

ASMPT SMT Solutions



Net Zero 2035 (Scope 1 & Scope 2)

Julia Jozic Andreas Ernst

Customer Request regarding Net Zero



ERICSSON

Ericsson Supply Chain Climate Action

Dear Supplier,

Conducting business responsibly is fundamental to Ericsson's strategy and culture, and Sustainability is part of Ericsson's purpose to empower an intelligent, sustainable and connected world. Acting on the climate emergency has never been more important. In order to limit global warming to maximum 1.5°C, aligning with the latest science and the Paris Agreement is essential.

Ericsson is working in alignment with the 1.5°C ambition, and we expect our suppliers to join us on this crucial journey. We are now asking you as our supplier to also set a public target of your own, in line with this ambition, meaning halving your absolute scope 1 and 2 emissions by 2030. The progress to reach this target should be publicly reported on an annual basis.

For those of Ericsson's suppliers that have a performance card with Ericsson, the status of setting up such a climate target will as of 2021 be part of the total performance score.

To our already aligned suppliers, we thank you for your dedication and look forward to a mutual progress on this topic. What we achieve in this area matters!

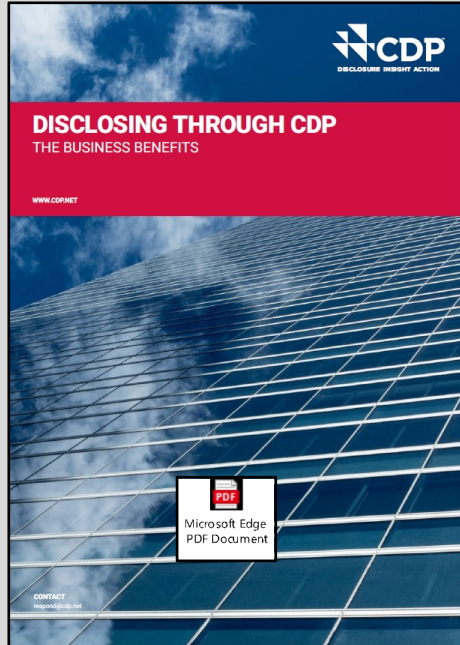
For further information on how to align with the 1.5°C ambition, please see:



A photograph of a dense forest with sunlight filtering through the trees, creating a bright, hazy glow in the center. The text "Environmental and social commitment" is overlaid in white.

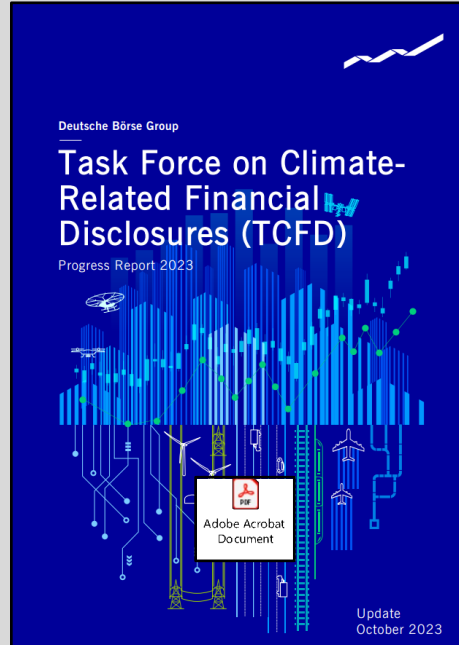
Environmental and social commitment

NGO's



CDP = Carbon Disclosure Project

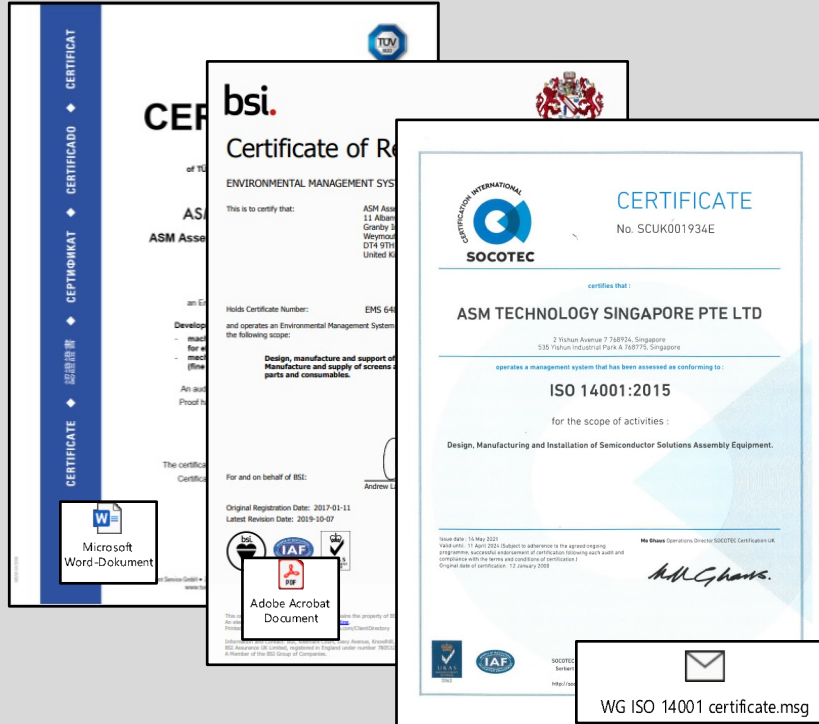
Stock Exchange



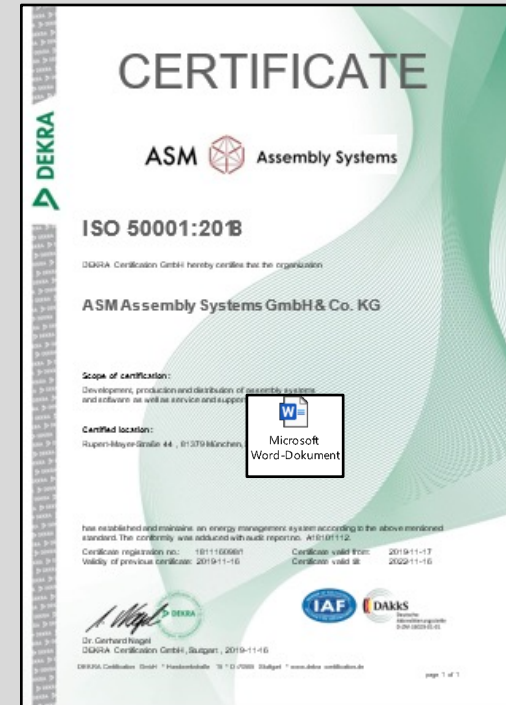
Legal



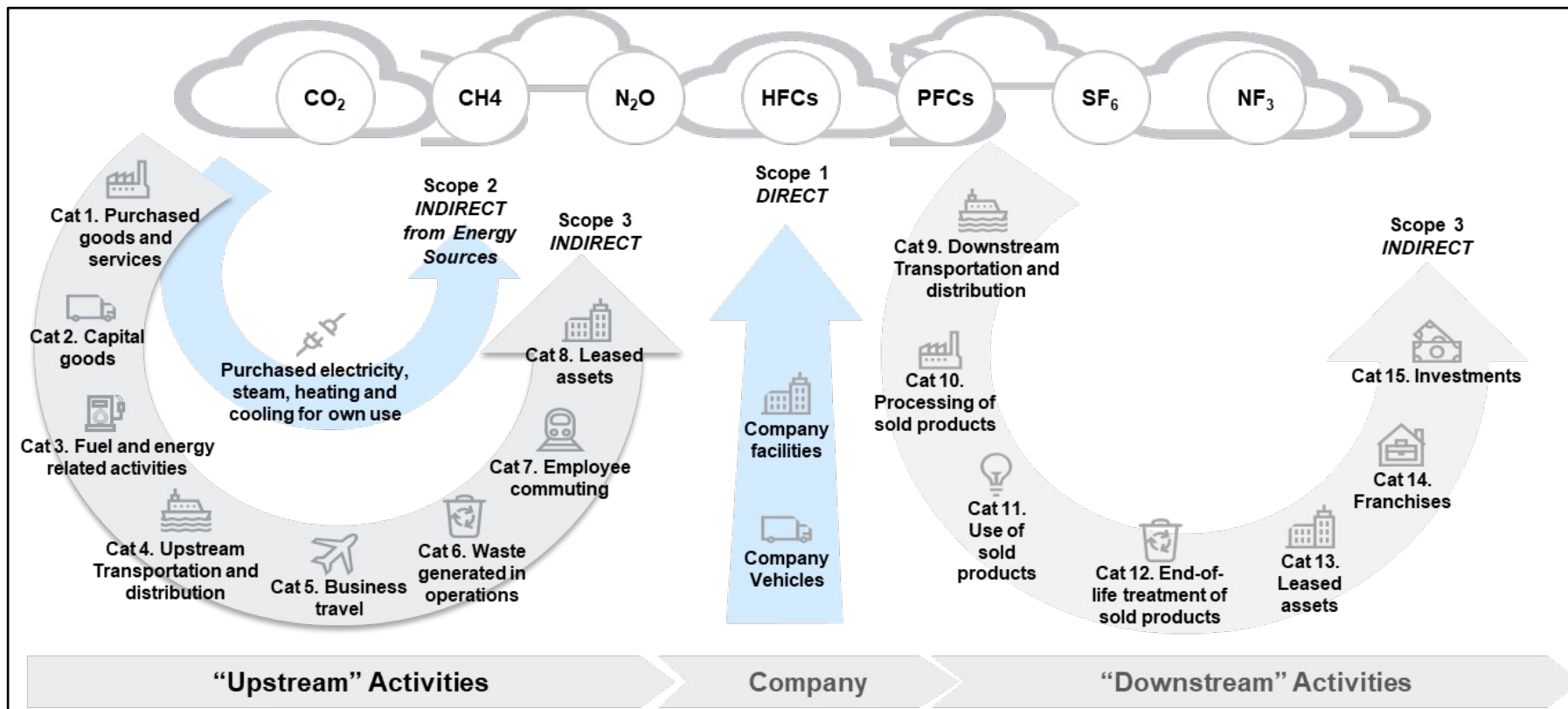
ISO 14001:2015 (Munich, Weymouth, Singapore)



ISO 50001:2018 (Munich)



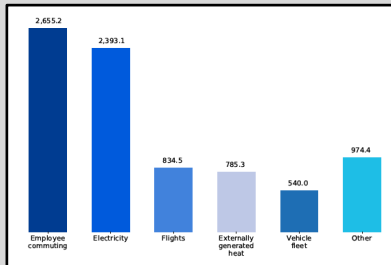
Greenhouse Gas Protocol Scope 1,2,3



Carbon Footprint

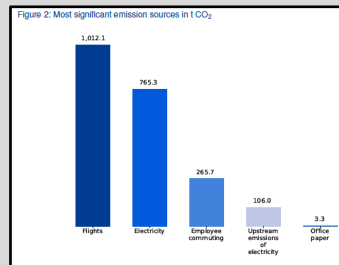
Munich

2019 / 8174 to CO₂



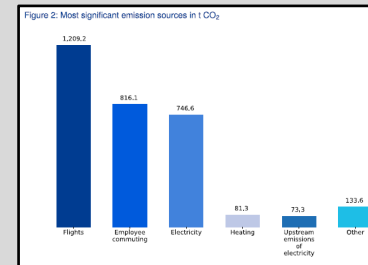
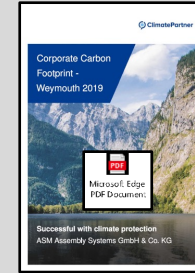
Singapore

2019 / 2157 to CO₂



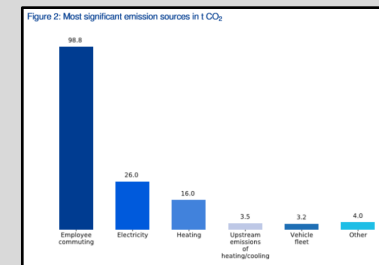
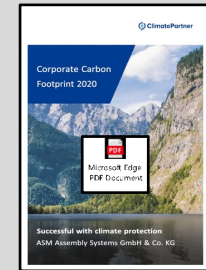
Weymouth

2019 / 3060 to CO₂



Győr

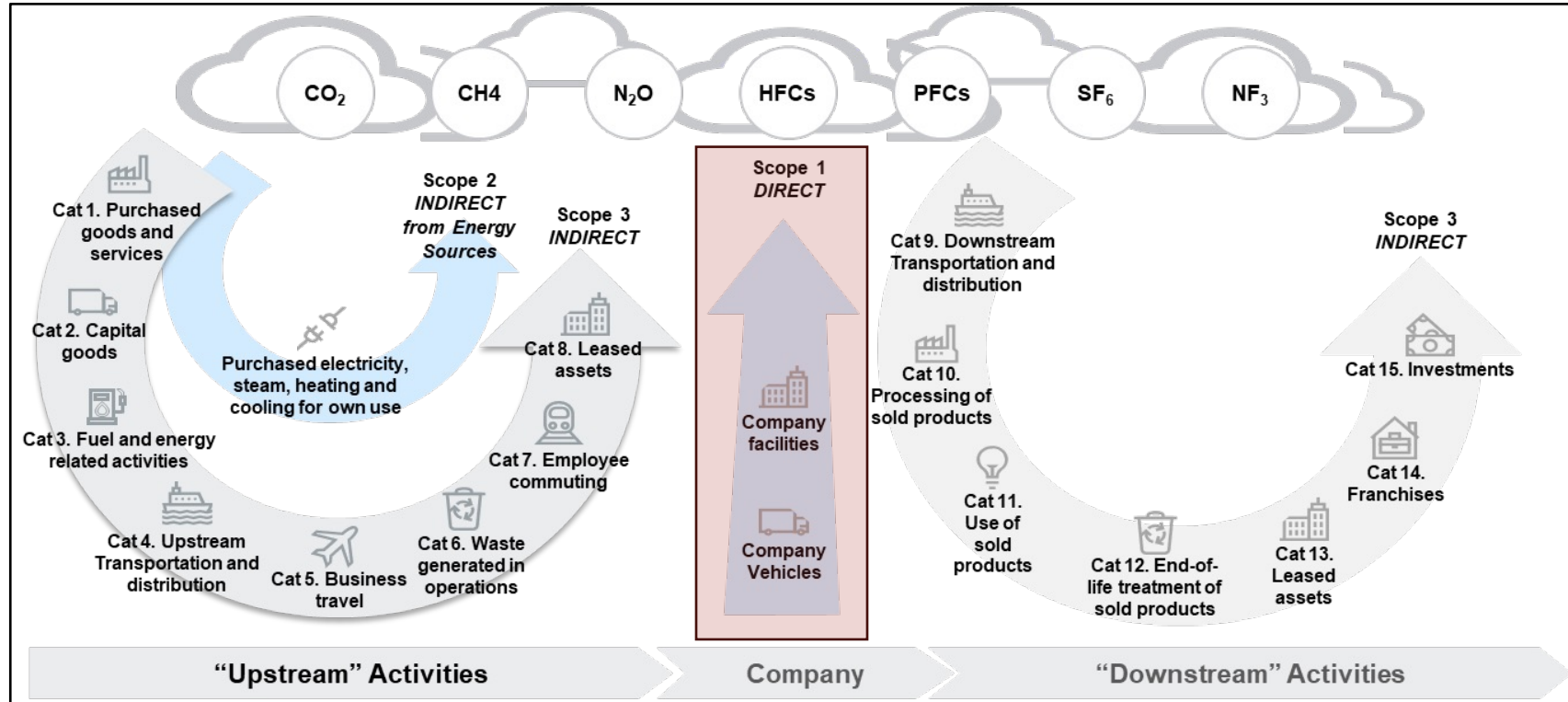
2020 / 152 to CO₂



Carbon Footprint

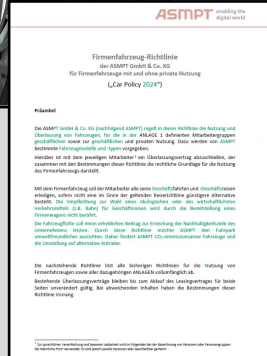
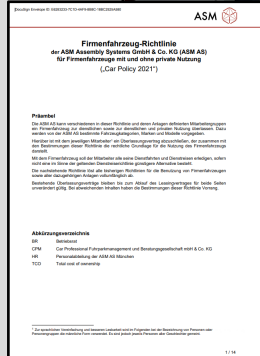
		Munich 2019 - t CO ₂		Singapore 2019 - t CO ₂		Weymouth 2019 - t CO ₂		Győr 2020 - t CO ₂	
Scope 1	Vehicle fleet	540		0		47,7		3,2	
	Cooling agents	61,8		0					
	Heating	0		0		81,3		16	
Scope 2	Electricity	2988,7		765,3		746,6		26	
	External generated heat	785,3		0				0	
	District cooling	0		0				0	
		4375,8		765,3		875,6		45,2	6061,9
Scope 3	Employee commuting	2655,2		265,7		816,1		98,8	
	Flights	834,5		1012,1		1209,2			
	Upstream emissions of heating/cooling	375,5				18,1		3,5	
	Upstream emission electricity	336,9		106		73,3		1,2	
	Rental car / private vehicles	107,8				65,7			
	Upstream emission fuel	83,4						0,7	
	Office paper	0		3,3		2		0,4	
	Teleworking							1,2	
	Train trips	0,8						0,4	
Summary		8769,9	0	2152,4	0	3060	0	151,4	14133,7

Greenhouse Gas Protocol Scope 1,2,3

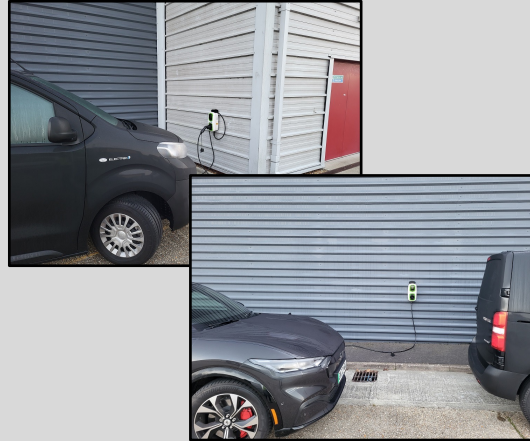


Scope 1 - Vehicle fleet

Munich



Weymouth

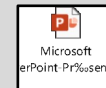


Charging station

- 3 Charging station exist for the company cars
- 20 should go live in April 2023 for the employees

Cars

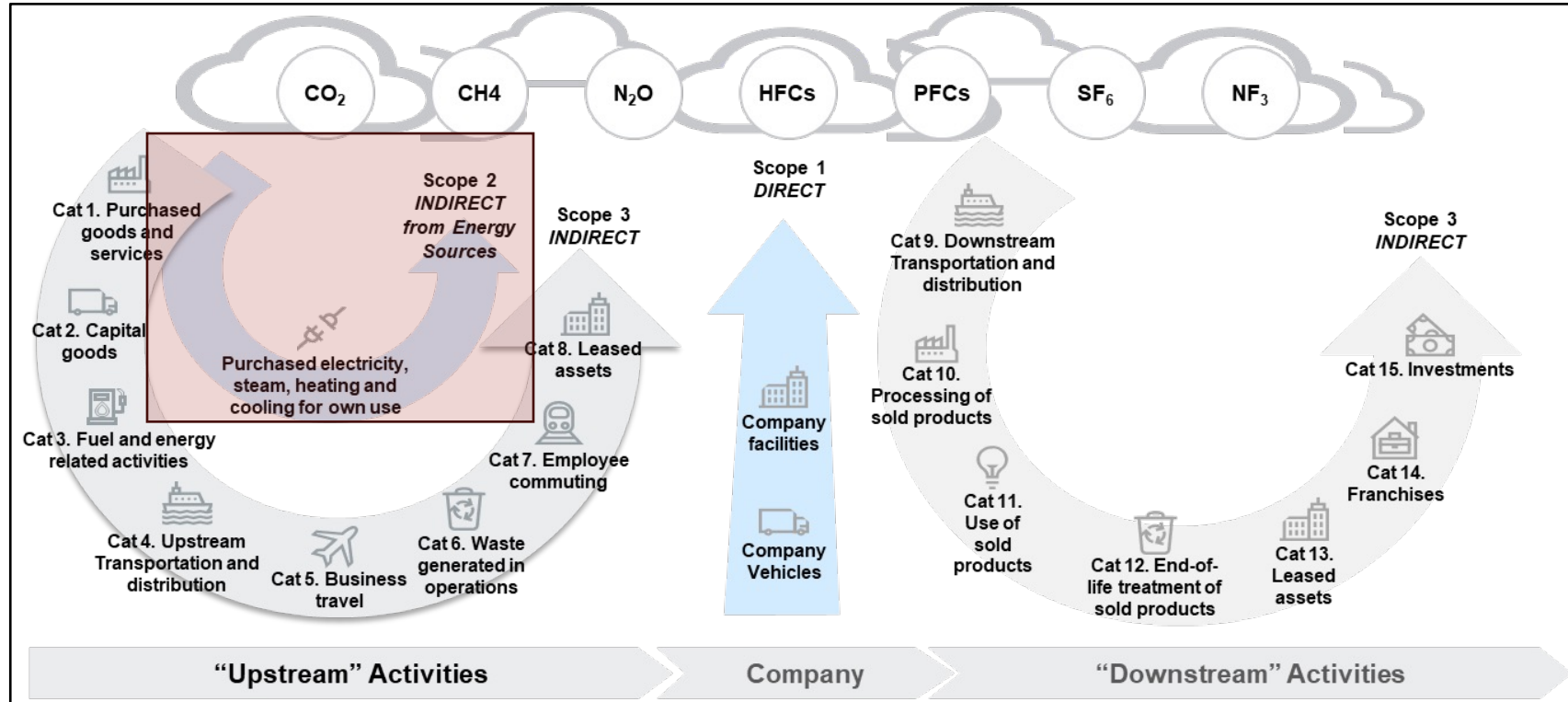
- pool cars electrical 2/3 in 2022
- one van is electric too



Singapore

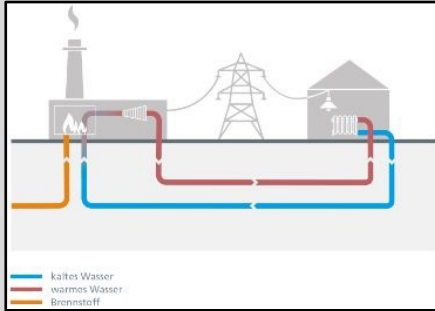
no company cars
in Singapore

Greenhouse Gas Protocol Scope 1,2,3



Scope 2 – Heating

Munich



[Die Entwicklung des neuen Energiestandorts Süd | SWM Magazin](#)

Weymouth

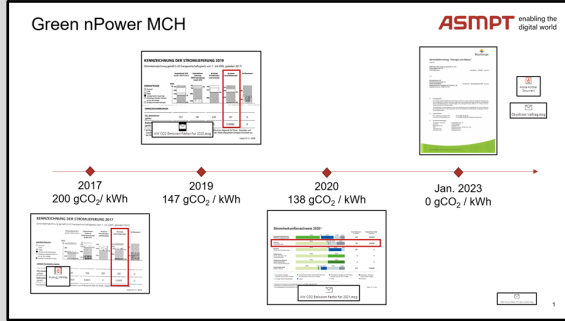
The upgrade of the heating system is currently not planned

Singapore

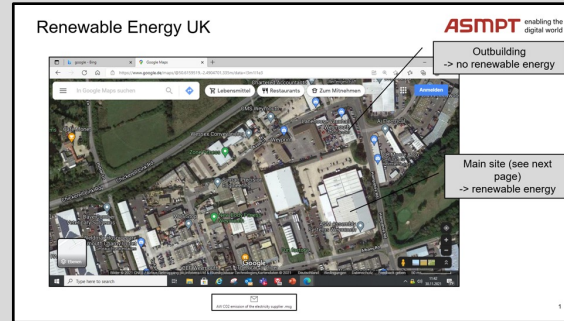
no heating
cooling via electricity

Scope 2 - green power

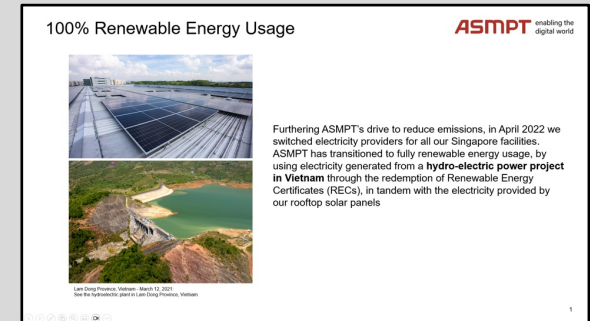
Munich



Weymouth



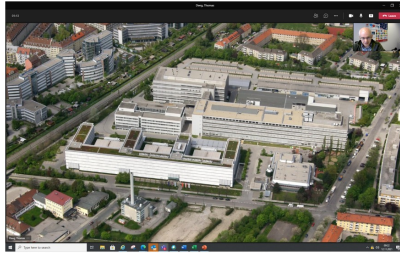
Singapore



Scope 2 – self generated power

Munich

Photovoltaic - Munich



2



Weymouth

Photovoltaic - Weymouth

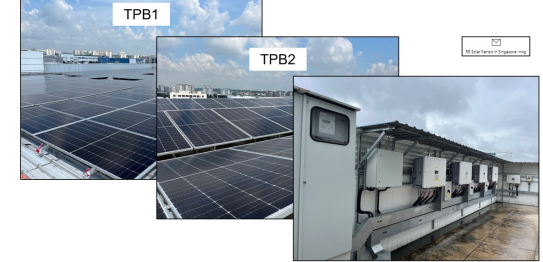


3



Singapore

Photovoltaic Singapore starts in Nov. 2022



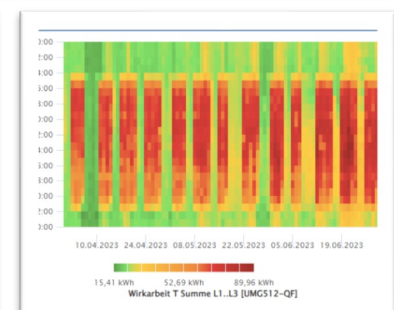
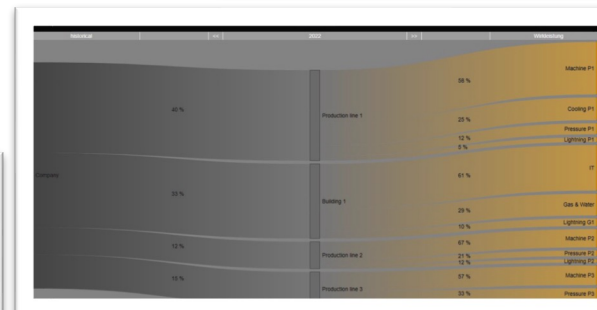
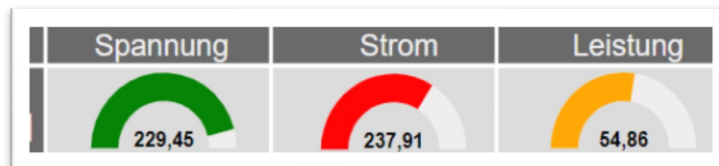
2



Scope 2

Digitales Energiemonitoring zur Transparenzsteigerung

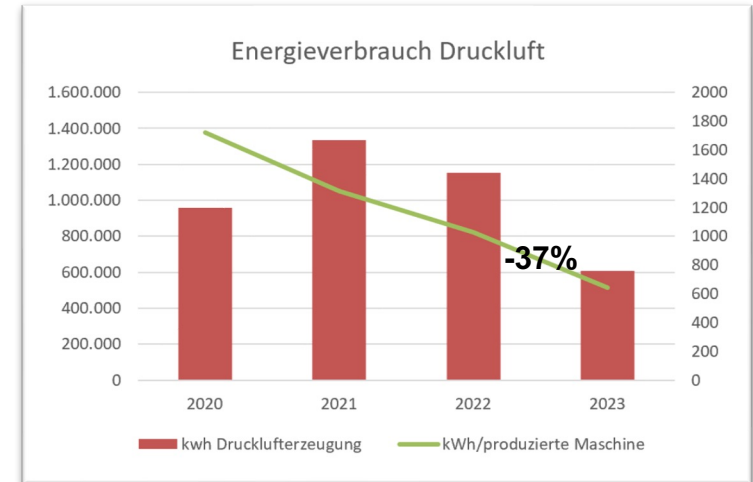
- Automatisiert
- Konsolidiertes Tool / Datensammlung
- Skalierbarer Webzugriff
- Konstante Messintervalle
- Echtzeitüberwachung
- Alarmmanagement
- Erweiterbar / leichte Anpassung
- Individuelle Dashboarddarstellung



Scope 2

Energieeinsparung – Verbesserungsprojekte der letzten 4 Jahre

- Wechsel auf LED Beleuchtung
- Optimierung der Kältemaschine
- Modernisierung der (Inhouse-) Serverlandschaft
- Optimierung der Druckluft



Energieeinsparung – Optimierung der Druckluft

1/3 des Gesamtstromverbrauchs am Standort durch Druckluftherzeugung

Optimierungsmaßnahmen der letzten Jahre:

- Senkung des Netzdrucks auf 6,5 bar
- Vermeidung von überflüssigen Redundanzen
- Prozessanpassung (Total Flow in Systemabnahme)
- Digitales Monitoring
- Modernisierung durch neue Druckluftzentrale
- Proaktive Leckageortung

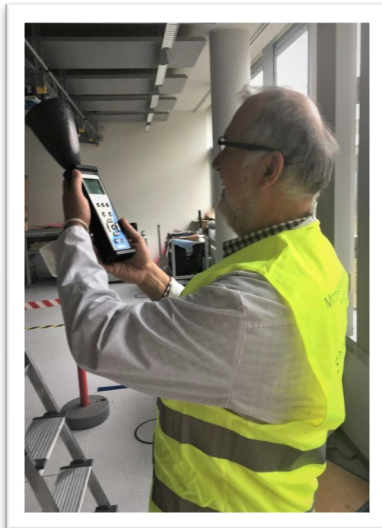


Scope 2

Energieeigisparung – Optimierung der Druckluft – Proaktive Leckageortung

Druckluftleckagelauscher SDT200

Basisdaten:
kWh/m3
Betriebsstunden/Jahr
Preis/kWh Druckluft



Neues Leck

Hilf mir

Machen Sie ein Foto

Weitwinkel

Nahansicht

Leckage

Sensor *

Flexibler Sensor

ntfernung von der Leckage *

20 cm

iasart *

Druckluft

fesswert (dBμV) *

Neues Leck

/erlust (m³/min)

0.0

/erlust (€/Jahr)

ag-Nummer *

1

osition *

otizen & Kommentare

itärke

Niedrig

itatus

Nicht behoben

Scope 2

Energieeigspargung – Optimierung der Druckluft – Proaktive Leckageortung

SDT LEAKReporter

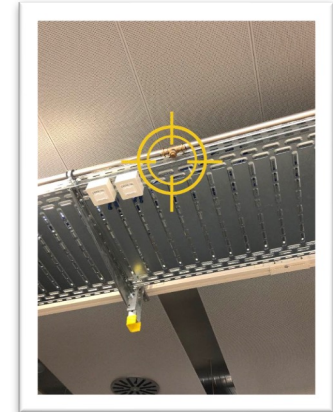
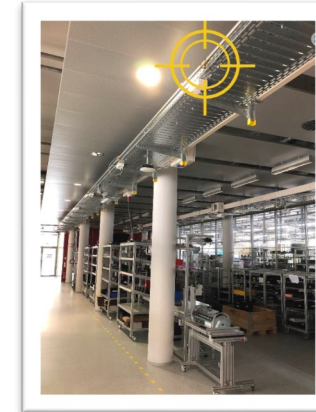
Meine Guthabeneinheit(en): 0

Deutsch Leak Reporter (ASMPT)

Anzeige: 10 Leckagen

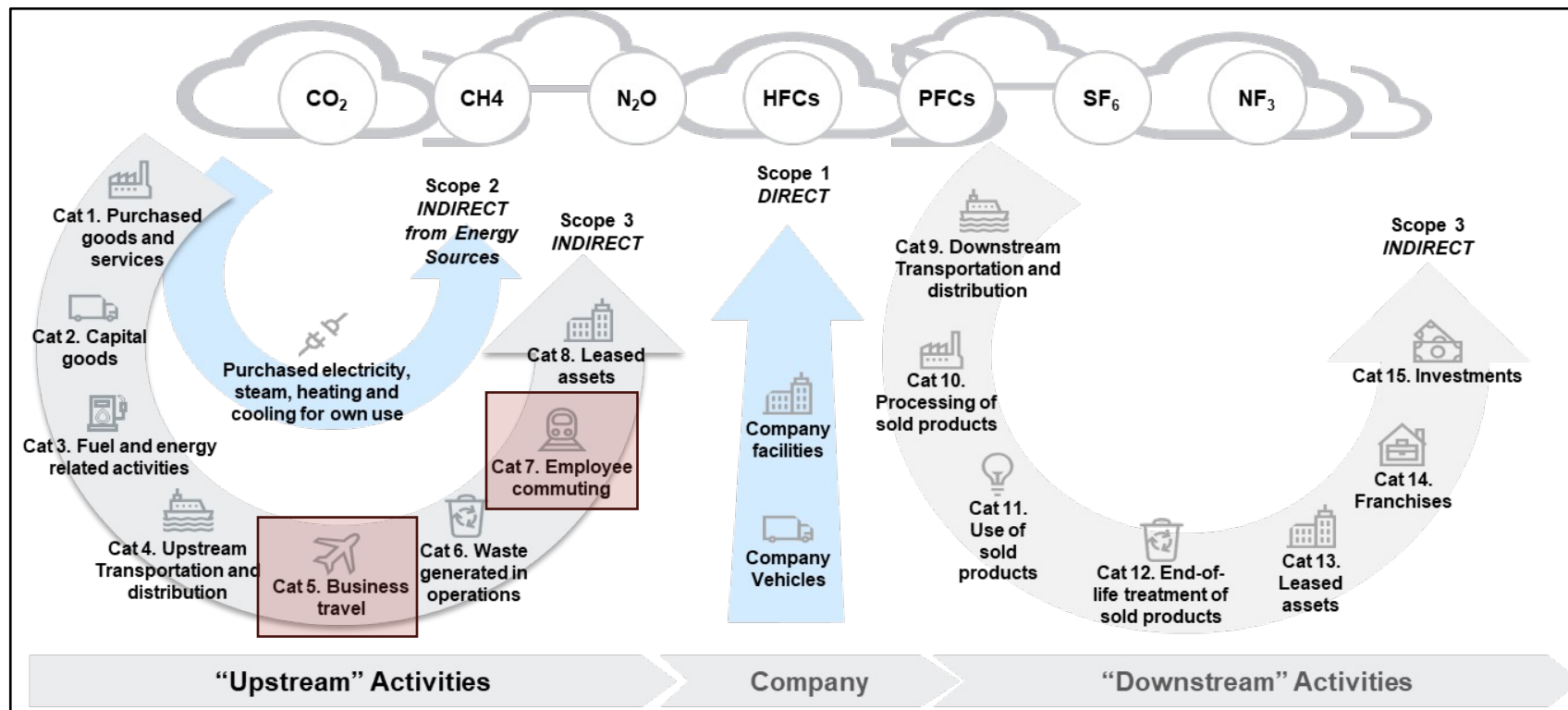
Suche:

		ID	Name	Bilder	Datum	Datum repariert	Sensor	dBpV	Gasart	Liter/Stunde	Verlust (m³ / h)	Verlust (€ / Jahr)	Aktionen
+	☒	180170	Leck Nr 1	 	12/09/2023		Flexibler Sensor	24,90	Druckluft	904	0,9	113	  
+	☒	180171	Leck Nr 2	 	12/09/2023		Flexibler Sensor	32,00	Druckluft	727	0,7	91	  
+	☒	180172	Leck Nr 3	 	12/09/2023		Flexibler Sensor	21,00	Druckluft	386	0,4	48	  
+	☒	180174	Leck Nr 4	 	12/09/2023		Flexibler Sensor	35,00	Druckluft	865	0,9	108	  
+	☒	180176	Leck Nr 5	 	12/09/2023		Flexibler Sensor	50,00	Druckluft	2052	2,1	257	  
+	☒	180178	Leck Nr 6	 	12/09/2023		Flexibler Sensor	26,00	Druckluft	515	0,5	64	  



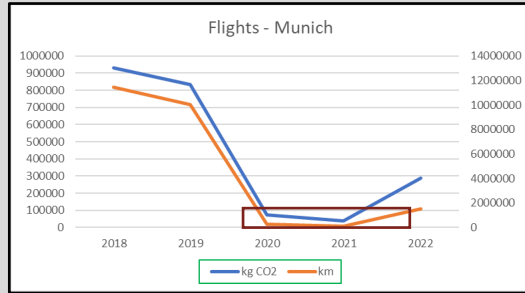
	☒	ID	Name	Bilder	Datum	Datum repariert	Sensor	dBpV	Gasart	Liter/Stunde	Verlust (m³ / h)	Verlust (€ / Jahr)	Aktionen
+	☒	180170	Leck Nr 1	 	12/09/2023		Flexibler Sensor	24,90	Druckluft	904	0,9	113	  

Greenhouse Gas Protocol Scope 1,2,3

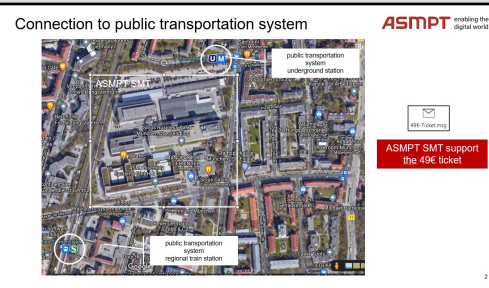


Scope 3

flights



employee commuting



Remote Working

Grundsätze des Arbeitens im Remote Working

Das Remote Working ist für jeden Mitarbeiter der Möglichkeit geschaffen worden, seine Arbeitsleistung, Remote zu verrichten. Auch im ersten von drei zusätzlichen Vorgehensschritten wird der Mitarbeiter im Rahmen des Remote Working, wie z.B. in der folgenden Tabelle, Remote Working unterstützen sich bei der Umsetzung der Remote Working, wie auch von den Mitarbeitern. Diese Arbeitsform ist ein geplanter Arbeitsveränderung bzw. Rückkehr.

Hier wird von den Vorgesetzten die erforderliche Offenheit und Bereitschaft erwartet, die Remote Working zu unterstützen.

Remote Working

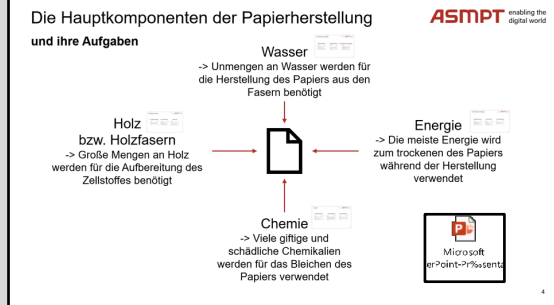
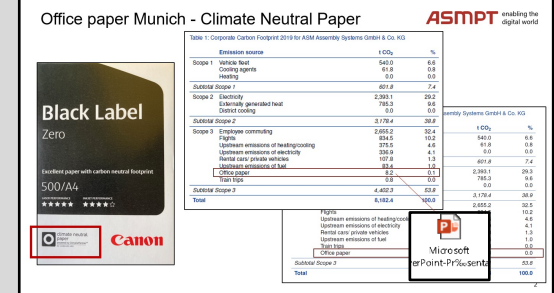
grundsätzlich:

- An Arbeitsplätzen im Betrieb kann zusätzlich stundenweise remote gearbeitet werden;
- Der ursprüngliche Arbeitsplatz steht dem Mitarbeiter jederzeit weiterhin im Betrieb zur Verfügung. Einpendeln bleibt Remote Working keine Pflicht und ist nicht zu erwarten;
- Remote Working kann angelernt werden (z.B. Personalgespräch, für die Teilnahme an Schulungen, oder wenn regelmäßige Team-Treffen/Tagen über PC/Multimediale sind, bei denen aus betrieblichen Gründen eine Anwesenheit erforderlich ist);
- Remote Working ist ausschließlich freiwillig und ausschließlich zulässig;
- Das Remote Working erfolgt in, besteht aus einer freiwilligen Entscheidung. Der Mitarbeiter hat weiter einen Anspruch auf Remote Working an bestimmten, von ihm gewünschten Tagen, nach der Remote Working verfügbar ist.

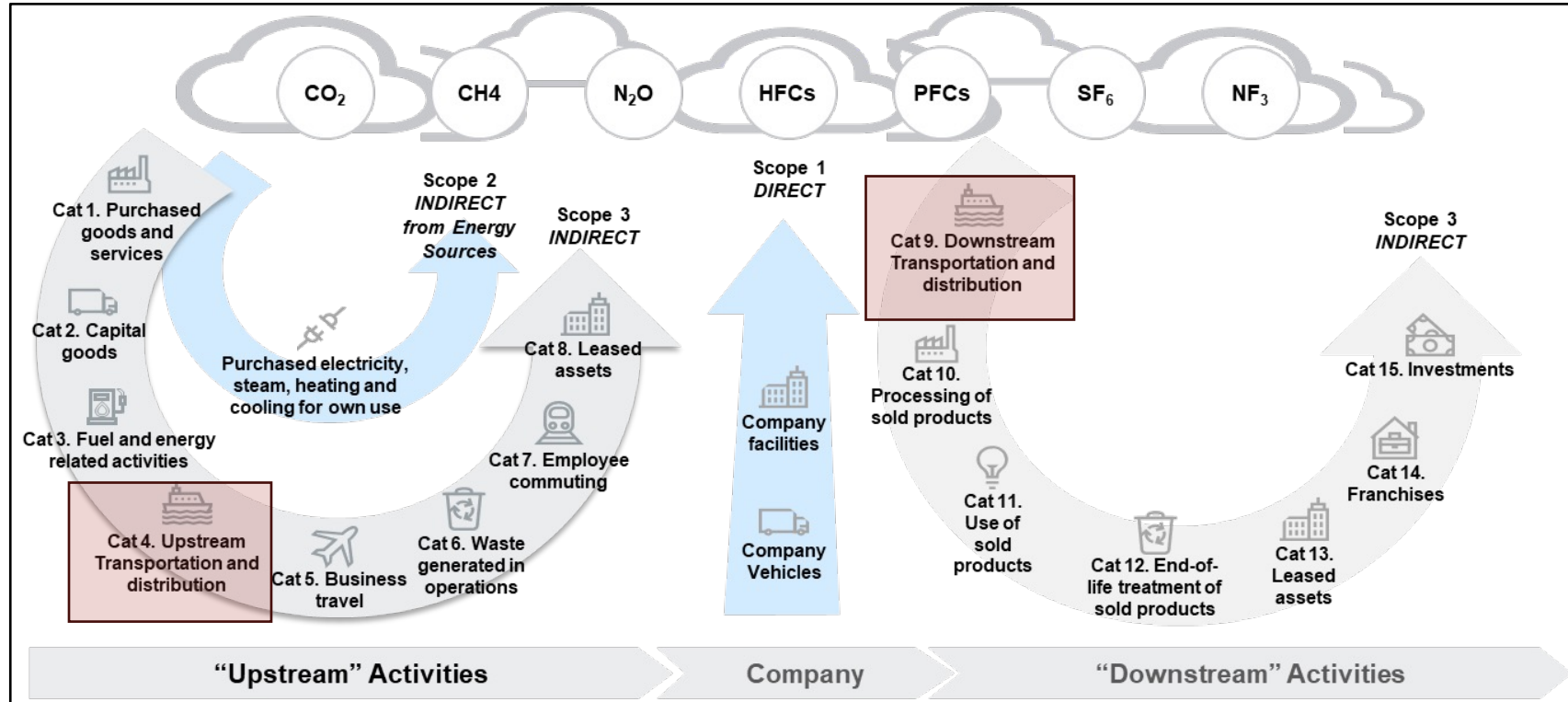
Seite 2 von 5



paper



Greenhouse Gas Protocol Scope 1,2,3



Scope 3

CO2 Emissionen der Upstream and Downstream Transporte

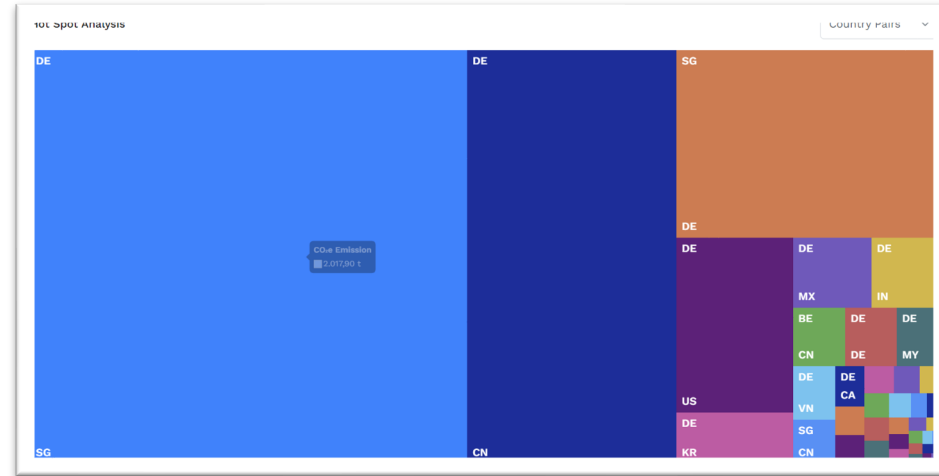
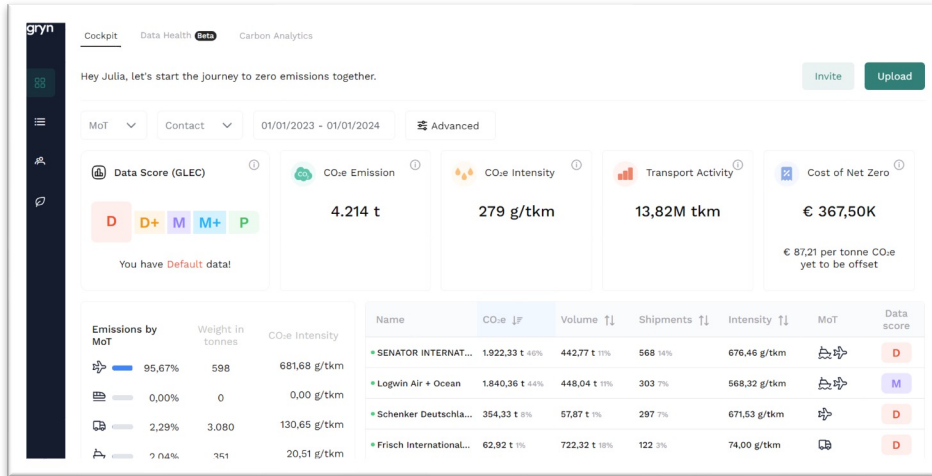


Die Partnerwahl ist sehr wichtig zur vertrauenswürdigen Berechnung der Emissionen

- Zertifizierte Berechnung nach internationalen Standards und Normen
 - Zusammenarbeit mit bereits etablierten Berechnungstools (z.B. EcoTransIT)
 - großes Know-How in der Logistik-Branche
 - Automatisierter Upload der Daten durch API-Schnittstelle mit den Transportdienstleistern
-
- 
- Bewertung der Datenqualität jeder einzelnen Sendung
 - Vergleich der mittleren CO2e Emission nach Transportart und Frachtführer

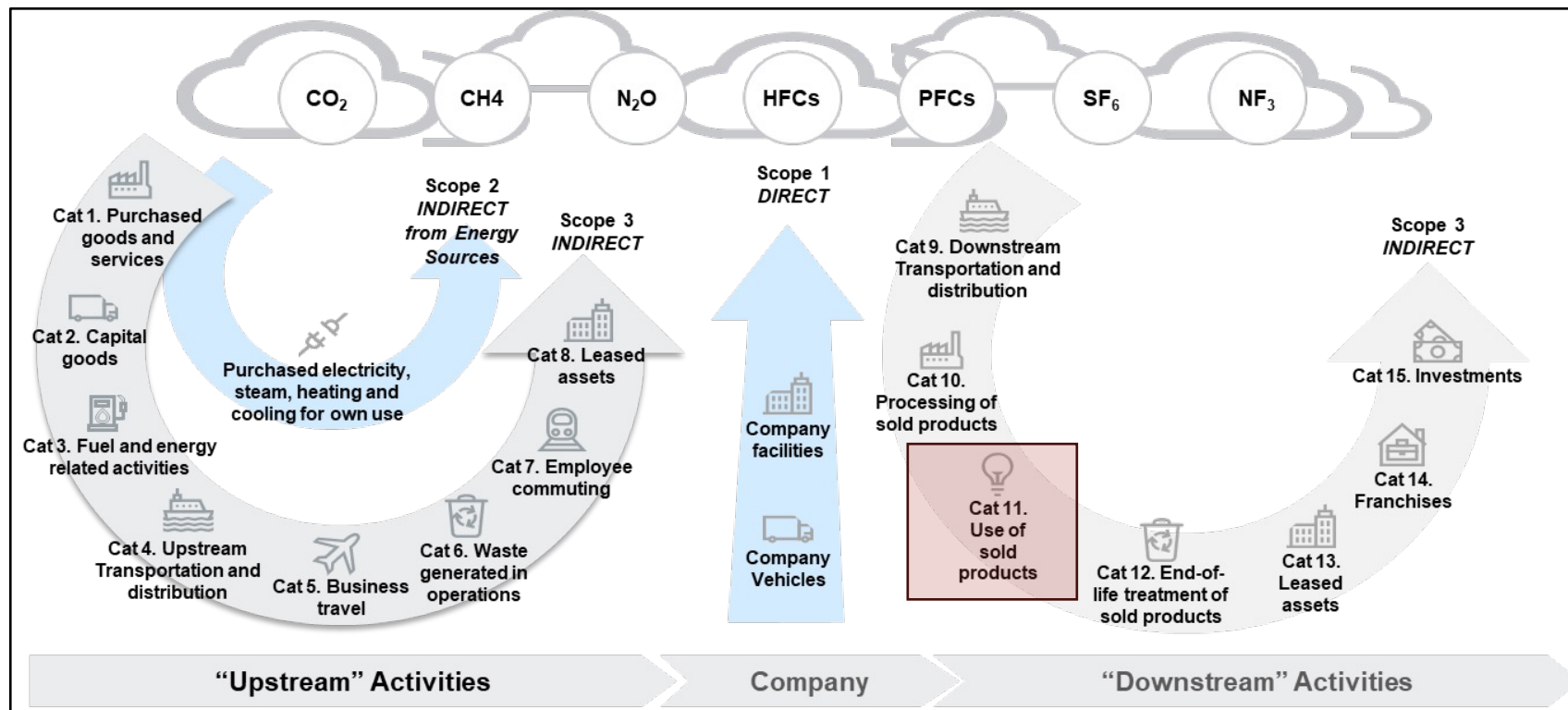
Scope 3 Emissionen

CO2 Emissionen der Upstream and Downstream Transporte



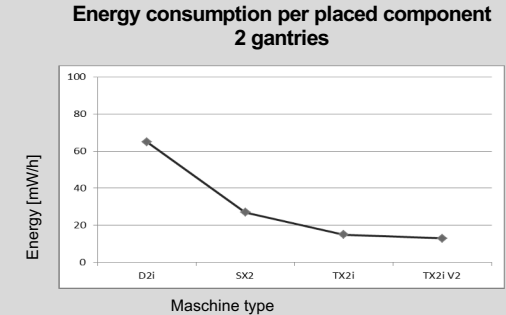
No	Origin Country	Destination Country	CO ₂ e	Number of Shipments	TKM	Share of Business (Volume)	CO ₂ e-Intensity
1	DE	SG	2,017,90 t	605	3,00M	14.85%	676,05 g/tkm
2	DE	CN	967,25 t	234	2,38M	5.74%	631,74 g/tkm
3	SG	DE	557,33 t	80	2,46M	1.96%	464,80 g/tkm
4	DE	US	227,79 t	61	437,71K	1.5%	770,17 g/tkm
5	DE	KR	66,47 t	34	328,47K	0.83%	619,32 g/tkm

Greenhouse Gas Protocol Scope 1,2,3

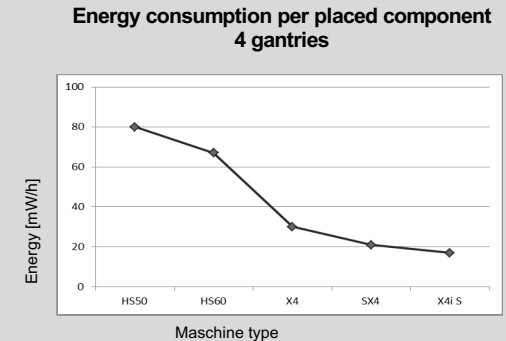


Scope 3 – product energy consumption

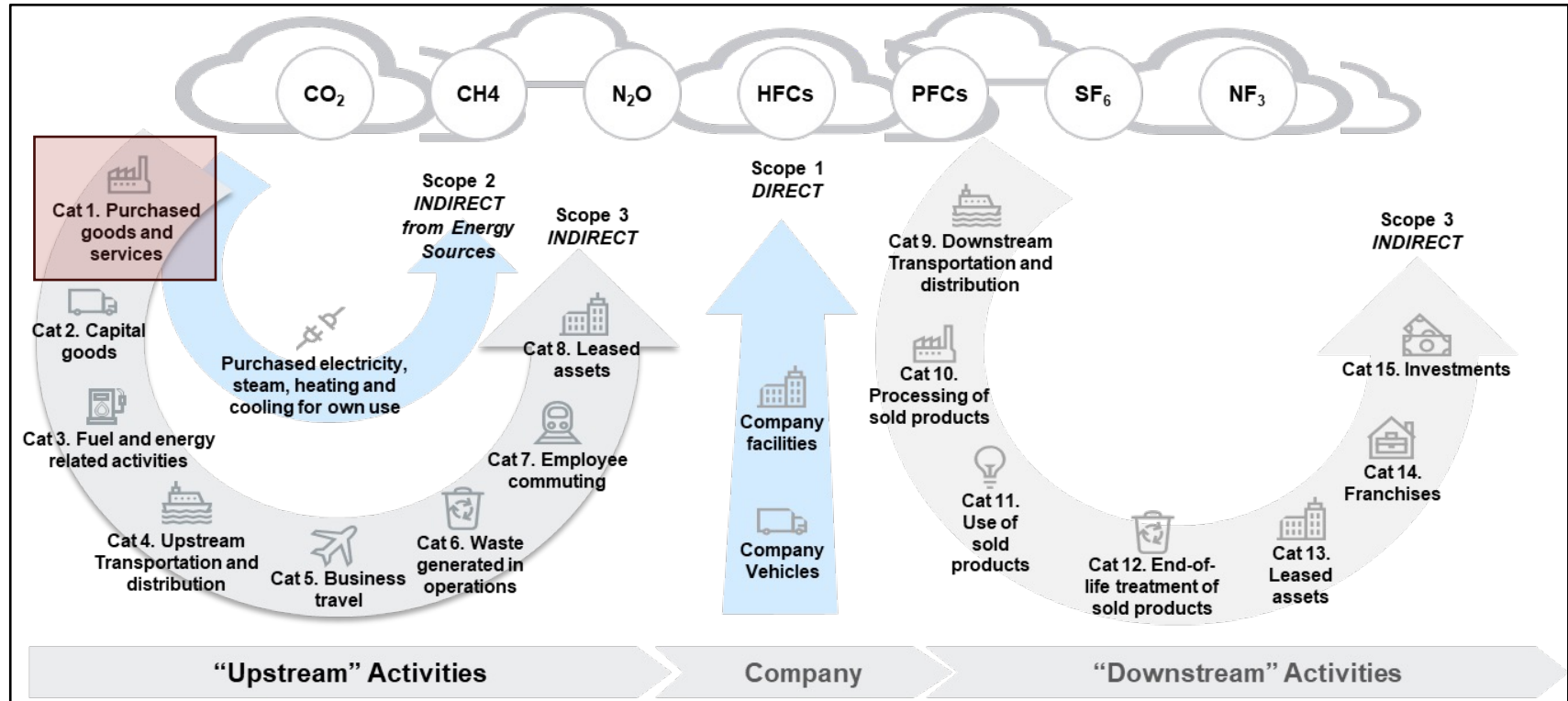
2 gantries	Type	Supply voltage	Placement performance	Energy consumption
	TX2i V2	1,2 kW	95000 cph	13 mWh / component
	TX2i	1,2 kW	78000 cph	15 mWh / component
	SX2	1,6 kW	60000 cph	27 mWh / component
	D2i	2,0 kW	31000 cph	65 mWh / component
65 → 13 mW / component / h = <u>30 kg CO₂</u> -saving per 1million components				



4 gantries	Type	Supply voltage	Placement performance	Energy consumption
	X4i S	1,6 kW	150000 cph	11 mWh /component
	SX4	2,7 kW	125000 cph	21 mWh / component
	X4	2,7 kW	80000 cph	30 mWh / component
	HS60	4,0 kW	60000 cph	67 mWh / component
	HS50	4,0 kW	50000 cph	80 mWh / component
80 → 11 mW / component / h = 36 kg CO ₂ -saving per 1million components				

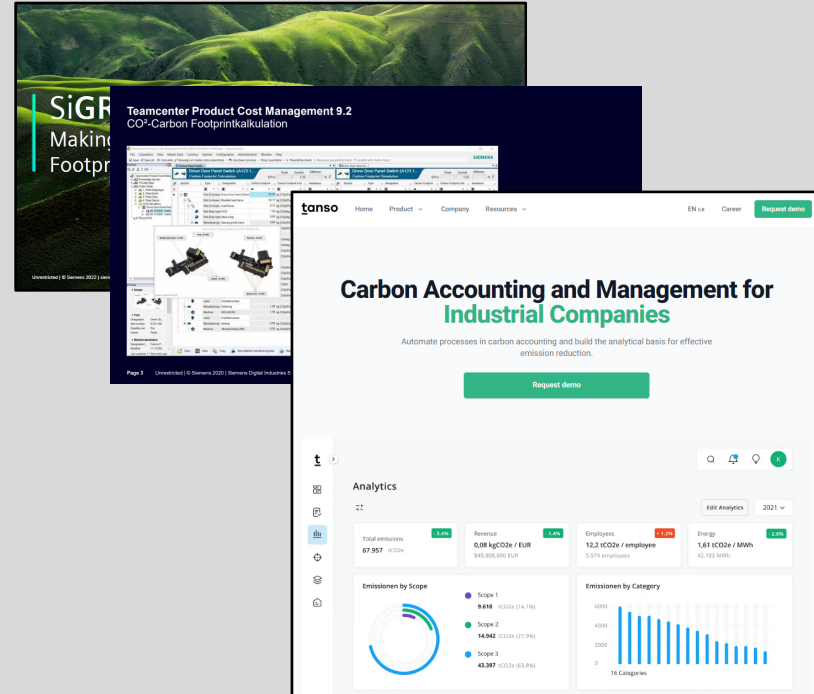
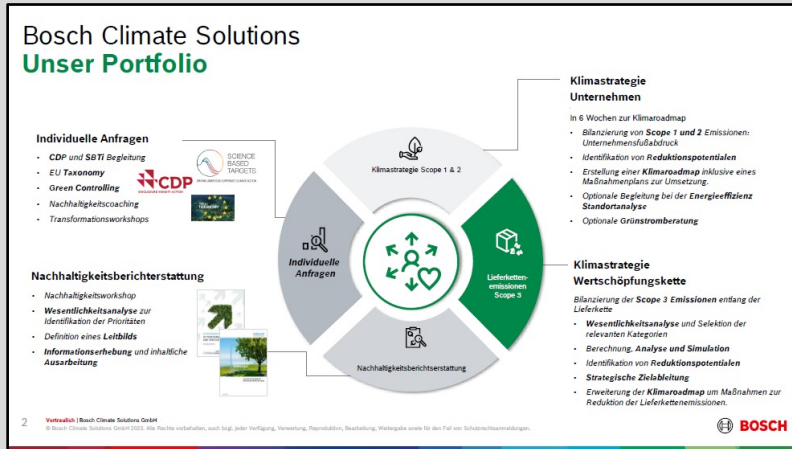


Greenhouse Gas Protocol Scope 1,2,3

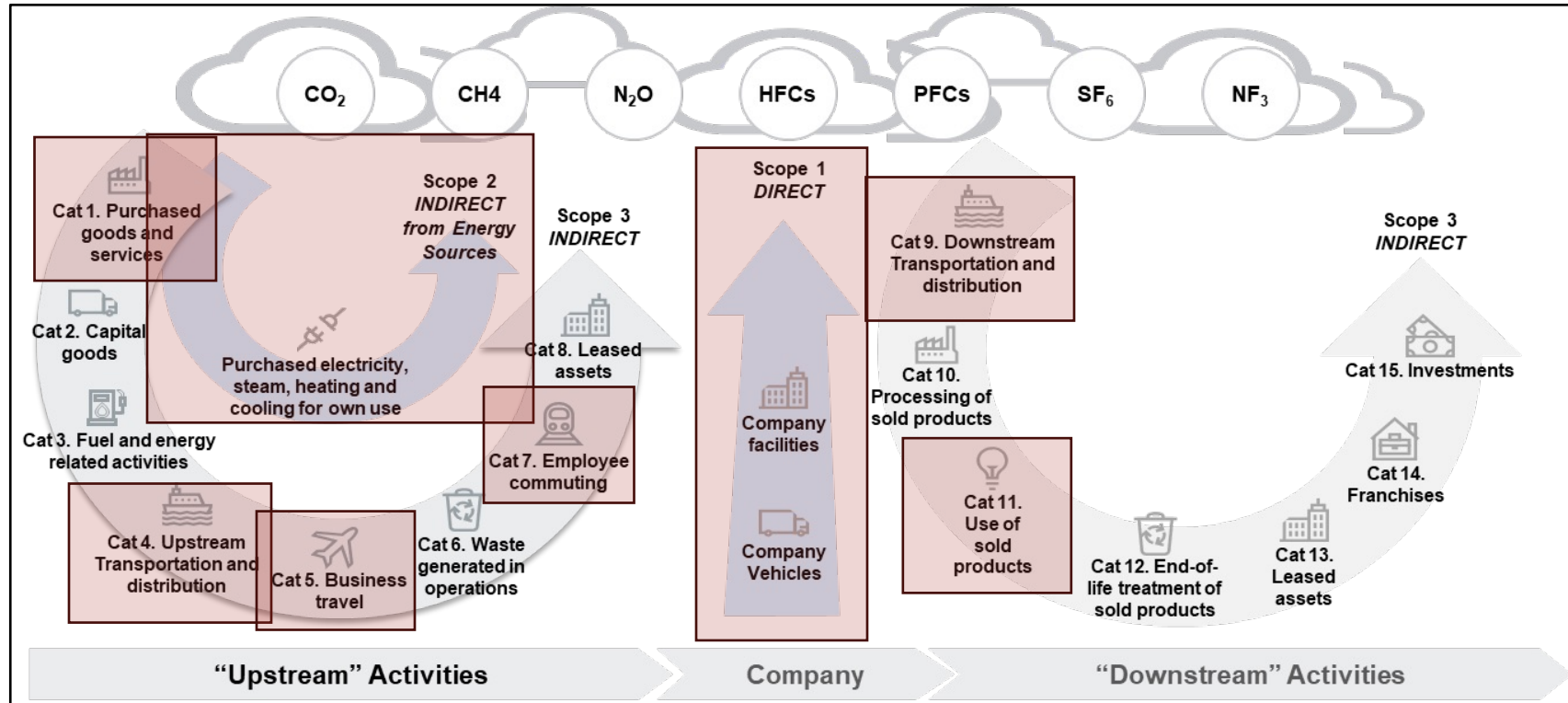


Consultant

Software



Greenhouse Gas Protocol Scope 1,2,3





ASMP T enabling the
digital world



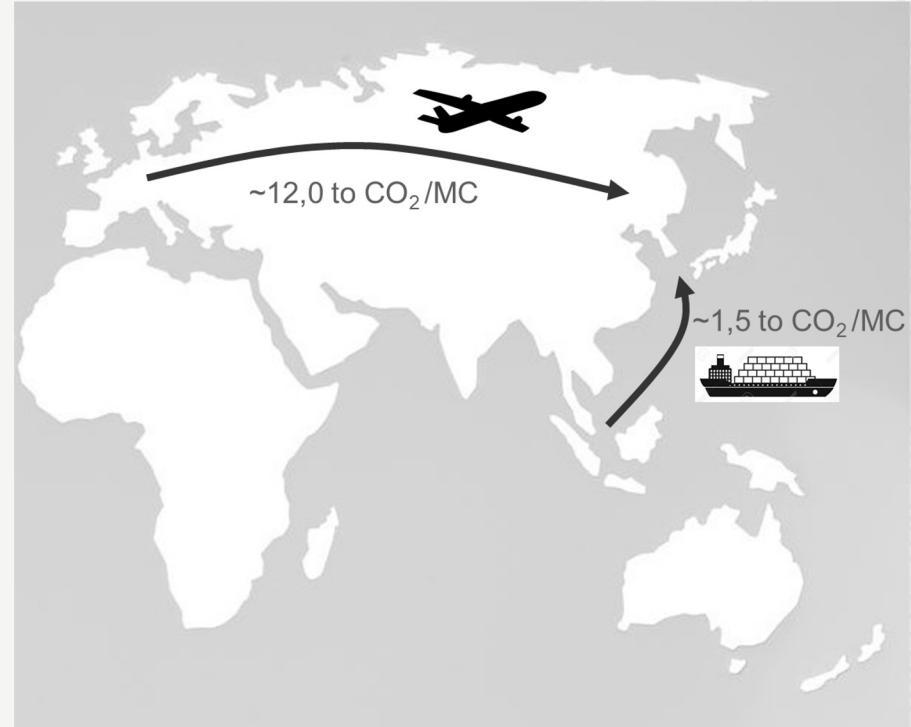
The background of the slide is a 3D rendering of a modern surface mount technology (SMT) assembly line. The scene is set in a futuristic, digital environment. The floor and walls are composed of glowing blue circuit board patterns. In the center, there is a long, automated assembly line with various machines, including pick-and-place machines, reflow ovens, and inspection stations. The machines are white and grey, with some having red accents. The background is filled with floating binary code (0s and 1s) and streams of light blue data, creating a sense of high-speed digital processing. The overall color scheme is dominated by blue and white, with some red highlights on the machinery.

Thank You!

Reduction of logistics efforts

Relocation of production and thus **reduction of the CO₂ footprint** thanks to **manufacturing close to the customers**

	CO ₂ footprint in tons (t) / machine
2016	7,148 t
2020	4,491 t
2021 (forecast)	3,641 t
2025 (target)	3,075 t



SIPLACE Placement Machines



ASMPT enabling the digital world

Waste Reduction

- I. **Repair Service**
for placement heads, feeders and tools
- II. **1:1 Exchange Parts**
(gantry, vision, tape cutter, FCU etc.).
These parts will be repaired by
ASMPT SMT Solutions and further used
as spare parts.
- III. **Continuous improvement**
of the product quality, robustness, reliability

