ICT GROUP

CO2 Sector initiatives

Sustainability report

on behalf of ICT Group

CO2 Sector initiatives
Sustainability report
Version: 9.0

ictgroup.eu

Table of contents

Document information

Reference	Description
Document	CO2 Sector initiatives
Project	Sustainability report
Authors	lamerpp
Client	ICT Group
DocumentID	CO2 Sector initiatives
Status	Final
Date	03-07-2024
Classification	Public (R4)
Version	9.0

ICT Group B.V.
Kopenhagen 9
2993 LL Barendrecht
The Netherlands

info@ict.nl
+31 (0)88 908 2000

History

Version	Date	Author	Description
0.1	27-07-2012	Hans van den Hoven	Initial version
0.2	02-08-2012	Frits Wuts	Adjustments Frits Wuts
0.3	03-08-2012	Frits Wuts	Remarks Hans van den Hoven
0.4	17-08-2012	Frits Wuts	Remarks related to Sacha Tensen (BECO)
0.5	22-08-2012	Frits Wuts	Processed remarks initial audit
1.0	23-08-2012	Frits Wuts	Final version
1.1	17-09-2012	Frits Wuts	Deleted names
2.0	24-08-2014	Frits Wuts	Update initiatives
2.1	07-07-2015	Frits Wuts	Update based on SGS audit
2.2	27-08-2015	Frits Wuts	Update related applications test and external expert SKAO
2.3	19-05-2016	Frits Wuts	2016 update
2.4	05-07-2017	Frits Wuts	Update based on SGS audit
3.0	26-03-2018	Mark van Eesteren	Update to ICT Group N.V. level
3.1	28-03-2018	Mark van Eesteren	Process review changes F. Wuts
3.2	15-05-2018	Mark van Eesteren	Process changes MJA3 covenant ICT-sector
4.0	22-07-2019	Mark van Eesteren	2018 update
4.1	30-07-2020	Priya Pershad	2019 update
5.0	07-08-2020	Peter Lamers	2019 final version
5.1	14-07-2021	Peter Lamers	2020 update
5.2	15-07-2021	Peter Lamers	New branding
6.0	16-07-2021	Peter Lamers	2020 final version
6.1	26-01-2022	Peter Lamers	2021 update
7.0	02-03-2022	Peter Lamers	2021 update
7.1	15-06-2023	Peter Lamers	Update
8.0	05-07-2023	Peter Lamers	Final version
8.1	01-07-2024	Peter Lamers	Update
9.0	03-07-2024	Peter Lamers	Final reviewed version

1. Road map ICT 2030

In the road map ICT 2030 version 1.1 from May 2012 (ICT-Office, ministry of economic affairs and Atos Consulting) the concluded that the following energy reductions and their CO_2 emissions are important in the future:

- Already installed capacity can be better utilised by using techniques such as virtualisation, cloud computing, data deduplicating and thin provisioning. Data centres will look for measures to further improve their energy management. Additionally, there are possibilities for using waste heat of data centres and connecting to Smart Grids, so that data storage can be placed at the location where the energy is the cheapest.
- The development of more efficient hardware, ICT components and network will make ICT applications energy efficient. Also, energy efficient software will add to energy efficiency. The development of energy efficient applications can be picked up by the ICT industry.
- Stimulate 'the new way of working' to reduce the number of business travel kilometres.

Based on the multi-year plan "MJA3 ICT-sector" 2017-2020, it is estimated that already in 2015, the ICT-sector has met the energy reduction targets for 2020 as set in the MJA3-covenant. For the period 2017-2020 the ambition is reduced by 3,3 PJ. ICT Group did not participate in the MJA3 covenant, was in close contact with the ICT Nederland branch organisation who is pulling the MJA3-covenant. The MJA3 ended on December 31st, 2020. And no follow-up initiative was initiated. ICT monitors any new developments on this subject, in order to incorporate this in ICT Group reduction plans, when necessary.

In cooperation with NPM Capital and sister companies we share knowledge on sustainability and align our sustainability plans. The implementation of the Corporate Sustainability Reporting Directive (CSRD) also gives good guidance and in this process.

ictgroup.eu

2. Participation in sustainability initiatives

ICT Group ("ICT") is participating in various initiatives within the sector and the environment to reduce the energy consumption and CO_2 emission.

Besides a contribution in hours, there's budget for the costs of these initiatives. On a yearly basis ICT investigates which social initiatives are available to comparable companies, what will contribute to reduce CO_2 emissions.

The participation in social initiatives to reduce CO_2 emissions is discussed with ICT's management team on a yearly basis.
In this chapter initiatives in which ICT already participates are listed.

2.1. Zuid-Holland Bereikbaar

Zuid-Holland Bereikbaar (previously known as The Climate Alliance Sustainable Mobility) a network of Rotterdam and BAR municipalities companies, Zuid-Holland Bereikbaar and the Municipality of Rotterdam. Together they exchange knowledge and experience on measures to at least halve the CO_2 emissions from their commuting and business traffic by 2030.

For more information about this initiative, refer to:
- https://www.zuidhollandbereikbaar.nl/
- https://www.zuidhollandbereikbaar.nl/over-ons
- https://www.zuidhollandbereikbaar.nl/werkgevers/good-practices/ict-group-elke-dag-beter-slimmer-en-duurzamer
- https://www.rotterdam.nl/klimaatalliantie

2.2. Stichting Positieve impact

Stichting Positieve Impact (previously known as Nederland CO2 Neutraal) organizes various congresses. During these congresses practical and concrete tips are provided with respect to CO_2 reduction possibilities.

For more information about this initiative, refer to: https://positieveimpact.nu/

Affiliated: https://deduurzameadviseurs.nl/

2.3.   Goingdutch

goinGDutch emerged from an ideology centred on building on The Future Of Cycling, but which recognised that the challenges presented by urbanisation and mobility are too complex to be solved by one party alone.
Through this initiative, under the auspices of the Ministry of Infrastructure & Water Management, companies BAM Infra, Schiphol, Microsoft and OrangeNXT have joined forces, working as partners to benefit governments, businesses and end users. In the past, we would all provide our own separate pieces of the puzzle, but now we focus on the end result together, working on new concepts and services that place end users front and centre.

More information:
*   https://goingdutch.bike/en/
*   https://togetherwecycle.eu/

Social:
*   https://www.linkedin.com/company/goingdutch/

2.4.   Railforum

This is the independent knowledge network for public transport and rail.

Participation via ICT InTraffic.

Contact information: https://www.railforum.nl/

Aspects: CO_2-reduction related to public transport and rail.

2.5.   Duurzame Leverancier

The Sustainable Supplier is the platform for organisations who do business safely and responsibly. The platform supports companies, clients and suppliers in their challenges in the field of sustainability, environment and safety.

More information see:
*   https://www.duurzameleverancier.nl/deelnemer/249677/ICT%20Group%20B.V.
*   https://www.duurzameleverancier.nl/

2.6. Microsoft Western Europe Partner Sustainability Pledge

As a partner of Microsoft in the Netherlands, ICT Group shares Microsoft's global vision to empower every person and every organisation on the planet to achieve more. By signing this Partner Pledge, ICT Group supports the Microsoft Partner Pledge to have a positive social impact on society.

The Microsoft Partner Pledge is a statement of intent in which we join Microsoft in using technology as a force for good. We join this journey and work to become ambassadors for all four pillars of the Pledge, namely digital skills, responsible and ethical AI, building a diverse and inclusive tech sector and an environmentally sustainable future for our planet.

The world around us is changing fast and digital transformation significantly impacts the way we live and do business. As a technology services provider, ICT Group is very much aware of its social role and responsibility. Our purpose is at the heart of everything we do: using innovative ideas, sustainable solutions and an inclusive workforce to truly make the world smarter by the day. By signing this Pledge, we are doing our part and hope to make a powerful impact on society together with Microsoft.

For more information see:
- https://partner.microsoft.com/en-fi/connect/local/fi-partner/partner-pledge
- https://www.ict.eu/en/newsroom/news/ict-group-signs-microsoft-partner-pledge

2.7. Events

Participation in various events like congresses, webinars, etc.. Some examples:

2.7.1. Events 2022

Event	Description	References
Online Water Congress 2021 March 11th, 2022	Also in 2021, ICT Group organised the leading Water Congress, which this year was all about Intelligent Water Management. We opted for an online conference with an extensive afternoon program, including a new part: the panel discussion.	https://www.ict.eu/en/projects/online-water-congres-2021

Event	Description	References
ICT Group at World of eMobility January 6th, 2022	ICT Group was present at World of eMobility. At the congress, we informed our visitors about how we contribute to the creation of intelligent vehicles by providing system and software engineering services that help the automotive OEM industry to make their vehicles smarter, safer and more connected. We also demonstrated our product, Motar, that enables mechanical engineers to create software without programming skills.	https://www.ict.eu/en/newsroom/news/ict-group-world-emobility
ICT Group at TOC Europe July 12th, 2022	ICT Group was represented at TOC Europe from 14 to 16 June. We showed the visitors how a digital twin can serve as a virtual mirror of your terminal. The visitors even had the opportunity to test this with VR glasses. Next to that we showed how SmartECS is the solution to implement and match the TIC 4.0 standardisation.	https://www.ict.eu/en/newsroom/news/ict-group-toc-europe
INNOCY Summer Event September 22nd, 2022	On Thursday 8 September, the INNOCY Summer Event took place. INNOCY and ICT Group look back on a successful evening. INNOCY organised the Summer Event to celebrate the opening of their new premises together with its relations. The participants had drinks, listened, enjoyed and laughed. Ruud Veltenaar, speaker of the evening, shared his views on the transition to the next phase of our civilisation. A transition in which we ourselves can and must take the lead. The participants were inspired!	https://www.ict.eu/en/newsroom/news/recap-innocy-summer-event
Turnn App demonstration and interactive	On 23 November, Turnn will offer visitors to Fleet Expo a demonstration of and interactive session on the digital travel	https://www.ict.eu/en/newsroom/news/turnn-app-demonstration-and-

03-07-2024   ICT Group
Version: 9.0 - Classification: Public (R4)

Event	Description	References
session at Fleet Expo **November 23rd, 2022**	platform developed by Turnn. The Turnn App is the smart solution that unburdens employers in implementing sustainable mobility policies. Fleet Expo is the pre-eminent networking spot for all professionals in the mobility sector and will take place at Expo Greater Amsterdam.	interactive-session-fleet-expo
ICT Group Water Congres 2022 **November 22nd, 2022**	On 22 November, ICT Group has organised its annual Water Congress. This time on location at Green Village in Nieuwegein. This year, we will pick up on the theme of Intelligent Water Management and focus on concrete examples from practice.	https://www.ict.eu/en/newsroom/news/ict-group-water-congres-22-november-2022
Mobility Trade Fair **October 5-6th, 2022**	At the Mobility Trade Fair, ICT Group was represented by the ICT unit Water, Infra and Energy and InTraffic. Whereas ICT Netherlands, as a technical automation company, specialises in realising the digital control of physical assets such as bridges, locks and tunnels, InTraffic's expertise lies in supplying software for mobility applications. At the mobility trade fair, with the Physical Twin and the Multimodal Analytics platform, we presented two concrete solutions for the challenges faced by the infrastructure market, provinces and municipalities.	https://www.ict.eu/en/newsroom/news/recap-mobility-trade-fair-vakbeurs-mobiliteit

2.7.2. Events 2023

Event	Description	References
ICT group at TOC Europe **June, 13-15th, 2023**	ICT Group will be exhibiting at this year's TOC Europe in Rotterdam Ahoy. Here, we will show you the latest innovations within our	https://www.ict.eu/en/newsroom/news/ict-group-toc-europe-0

ictgroup.eu

Event	Description	References
	Port Suite such as the Digital Twin, Middleware, Internet of Things, Data Driven Smart Solutions and other solutions.	
ICT Group Smart Industry Summit **June 21ˢᵗ, 2023**	The Smart Industry Summit on 21 June will have a wonderful line-up of speakers. They know better than anyone what the digital transformation is going to bring and are happy to share their knowledge, experience and lessons learned. Data analytics & intelligence, robotics, supply chain integration, AR, VR, cyber security, business continuity, lifecycle management, everything will be discussed during this special summit.	https://www.ict.eu/en/newsroom/news/ict-group-smart-industry-summit-complete-programme
YellowStar Webinar: Sustainable supply chain collaboration **15ᵗʰ June 2023**	Reducing the logistics carbon footprint through supply chain collaboration

Numerous studies show that companies operate faster, better, cheaper, more sustainable and more innovative when they work together. Hick-ups and bottlenecks in the supply chain disappear, error rates decrease and customer satisfaction increases. | https://www.yellowstar.com/en/events/sustainable-suppy-chain-collaboration/ |
| **ICT Group Water Congres** **Nov 14ᵗʰ, 2023** | Annual Water Congress Theme: Intelligent Water Management: a source of inspiration | https://www.ict.eu/en/events/ict-group-water-congress |

2.7.3. Events 2024

Event	Description	References
ICT Group Smart logistics Summit **31ˢᵗ May, 2024**	The ICT Group Smart Logistics Summit, held at the beautiful venue: Buitenplaats Sparrendaal in Driebergen-Rijsenburg, was a vibrant and inspiring day! With fascinating	https://www.ict.eu/en/newsroom/news/recap-ict-group-smart-logistics-summit

03-07-2024   ICT Group
Version: 9.0 - Classification: Public (R4)
ictgroup.eu

Event	Description	References
	presentations by well-known keynote speakers and enthusiastic customers, participants were taken through the latest challenges and opportunities within the logistics sector. Hot topics such as last-mile challenges, supply chain optimisation, emission registration and warehousing were discussed in detail.	
Living Documentation Event	Improve Quality Services organized the 4th edition of the Living Documentation Event (LDE24). This year's theme was "Mastering the Present, Shaping the Future."	https://www.ict.eu/en/newsroom/news/improve-organises-living-documentation-event
TOC Europe 2024, 20th June, 2024	ICT Group was present during the TOC Europe 2024 in Rotterdam Ahoy. At our booth A64 we presented the latest innovations in Terminal Automation and Data Science. Visitors were introduced to our advanced Smart Equipment Control System (SmartECS), which ensures a flexible integration of terminal equipment and universal access to equipment data. Through an impressive Lego Technic demo, we showed how SmartECS optimizes the diversity of equipment and processes in container terminals, taking control, efficiency and integration at terminals to the next level.	https://www.ict.eu/en/newsroom/news/recap-toc-europe-2024
Webinar: Industry 4.0 – Connected Supply Chain	ICT's webinar series around the theme of Industry 4.0, sharing our practical experience and insights. The webinar zooms in on the Connected Supply Chain. The webinar is in cooperation with Yellowstar, part of ICT Group and specialist in logistics software for supply chain collaboration.	https://www.ict.eu/en/events/webinar-industry-40-connected-supply-chain

03-07-2024   ICT Group
Version: 9.0 - Classification: Public (R4)

ictgroup.eu

Event	Description	References
ICT Group Water Congres **Oct 15th, 2024**		https://www.ict.eu/en/events/ict-group-water-congres-2024

3. Initiatives in which participating will be considered

As ICT believes, it is important to participate in initiatives which suits us as well and in which we can successfully contribute. We investigate and consider participating in the following initiatives.

3.1. Science Based Targets initiative (SBTi)

The Science Based Targets initiative (SBTi) drives ambitious climate action in the private sector by enabling organisations to set science-based emissions reduction targets.

https://sciencebasedtargets.org/

Research for participation is ongoing in consultation with NPM Capital.

3.2. Anders Reizen

Each organisation that joins the Coalition Anders Reizen, signs the Dutch Sustainable Mobility Pledge. In it, it promises to take the following four actions:

- Actively take measures to reduce and monitor their own CO_2 emissions;
- Actively communicate about this within the organization to increase awareness about and acceptance of sustainable mobility;
- Identify obstacles and, if necessary, make them known to the government;
- Encourage other companies to do the same.

The Anders Reizen coalition wants to keep the Netherlands mobile. Mobility is literally and figuratively the engine for our prosperity and well-being, and we want to keep it safe, healthy, affordable and accessible to everyone. We want mobility without particulate matter, noise pollution and CO_2 emissions. That's carefree mobility and with new energy!

https://www.andersreizen.nu/

Participation with Anders Reizen is in progress.

4.   Overview themes

	Form		Benefits and expenses		Theme			Notes
	Con-gress	Long-term	Membership expenses	Benefit for ICT	ICT	Mobility	Sustainability	
Klimaatalliantie Zuid Holland Bereikbaar	Yes	Yes	No	Exchange knowledge and experience on measures to reduce CO_2 emissions from commuting and business traffic.		X	X	Mobility assessment
Positieve Impactl	Yes	Yes	€ 1.247,-	Practical tips on how to reduce CO_2			X	Various knowledge sharing events
Microsoft Western Europe Partner Sustainability Pledge	No	Yes	No	Insights and participations in the newest developments in this area	X		X	Monthly meetings.
goinGDutch	No	Yes	Various project investments	Building on The Future Of Cycling	X	X	X	OrangeNXT (part of ICT Group) is one of the founding partners
Railforum	Yes	Yes	No	Insights and participations in mobility issues and standards. Knowledge sharing.	X	X	X	Dialogue is started via InTraffic
Duurzame Leverancier	Yes	Yes	€ 150,-	Knowledge sharing about sustainable Infra & Mobility solutions			X	
InfraTech	Yes		Congress expenses	Knowledge sharing about sustainable Infra & Mobility solutions	X	X	X	Annual
Waterinfodag	Yes		Congress expenses	Knowledge sharing about smart grids on sewage treatment plants	X		X	Annual
TOC Europe	Yes		Congress expenses	Knowledge sharing about more efficient container terminal management	X		X	Annual
Water congress	Yes		Congress expenses	Knowledge sharing about water management systems	X		X	Annual
Vakbeurs Energie	Yes		Congress expenses	Knowledge sharing about sustainable energy solutions and innovations	X		X	Annual
Science Base Targets initiative	-	-	$4750 - $9500	Practical tips on how to reduce CO_2	X		X	Is considered
Anders Reizen	Yes	Yes	€ 5000,-	Exchange knowledge and experience on mobility measures to reduce CO_2 emissions from commuting and business traffic.	X	X	X	Participation in Progress

5. Previous participations

5.1. USEF/EnergieKoplopers (intelligent energy networks)

ICT is an important initiator of developing, realising and supporting the ICT for Smart Grids in the Netherlands. For example, ICT is one of the founders of the USEF foundation, together with other key players active across the smart energy chain: ABB, Alliander, DNV GL, Essent, IBM and Stedin.
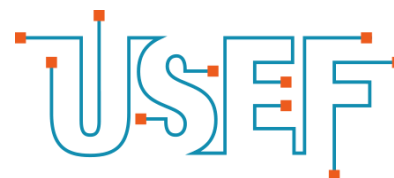
The Universal Smart Energy Framework (USEF) sets the international common standard for a unified smart energy market, connecting projects and technologies at the lowest cost possible. With a value-to-all approach, USEF enables the commoditisation and trading of flexible energy use. The framework defines the market structure, stakeholders' roles, how they interact and how they benefit doing so. The USEF foundation was founded to accelerate the transition to a commercially viable smart energy system.

The 'EnergieKoplopers' project in the Dutch town of Heerhugowaard tested a USEF flexibility market for the first time. To this end, smart appliances were installed in 203 homes, to enable flexibility electricity consumption. The smart appliances were automatically controlled by a smart ICT system. The project has shown that the USEF flexibility market works: the system helps resolve future problems in the energy system and creates value for all the parties that play a role in a USEF flexibility market.

For more information see:
- https://www.usef.energy/
- https://www.usef.energy/usef-foundation/
- https://www.usef.energy/download-the-framework/demonstration-projects/heerhugowaard/

5.2. GridFlex Heeten

In the village of Heeten in the province of Overijssel, ICT and several partners launched a pilot for GridFlex in December 2017. The aim is to create a local and sustainable energy market for the consumption, storage and trading of solar energy. To make this possible, salt batteries are being used to store the renewable energy. ICT developed the energy management system. With respect to GridFlex Heeten, we have setup a chain analysis to reflect on the future CO_2 reductions.

References:
- https://gridflex.nl/

5.3. Smart Charging (GreenFlux)

ICT and GreenFlux are working together on Smart Charging. Smart Charging is a smart and safe charging system that consists of charging points, a backend system in the cloud and reliable communication between the charging points and the cloud system.

ICT is realising the design, build and operational support for the GreenFlux Service and Operatings Platform which is used for the setup and support of the loading poles network. Additionally, ICT is realising the MyGreenFlux portal for the mobile electric driver.

For more information, see:

- 2015, ICT and Brabantse Ontwikkelings Maatschappij (BOM) acquire stake in GreenFlux, http://ict.eu/2015/ict-brabantse-ontwikkelings-maatschappij-bom-acquire-stake-in-greenflux/
- 2016, GreenFlux Smart Charging Controller wins sMove360° Award at eCarTec in Munich, https://ict.eu/2016/greenflux-smart-charging-controller-wins-smove360-award-ecartec-munich/
- 2017, Transform data into action-oriented information, https://ict.eu/blog/transform-data-action-oriented-information/
- 2018, Eneco Group and SET Ventures invest in GreenFlux, https://ict.eu/2018/eneco-group-and-set-ventures-invest-in-greenflux/
- 2020, ICT Group N.V. Annual report 2020, https://ict.eu/annualreport/
- GreenFlux, https://www.greenflux.com/about-us/investors/

5.4. Hosting

Under the title 'hosting', ICT offers her knowledge and experience with Cloud Computing over the whole spectrum from IaaS (Infrastructure as a Service), PaaS (Platform as a Server) to SaaS (Software as a Service) on, among other things, the Windows Azure Cloud platform. This software hosting technology is already used in a number of projects and in the future the use will be further expanded. Additionally, the service will be extended with support services to be able to serve the customers more broadly and deeply.

An important part of this Cloud Sourcing proposition is the offering of a total 'green' package. The energy reduction compared to a traditional on-premise solution is considerably. For more information on this initiative, refer to https://ict.eu/digital-transformation/cloud/.

5.5. Connekt

This is the independent network for smart, sustainable and social mobility. A healthy mix of knowledge, creativity and vigour in which influential partners are coming together. With more than 200 partners all over the world we create and realise tangible solutions for a more sustainable and economic better world.

Participation via InTraffic.

Contact information: https://www.connekt.nl/home/

Aspects: CO_2-reduction related to mobility.

03-07-2024   ICT Group
Version: 9.0 - Classification: Public (R4)