. Therefore a meeting allowance which was previously conditioned by no monthly absence, is now a fixed part of salary.

We have avoided work accidents leading to absence – a result of our constant focus on safety. In this context, we can note that all employees in production receive safety glasses and equipment as well as work clothes and shoes.

The organization has changed in 2023 due to strategic development in order to be a modern industrial company. The staff was reduced in 2023 to a total yearly average of 31 employees due to resignations and lower activity.

The occupational health and safety organisation is unchanged in 2023.

#### Governance

CTP strives for good corporate governance and corporate culture, so that we act responsibly and reliably. We continuously update our policies and business practices, and we work against discrimination, corruption, and bribery, as well as encouraging our customers and suppliers to conduct business in a responsible manner.

CTP has defined its management system as part of ISO9001, which i.a. includes management handbook, staff handbook and IT policy.

The local community is highly valued at CTP. A large part of the staff lives locally and participates actively in local life, and CTP supports local initiatives.



CTP is located centrally in Uldum with housing close by. It is therefore important to pay particular attention to the immediate area and maintain good relations with neighbours. CTP has thus not received any neighbor complaints.

In the city of Uldum waste water separation is being established. CTP has therefore also been required to establish this in 2024, and various solutions are being worked on.

#### Development activities

CTP develops its production in collaboration with both customers and suppliers. This is done to ensure that the customers get the best surface coating, while at the same time causing the least possible damage to the environment.

CTP has a strong focus on the Reach candidate list, conflict materials, the RoHS directive etc. and ensures that all products used are in accordance with national and European regulations. CTP continuously works to phase out dangerous chemistry and replace it with less harmful chemicals.

When chemical waste is disposed of, the options for recycling the waste are always investigated first before it's decided to send it to destruction. When it is not possible to recycle the chemical waste, projects are initiated to investigate ways to recycle as much of the waste as possible.

In 2024, CTP invests in new surface coating technology that can replace chemical processes. This is so-called PVD — Physical Vapor Deposition, which is a coating process where a surface coating is vaporized under vacuum.