INDAVER

SUSTAINABLE WASTE MANAGEMENT IN THE CIRCULAR ECONOMY

SUSTAINABILITY REPORT 2016

OUR CONTRIBUTION TO SUSTAINABLE DEVELOPMENT

Together, raw materials and energy form the basis of humanity's prosperity. Both need to be conserved in order to provide a sustainable world for ourselves and future generations. Indaver has long been aware that a sustainable world is possible only if we manage our waste cleverly and carefully. In fact, Indaver came into being because government and industry needed a safe, sustainable solution for the waste produced in Antwerp Port. Our first acceptance of waste was in 1987; as our track record over the last 30 years shows, having sustainability as your core business can go hand in hand with achieving consistently good results. Now, in 2017, Indaver leads the field in sustainable waste management.

We play a key role in the realisation of the circular economy because we understand that waste is a rich resource that can replace raw materials if handled wisely. We create value from the industrial and municipal waste we treat by recovering high-grade materials and sustainable energy from it. At the same time, we prevent harmful substances from re-entering the materials or food chain. We champion the closing of material loops in a safe, low-carbon, energy-efficient way, because it is the only way for prosperity and well-being to be truly sustainable. We operate in line with the UN's Sustainable Development Goals (SDGs) that are relevant to our industry, and you'll see these SDGs referenced throughout this Sustainability Report.

Indaver's core values are demonstrating concern for people, safety and the environment, building relationships based on mutual trust, being transparent in communications and actions, concentrating on achieving results, and continuously improving.

At Indaver, we know that realising the circular economy requires a depth of knowledge and continual improvement, and these are the driving forces of our service offering. In order to offer the best possible service to our customers, we invest in our people. We attract, retain, and develop talent in order to foster a culture of expertise and knowledge-sharing. This knowledge-culture results in smart solutions to the most intransigent of problems. The wealth of knowledge within the organisation has resulted in the use of trusted technologies to develop tailored service concepts that meet our customers' needs.

This Sustainability Report, produced annually, shows our joined-up thinking approach to the circular economy and sustainability. It is divided thematically into sections concerning policy, people, planet, prosperity, and partnerships. I invite you to read further into the ways in which Indaver continues to improve across all areas of the organisation.

Paul De Bruycker, CEO

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POLICY

At Indaver, we have a clear understanding of our role in the circular economy, and have incorporated this into our organisational vision.

WORKING TOWARDS THE CIRCULAR ECONOMY

OUR VISION

Indaver's core activity is the management and treatment of industrial and municipal waste in specialist facilities. Our customers are varied, ranging from industrial multinationals to local and regional government bodies, and our operations are geographically dispersed across Europe.

As a values-driven organisation, we unify our activities through a shared vision and mission. Internally, we're guided by a mission statement, core values, a company code, a co-operation agreement, our 10 Codes of Good Practice, and a growth-model that focuses on three priority areas: improving process efficiency; focusing on organic growth; fostering breakthrough innovation.

The most significant external policy underpinning our activities is the European Union's action plan for the circular economy. This aims to close the materials chain and prioritise reuse, recycling and recovery, resulting in production and consumption practices that are sustainable. Within the circular economy, materials are used with maximum efficiency and minimum risk, with value being created rather than lost at each stage of the materials chain. The result is the safe circulation of high-quality materials around a closed loop that is protected from contamination.

Sustainability within the circular economy requires a focus on not just quantity but also quality of recycling, so that the quality and safety of products are not compromised. Current mechanical recycling methods need to be supplemented with new chemical and thermal recycling techniques capable of breaking materials down to their basic elements. New high-quality products will then be created from these basic elements.

Here at Indaver we have developed a clear understanding of our role in the circular economy, thus incorporating it into our own organisational vision. Our role is to recover energy and materials from the waste that we treat. At the same time, operating according to our safe sink guarantee, we protect the materials and food chain from contamination. Where the contaminating materials cannot be recycled or recovered, we destroy them in our high-tech facilities and safely dispose of the residual fraction.

Indaver's contribution to the circular economy rests on **three pillars of equal importance**:

- the **recovery of high-quality materials** through the use of trusted technologies;
- **attention to cost** in order to ensure added value and affordability;
- **monitoring** all of our activities to minimise our ecological footprint and control any risks to the environment or to safety.

It's clear that the realisation of the circular economy requires collaborative working and new technologies, and so Indaver continuously invests in both. We encourage industrial symbiosis, in which raw materials are recovered from one company's waste to be used in another company's manufacturing processes. We invest in the technological innovation needed to close loops.

We are the ideal partner to help with the creation of a sustainable circular economy. The contents of this chapter show how our vision is realised in each of our areas of operation, our partnerships, our activities within our growth-model, and our commitment to our values.

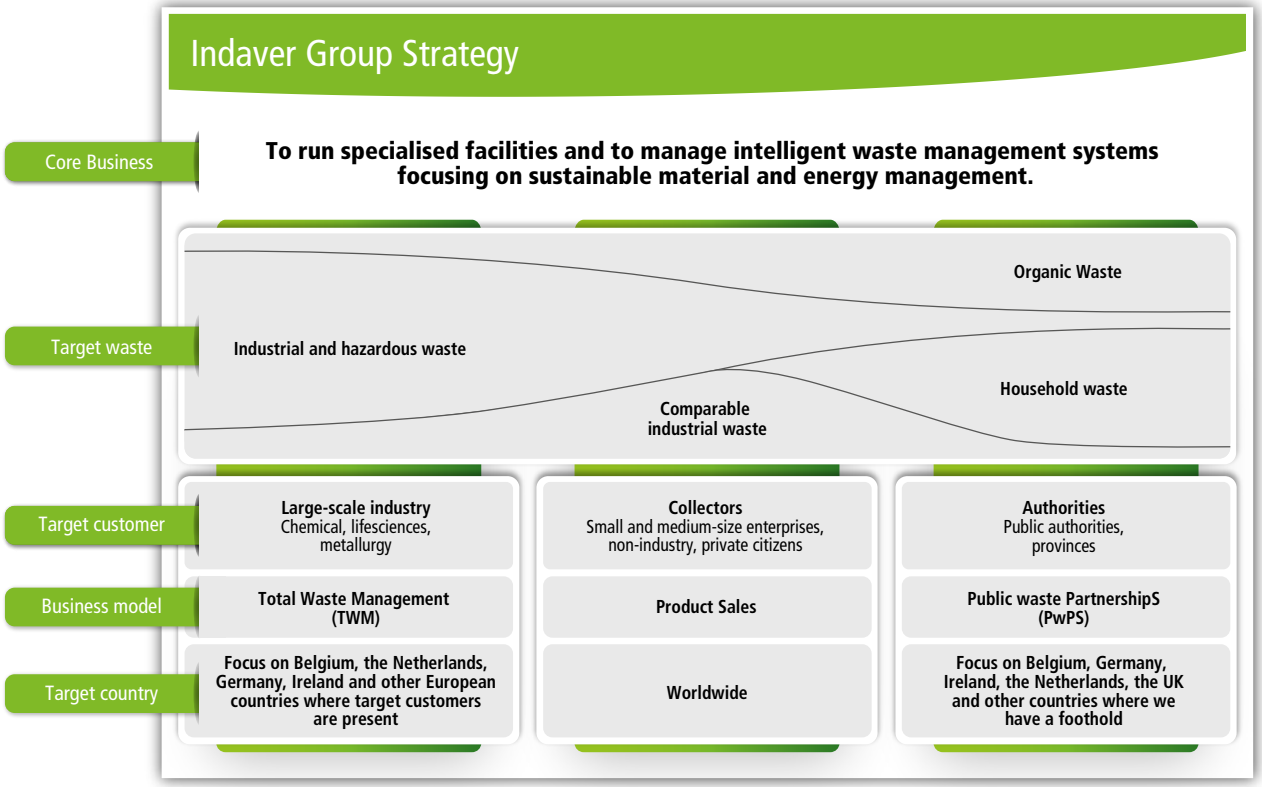
MISSION AND STRATEGY

As a full service provider, we have direct control over the entire process including: efficiency of handling and treatment, quality of materials recovered and quantity of energy generated.

Our mission is leading the field in sustainable waste management, and in order to achieve this, we have a clear, focused strategy.

We run specialised facilities and intelligent waste management systems focusing on sustainable material and energy management. We work with industry, who produce their own waste, and with public institutions who manage municipal waste.

We are a full service provider, offering both industry and public institutions sustainable waste management services. As a full service provider capable of managing the most complex portfolios of waste, we advise our customers on the most sustainable option for their waste. We offer them the best solution for each waste stream given its characteristics and the possible environmental impact, options for recovery and treatment, logistics and cost of handling, transport and treatment.



SUSTAINABLE DEVELOPMENT, RESPONSIBLE REPORTING

METHOD, SCOPE, AND STAKEHOLDERS

Sustainable Development Goals

For the first time, Indaver's Sustainability Report is explicitly cross-referenced to eight of the United Nation's Sustainable Development Goals. The SDGs are collective goals that aim to support nation-states in achieving inclusive and sustainable prosperity. ISWA, the International Solid Waste Association, has identified seven of the seventeen SDGs as of particular importance to the waste sector. As a member of ISWA, Indaver committed to the organisation's mission to achieve sustainable and professional waste management worldwide, and so we have taken on board the SDG priorities that ISWA has identified, and added an additional goal for our organisation to focus on: economic growth. As ISWA notes in this video, the waste sector can reduce green house gas emissions by 15 - 20%, and has a crucial part to play in helping to achieve the SDGs. Each SDG has its own icon, and these are included where they are relevant. For more information about each of the SDGs, turn to page 86.

Reporting for responsible businesses

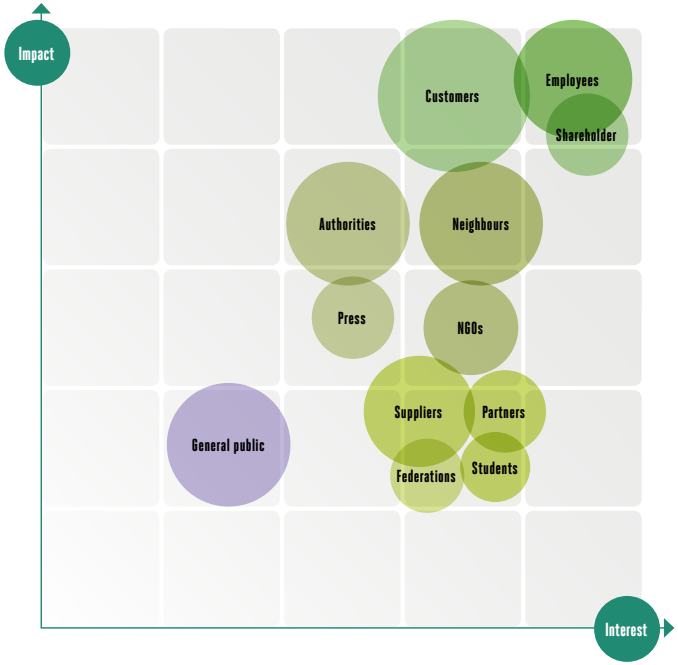
The Global Reporting Initiative (GRI) is an internationally recognised system for reporting on socially responsible business and setting out a company's performance in economic, social and environmental terms. Inspired by the GRI, we have mapped our own performance in a similar way, as can be seen from the table on page 88 at the end of the report. This table indicates the GRI criteria that we have used.

Scope of the report

In this report, we set out Indaver's performance in terms of socially responsible business. We consider our activities at our various European sites. The business activities of subsidiaries in which Indaver has a stake greater than 50%, as well as 50%-owned subsidiaries where operations take place at an Indaver site are also covered. The financial results are consolidated in line with Indaver's corresponding stake in accordance with the IFRS (International Financial Reporting Standards) reporting method.

Anticipating expectations

A working party consisting of staff from the various regions and departments determines the content and scope of the report, ensuring that it is balanced and representative of the entire organisation. The working party ensures that the Sustainability Report is written with our various stakeholders in mind. The stakeholders are mapped here according to their interest in and potential impact upon Indaver. Our experience and frequent contact with these groups and individuals have enabled us to compile a report geared towards their interests. The report will be distributed to these stakeholders as well as being freely available on our website to all interested readers.



A VALUES-DRIVEN ORGANISATION

CORE VALUES

Five core values underpin all our work.

- Demonstrating concern for people, safety and the environment.
- Building relationships based on mutual trust.
- Ensuring transparency in communications and actions.
- Concentrating on achieving results.
- Continuously improving.

Why these values?

Together, our values shape our corporate identity and our culture. They guide our strategy, our operational decision-making, and our relationships with all of our stakeholders. Our core values ensure that we remain focussed on doing good business in a complex world: with integrity and a clear sense of social responsibility.

There are a number of ways in which we live our values. We operate in a way that is safe, socially responsible and sustainable, by, for example, using the best available technology in our facilities. This minimises any impact on people and the environment and maximises the recovery of materials and energy. We build relationships based on mutual trust by doing what we say, and saying what we do with all categories of stakeholders, from customers, to regulators, to employees. We comply with standards and regulations, and interested parties can contact us to access our compliance record. We monitor and evaluate all of our activities, from the safety of our employees and the environment to the quality of our service. With this information, we are able to optimise our activities to ensure that they remain both high value and cost-effective.

OPERATING CONSISTENTLY AND RESPONSIBLY ACROSS EUROPE

Indaver NV is registered in Burcht Singelberg
Blok D (Lady Hedwige Tower),
Ketenislaan 1, Haven 1548,
BE-9130 Kallo, Belgium.

As an international organisation we have subsidiaries and participating interests across Europe, all of which need to work together coherently. Our Co-operation Agreement ensures that our operating procedures and service provision are similar across the regions. As the organisation grows, the Co-operation Agreement creates consistency which is important to our large customers, many of whom operate across a number of countries or regions also. Our international standards mean that every customer in every region can expect to be served efficiently and effectively.

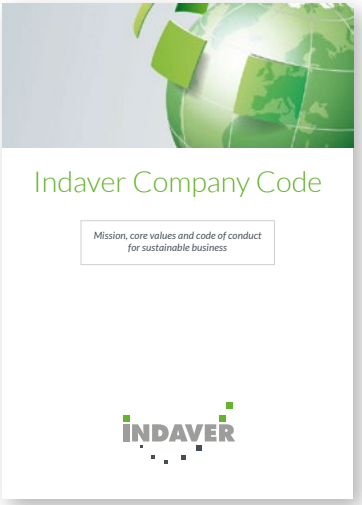
In our **Co-operation Agreement**, Indaver subscribes to a set of principles to continually improve its sustainability performance.

Within the context of our role as a waste management company active in the industrial and municipal waste sector, we have defined **economic goals** (concentrating on achieving results), **social goals** (demonstrating concern for people and building relationships based on mutual trust) and **environmental goals** (demonstrating concern for environment). These themes represent what we believe to be the most material environmental, economic and social aspects of our business and the ones that are of the most importance to our various stakeholders.

A number of internal policies have been developed in support of our vision and values. For example, in previous years, we have implemented a Supplier Sustainable Procurement Charter. The HR Management team adapted the Group HR Policy, adding further sustainable employability focus points.

In addition, we have also developed a comprehensive framework for ethical business practice through our **Company Code** and **10 Codes of Good Practice**. These, respectively, describe how we behave towards our stakeholders based upon our core values and how we handle waste.

▶ ***Have a look at our Company Code*** *for more information about how our values inform our relationships with all of our stakeholders.*



ENABLER AND GATEKEEPER OF THE CIRCULAR ECONOMY

PLAYING AN ESSENTIAL ROLE

The European Union's action plan for the circular economy guides our waste management activities here at Indaver. Within the circular economy described in the action plan, high quality materials are cycled around a closed-loop that is protected from contamination.

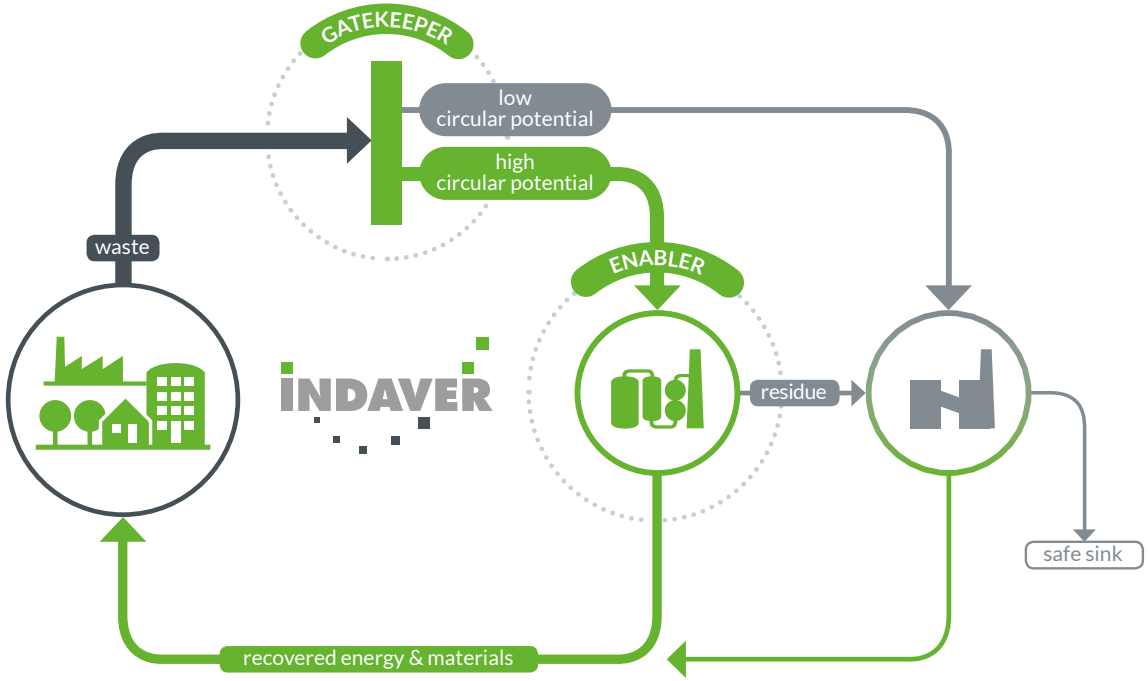
Our vision of a circular economy is clear. The circular economy has to focus on both sustainability (maximising recycling and minimising risks) and value creation (financial and qualitative objectives).

As a waste management company, Indaver wants to play a key role in achieving a circular economy.

As a leading company in the field of sustainable waste management it continues to create added value for all of our customers and for society.

In a circular economy, the key priority is to protect and secure the materials chains. It is thus imperative that these chains are not polluted or contaminated by undesirable or hazardous components. Therefore, safe sinks are needed as safe storage places for undesirable substances. If not recyclable, Indaver destroys or isolates these harmful elements of residual waste in its high-tech plants.

Sustainability in the circular economy also means maximising recycling by recovering high-grade materials, so that the quality and safety of products is not compromised. The current mechanical recycling techniques will therefore need to be supplemented with chemical and thermal recycling techniques. Such innovative recycling techniques will break materials down to their basic building blocks which will then be used to create new high-quality products instead of using primary raw materials.



2016: YEAR IN REVIEW

In 2016, Indaver managed approximately 5,000,000 tonnes of waste and employed 1,639 people. We had an operating revenue of €546.1 million. Our financial performance continues to be steady and sound, providing a good basis for growth and investment.

The following pages detail the most significant events during 2016.

We've been wholly owned by Katoen Natie since June 2015, and have developed synergies with them over that period.

In 2016, we handed over the Zeeuwse Reinigingsdienst (ZRD) to the Zeeland municipal authorities.

Finally, in February 2016, we had an incident at our Antwerp site, and collective effort was required across the whole organisation to find solutions in terms of both service provision and reconstruction.

Working with Katoen Natie

Katoen Natie has been Indaver's sole shareholder since June 2015. Although the two companies are different in nature, they both specialise in delivering a tailor-made, full service solution to a key number of customers. They are both focused on long-term partnerships and sustainable, cost-efficient, high-quality solutions.

In 2016, we have been working on synergies with our shareholder, and, for example, have created lean logistics solutions in Ireland. Due to limited treatment possibilities on the island of Ireland, most of the hazardous industrial waste is exported. Tank containers are used to move bulk liquid waste from customers' sites. This situation provides a perfect opportunity for Katoen Natie and Indaver to work together. The Katoen Natie business line 'KTN Tank Operations' has a large, modern fleet of tank containers.

Because of its scale and expertise, KTN Tank Operations meets the needs of our industrial Total Waste Management customers. As a tank operator/freight forwarder Katoen Natie handles the entire transport flow, from providing tank containers to the customer facility, pre-carriage to the port, booking the overseas shipment and carriage from pier to the final treatment centre. After every transport load, the containers are cleaned, pressure tested, inspected and reused for new transport orders. This service is already successfully delivered to some of Indaver's pharmaceutical customers in Ireland and will be expanded in 2017.

These synergies have developed so easily and work so well in part because, like Indaver, Katoen Natie is committed to sustainable business practices.

▶ ***Click here*** *for more information about Katoen Natie.*

KATOEN NATIE

2016: YEAR IN REVIEW

In 2015, DELTA sold Indaver to Katoen Natie, which resulted in significant changes for the Zeeuwse ReinigingsDienst (ZRD).

The Zeeuwse ReinigingsDienst (ZRD) – Working sustainably in times of transition

The ZRD operates similarly to a public sector organisation in that it has a transparent cost model for its waste collection services that is exclusive to the Zeeland municipalities. This public-sector approach was not a natural fit with Katoen Natie's business model. Thus, on the advice of the Zeeland Public Waste Disposal Authority 'Openbaar Lichaam Afvalstoffenverwijdering Zeeland' (OLAZ) the thirteen Zeeland municipal authorities decided to take over the ZRD.

Transfer

Indaver in the Netherlands, the Zeeland Municipal Authorities, the works council, and DELTA arranged a successful handover within a short time. The handover took place on 1 January 2016 and was implemented officially one month later. The transfer secured the future of the ZRD, which will retain the expertise of the 51 employees. The ZRD serves Zeeland's interests through its effective and financially-sound management of waste collection points and collection of household waste. In the longer term, the six municipalities that have their own waste collection services may start to work more closely with the ZRD for the collection of household waste.

As the handover was completed, Indaver in the Netherlands said farewell to the ZRD staff, many of whom had worked with Indaver for many years. We are confident that they will continue to enjoy their roles in ZRD. Our waste portfolio has been reduced by about 100,000 tonnes annually as a result of this transfer. However, we are similarly confident that ZRD will continue to manage the waste sustainably.

▶ ***Click here*** *for more information about ZRD.*

2016: YEAR IN REVIEW

After-care following incident at the Antwerp site guaranteed continued service to customers

On 26 February 2016, an incident occurred on Indaver's site in Antwerp involving a tanker containing liquid waste that was fed into the rotary kiln incinerator via a direct feed line.

A chemical reaction and a build up of pressure caused the tanker to split open and a flammable gas cloud escaped which caught fire at a great height. The impact also caused nearby tankers to catch fire. The 117 staff present were able to evacuate the site quickly and safely.

Indaver instantly mobilised the entire organisation to deal with the after-effects, both in terms of service provision and reconstruction. We immediately organised solutions to guarantee the continuity of our services to customers. Thanks to our other waste treatment centres and to our partnerships with external treatment centres, we were able to offer a backup solution. Indaver also provided additional storage capacity, primarily for the large volumes of medical waste, in close cooperation with the authorities concerned.

Organising these back-up solutions required a considerable logistics effort. Three times as much packaged material was stored and 30% more waste liquids in external tanks among other things. Between 13,000 and 14,000 tonnes of material was transported from customers to other treatment plants, with over 1,000 extra journeys to various destinations in Europe.

A safe work environment is Indaver's priority, both for the safety of our own staff and for the areas immediately surrounding our facilities. So, we conducted a thorough safety review of all direct feed lines before putting them back into operation. We worked with our customers to make a detailed analysis of the composition of their waste streams and the treatment technique used and validated the chosen method.

In the meantime, we have been working hard to rebuild the site in Antwerp. One of the rotary kiln incinerators was put back into operation by mid-March. However, the other two incinerators had suffered considerable damage to the electric cables and were out of service for a few months. 200 tonnes of scrap was cleared away, 42,000m^3 of water was purified, 2,000 metres of piping was renovated, 35,000 metres of cable was replaced and 3,000 metres of new cable containment was installed. By the end of June the three thermal treatment plants were operational once again.

Indaver is most grateful to its staff for their efficient handling of the incident, as they put in a great deal of additional effort and played a key role in finding and implementing alternative solutions for their customers' waste streams. This was made possible thanks to the quality of their networks, the relationships they have built up with customers and their creativity.

OUR WORLD AT A GLANCE

FULL SERVICE PROVIDER WITH A CLEAR STRATEGY

We provide our customers – businesses, governments, and waste collectors – with a comprehensive solution for hazardous and industrial waste, and household and biowaste.

Two separate markets: an overview

Our Total Waste Management service makes us the leading service provider in **waste management for life science and chemical industry** in north-western Europe. We put safety, health and environment first and we ensure reliability and efficiency to achieve optimum performance. Indaver continues to invest in and to innovate its treatment capabilities and e-systems, to enable the management of ever more complex waste streams. We provide our services to customers throughout Europe, providing our services where and when high-quality, sustainable waste management is of crucial importance. In order to serve our customers to the best of our abilities, Indaver systematically expands its treatment capacity and commercial activities in Europe, through organic growth and targeted acquisitions.

In addition, Indaver has decades of experience across the regions in which we operate of managing **household and similar commercial waste**. Our objective, in the first instance, is to consolidate our position in countries where we already operate so as to make the optimum use of our own facilities. In this way, we can continue offering our customers cost-effective packages. Public waste PartnershipS (PwPS) provide an appropriate and flexible response to the needs of municipal authorities and intermunicipal partnerships.

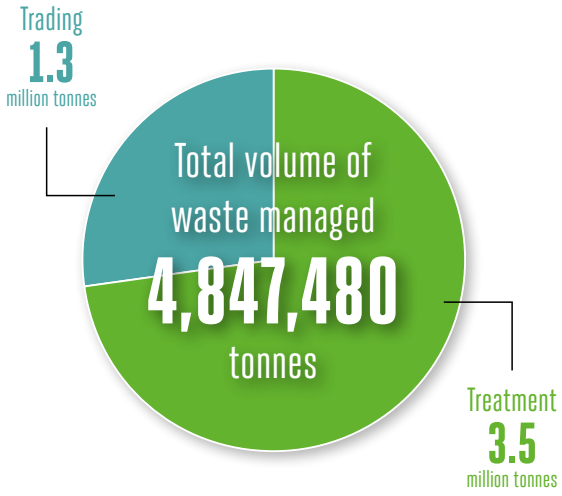
Innovative service solutions

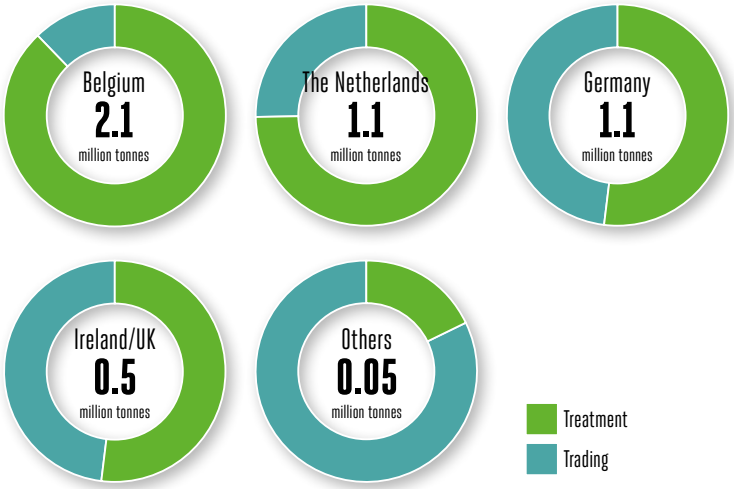
We offer all of our customers qualitative, sustainable and cost-effective solutions for their waste management. Rather than offering a one size fits all approach, we deliver tailored solutions that best suit the needs of our customers, be they large industrial companies or municipal authorities. Thanks to a broad range of in-house facilities, and supplemented by third-party treatment capabilities, we are able to offer a service that is flexible enough to meet any customer's requirements.

Our customers can rely on the right services, the best price, efficient project monitoring, and sustainable and effective waste treatment. We guarantee full transparency and traceability. If they wish, customers can have a complete, worry-free service in which we strive for the best solution and lowest possible Total Cost of Ownership.

THE INDAVER GROUP IN EUROPE

COUNTRIES OF OPERATION AND VOLUMES MANAGED





Belgium Antwerpen, Doel, Grimbergen, Kallo, Mechelen, Nivelles, Waregem, Willebroek

The Netherlands Alphen aan den Rijn, Bergschenhoek, Dordrecht, Goes, IJmuiden, Koegorspolder, Moerdijk, Nieuwdorp, Rijpwetering, Rotterdam-Europoort, 's-Gravenpolder, Terneuzen, Voorschoten, Well

Germany Biebesheim, Billigheim, Frankfurt, Hamburg, Kassel, Stuttgart, Wetzlar

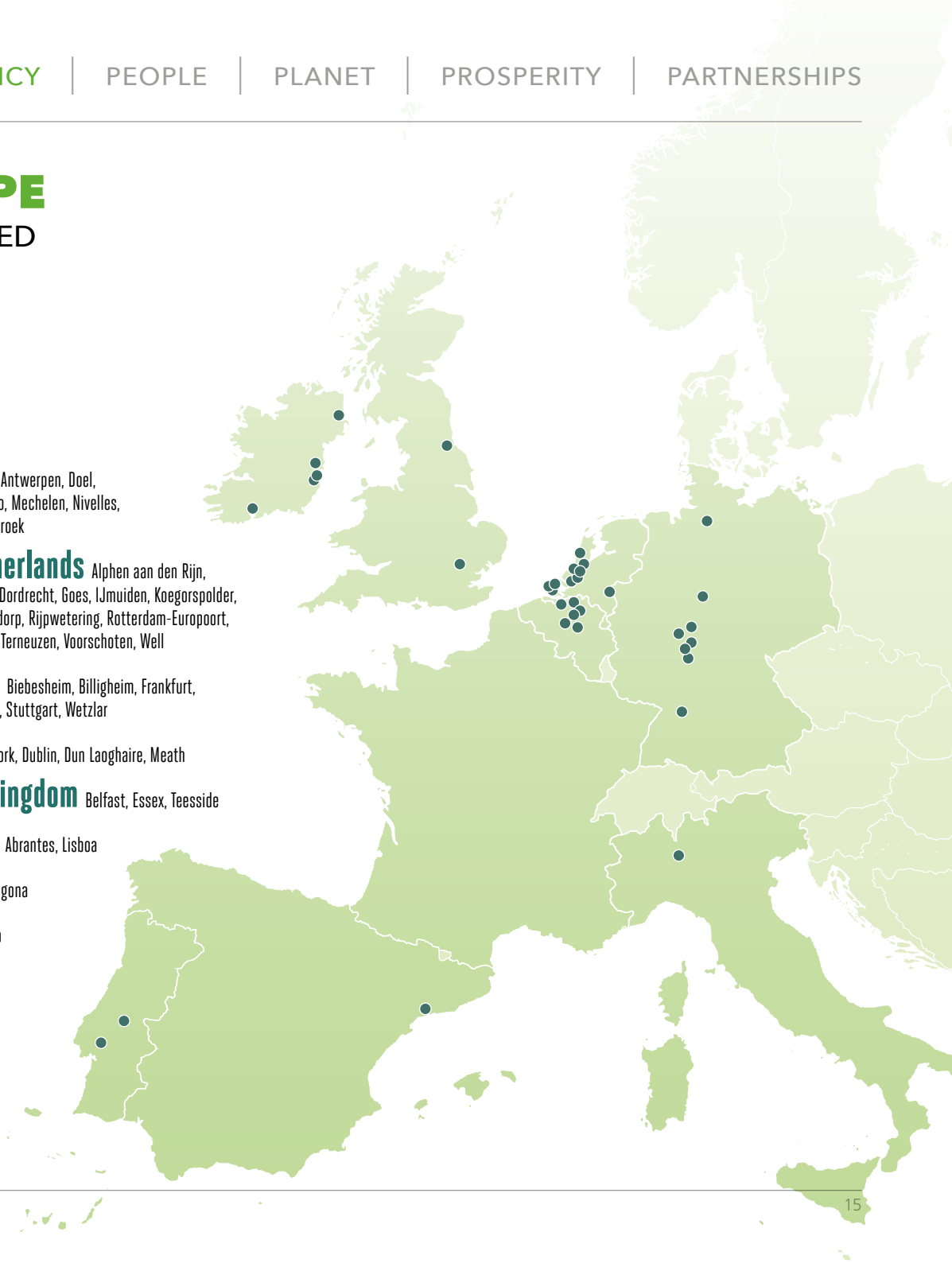
Ireland Cork, Dublin, Dun Laoghaire, Meath

United Kingdom Belfast, Essex, Teesside

Portugal Abrantes, Lisboa

Spain Tarragona

Italy Origgio



INDUSTRIAL WASTE SERVICES

TOTAL WASTE MANAGEMENT





Sustainable and cost-effective customised waste treatment solutions

The chemical, pharmaceutical and medical industries have to contend with complex, often hazardous waste streams that require careful, thorough treatment. The capacity to deliver such treatment is not usually part of our customers' core business. As a strong international player whose work area spans the whole of Europe, Indaver is the perfect partner for large-scale industry.

Our knowledge of materials and production techniques is comprehensive, and our particular expertise is managing critical, sensitive and complex waste streams from the chemical and pharmaceutical industries. We constantly monitor developments in the waste market, particularly in terms of legislation, technology, sustainability and innovation. We deliver a 'Total Waste Management' service model, providing our customers with a worry-free customised solution. We can assist our customers from the moment of production right through to recovery and/or treatment. We have a range of our own facilities and we work with external treatment centres, when specialist (niche) treatment and/or proximity counts. We take care of all the handling, planning, administration and reporting involved in the process. We monitor results and advise on improvements.

Because Indaver operates throughout Europe, we can always offer the best solution. That is, the solution that offers maximum safety for people and environment, maximum recovery of energy and materials and the best possible Total Cost of Ownership.

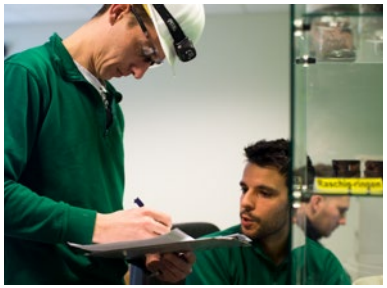
Indaver invests in sustainable, long-term relationships, because these deliver the best results. Working closely with the customer's team, we figure out the best connection between the customer's specific requirements and our knowledge platform. Partnerships like this are based on mutual trust and integrity.

EXPERIENCED PARTNER FOR PUBLIC AUTHORITIES

PROVIDING RELIABILITY AND EXPERTISE







We are a reliable partner for public authorities, helping them to deliver sustainable and cost-effective waste services. With our Public waste PartnershipS (PwPS), we provide high-quality, cost-effective and flexible response to the needs of municipal authorities and inter-municipal partnerships.

Our service provision is determined by flexibility, free choice and trust. These three principles ensure that public authorities and their citizens are well-served.

- **Flexibility:** public authorities choose what to outsource to Indaver. We advise them, based on our technical, administrative, legal and commercial expertise.
- **Free policy choice:** they determine what is the best solution for them, we advise them on the most appropriate services and technologies.
- **Trust:** open, prompt and accurate communication is crucial.

We offer three types of service

- **Treatment of household waste:** examples include waste-to-energy, digesting and composting, preliminary treatment of biomass, sorting plastic, paper and cardboard, treatment of hazardous household waste.
- **Organisation of waste management systems:** for example management of waste services for local administrations, collection and transport, operation of transfer stations, talking to external treatment centres for recyclable materials or residues, and support for waste prevention campaigns.
- **Management of infrastructure:** for example management or full operation, optimisation of capacity, formulas for co-ownership, joint projects.

Continuity and sustainability

Continuity and guaranteed sustainable treatment of waste are essential for public authorities. Indaver can provide both, as we have our own facilities for the treatment of municipal waste. High-quality recycling and recovery of energy are central to our operations. We also have the necessary experience and expertise to partner with public authorities in the construction and development of new infrastructure, such as recycling facilities or waste-to-energy plants.

International expertise applied locally

Every public authority has its own waste policy and its own approach, and they can choose to join forces with neighbouring municipalities. Indaver has the necessary expertise to work with such complex partnerships. Our people are on hand to be of service, as is the wealth of our broad experience.

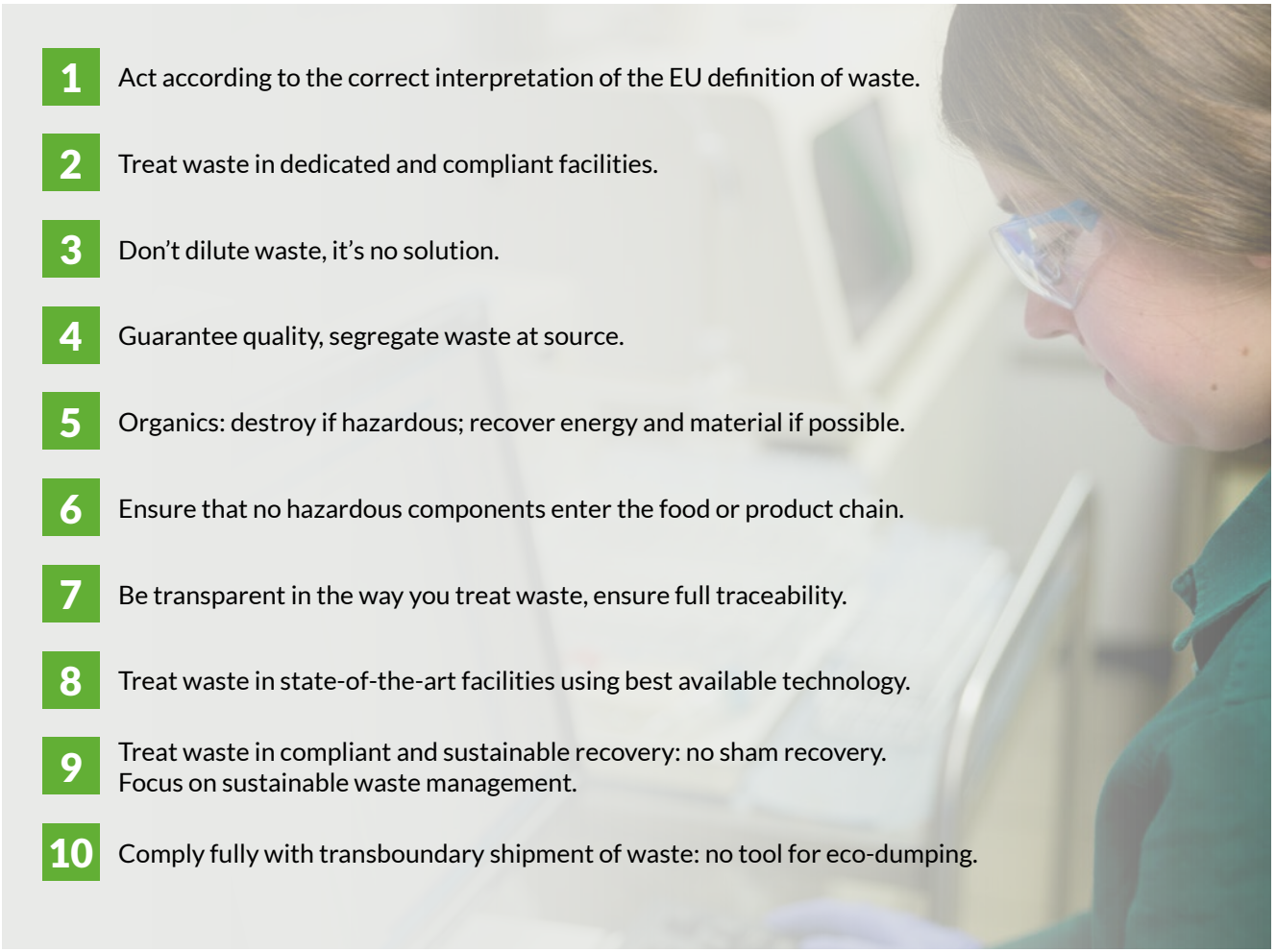
GUIDELINES FOR SUSTAINABLE POLICY

10 CODES OF GOOD PRACTICE

Our 10 Codes help us to keep our role as enabler and gatekeeper of the circular economy at the forefront of all our business activities. Not only our employees, but also our suppliers, partners and subcontractors adhere to our 10 Codes.

The fundamental principle underlying our 10 Codes is that we neither perpetuate nor pass on problems to the future or to places where these problems cannot be dealt with properly.

Alongside our Company Code, the 10 Codes specify our ethical behavior, with the 10 codes being pertinent to the area of waste treatment in particular. Our stakeholders can trust that we are dealing with their waste in a prudent and responsible manner.



1. Act according to the correct interpretation of the EU definition of waste.
2. Treat waste in dedicated and compliant facilities.
3. Don't dilute waste, it's no solution.
4. Guarantee quality, segregate waste at source.
5. Organics: destroy if hazardous; recover energy and material if possible.
6. Ensure that no hazardous components enter the food or product chain.
7. Be transparent in the way you treat waste, ensure full traceability.
8. Treat waste in state-of-the-art facilities using best available technology.
9. Treat waste in compliant and sustainable recovery: no sham recovery. Focus on sustainable waste management.
10. Comply fully with transboundary shipment of waste: no tool for eco-dumping.

LEAN SIX SIGMA

DELIVERING IMPROVEMENT PROJECTS ACROSS THE ORGANISATION

We know that in order to keep pace in a rapidly-changing world, an organisation must see improvement and responsiveness as a part of its day-to-day processes.

Our integrated and standardised management systems help us to monitor quality, the environment and safety, and to guarantee the reliability and traceability of our processes. Because we are continually assessing our own performance, we are also able to improve our approach systematically.

Such an approach means that we operate sustainably and efficiently and can demonstrate this to our stakeholders, giving them confidence in the organisation. This approach also prepares us to expand into new locations and to deliver more complex services.

Lean Six Sigma drives improvement processes at Indaver

With Lean Six Sigma (LSS), we approach projects systematically in order to pro-actively raise the quality of our operations. Through LSS projects, we tackle reoccurring problems and deliver a better service to our customers. These projects rely on clear problem statements, clearly defined outcomes, the collection of data, and the ability to measure and assess the outcomes of any changes. The improvements they deliver fall into three categories: improving the efficiency of plants and processes, increasing profit, or improving compliance.

Lean Six Sigma gives employees the opportunity to hone their expertise and develop their skills. Our skilled employees are well-placed to spot improvement opportunities, thus delivering better service to our customers. In order to become a green belt, the team leader follows the LSS training, and is then partly freed up to concentrate on structural improvements and on teaching the LSS approach to his or her team. The black belts are the LSS experts able to deliver large-scale process improvement; they also train and coach the green belts.

Lean Six Sigma projects in the regions: showcase – Belgium

LSS project teams in the regions have delivered a range of improvements. Since Indaver Belgium adopted LSS methodologies, there have been 45 projects to increase the efficiency of existing processes, of which 19 were six sigma projects and 24 were lean projects. Customer Services, for example, undertook a LSS project to make the digital creation of orders run more smoothly so as to enable the department to process a greater number of orders. Analytical Services had an improvement project to fine-tune waste substance analysis within the context of the pre-sales process. Thermal Treatment Antwerp is working on a project to have as little down time as possible on the direct injection lines for liquid waste, because down time can lead to safety risks for operators and maintenance staff.

AUDITING

IMPROVING THE QUALITY OF OUR PROCESSES

We use audits to check the safety, reliability and traceability of our operations. Being prepared for and open to both internal and external audits is a part of our organisation philosophy. We are transparent, we seek to improve wherever possible, and we operate according to very high standards.

Internal audits

Internal audits help us to improve our business processes. The internal audit team is made up of auditors from all departments. This ensures a balanced approach while helping people from different departments to understand different aspects of the business. The audit team receives audit training on top of their expertise, technical knowledge and analytical skills.

There are two different types of internal audit:

- **Compliance audits:** the internal audit programme for quality, safety and the environment assesses whether Indaver's operations are being carried out in accordance with codes of good practice, operational procedures, legislation and the various accreditations and licences.
- **Risk-based audits:** these audits identify and quantify risks in the processes, and test the efficiency and effectiveness of the management systems.

External audits

Each year, Indaver is audited by a range of third parties.

- **Government audits:** in all regions Indaver is controlled by public authorities that grant licences or supervise the correct compliance with such licences.
- **SEVESO audits:** some Indaver sites (for example, Hamburg, Biebesheim, Frankfurt, Stuttgart, Antwerp, Hoek and Dublin Port) store and treat a quantity of hazardous waste such that the sites are subject to the SEVESO Directive. This is a European Directive on the management of risks associated with the storage and handling of hazardous waste. The Directive aims to prevent serious accidents and minimise their impact on people and the environment. The preventive measures and the inspection and maintenance programmes on a SEVESO site are audited periodically by the competent authorities.

Audits by customers

Customers regularly make use of the opportunity Indaver offers to carry out onsite audits themselves. These audits are either part of the acceptance procedure for Indaver as a waste treatment company (pre-contractual audits) or of an interim supplier evaluation (post-contractual audits).

Audits by certification agencies

With the certification of Indaver's management systems, an independent and accredited certification body formally confirms that Indaver is operating correctly. Depending on the region, Indaver holds ISO 9001, ISO 14001, OHSAS 18001 certificates and specific regional certificates.

▶ ***Please see the following page*** *for an overview of all certificates*

In order to obtain a certificate, Indaver must participate in a vetting process or certification audit to demonstrate that we comply with these internationally recognised standards. The certificates are valid for three years. During annual follow-up audits, the main aspects of the standards are verified on a sampling basis. Once the period of validity of the certificate has expired a full re-certification audit will follow.

AUDITING

CERTIFICATES FOR EACH COUNTRY AND LOCATION

Country	Certificate holder	Certificate	Since
Belgium	Indaver nv (Antwerpen, Doel, Kallo, Willebroek, Grimbergen, Mechelen, TWM sites)	ISO 9001/14001	1991/ 1997
		OHSAS 18001	2011
	SVEX nv (Doel)	ISO 9001/14001	2008
		OHSAS 18001	2011
The Netherlands	Indaver Nederland B.V. (Indaver Recycling B.V., Indaver Waste to Energy B.V., Indaver Afvalberging B.V., Indaver Groencompost B.V., Indaver Compost B.V., Indaver Impex B.V., Indaver ARP B.V., Indaver Gevaarlijk Afval B.V., Indaver Bio Energie B.V.)	ISO 9001/14001	1995 / 1997
		OHSAS 18001	2012
		CO_2-bewust	2014
	Indaver Gevaarlijk Afval B.V.	SQAS-certificaat	2011
	Indaver Compost B.V. (Alphen aan den Rijn, Europoort, Nieuwdorp) Indaver Groencompost B.V. (Moerdijk, Rijpwetering, Voorschoten)	Keurcompost	2011
	Indaver Bio Energie B.V., Indaver Groencompost B.V. (Moerdijk, Rijpwetering, Voorschoten, Nieuwdorp, Bergschenhoek)	NTA 8080	2010
	Indaver Compost B.V. (Alphen aan den Rijn)	NTA 8080	2014
	Indaver Impex B.V.	VCA petrochemie	1994
	Indaver Nederland B.V., on site TWM services (Sabic Innovative Plastics B.V., Bergen op Zoom, Dupont Dordrecht, MSD Oss, ICL-IP Terneuzen)	VCA petrochemie	2014

Country	Certificate holder	Certificate	Since
Ireland / UK	Indaver Ireland Ltd (Dun Laoghaire, Dublin Port, Cork, Meath, Killmallock, Newcastle West, Mungret, TWM activities, UK sites)	ISO 9001/14001	1994/ 2000
		OHSAS 18001	2002
Germany	AVG mbH	ISO 9001	1994
		ISO 14001	1997
		OHSAS 18001	2003
		EN 50001	2010
		EFB	1997
	HIM GmbH (Biebesheim)	ISO 14001	2001
		EFB	1997
	Panse Wetzlar Entsorgung GmbH (Wetzlar)	ISO 9001	2008
	Chemisch-Physikalische Behandlung Frankfurt	EFB	1997
	Chemisch-Physikalische Behandlung Kassel	EFB	1997
	Chemisch-Physikalische Behandlung Stuttgart	EFB	1997
		ISO 14001	2012
	Sonderabfalldeponie Billigheim	EFB	1997
	Gareg Umwelt Logistik GmbH (Hamburg)	EFB	1997
Portugal	Abrantes	ISO 14001	2015
Italy	Indaver Italia (Origgio)	EMAS	2008
		ISO 1001	2007
		ISO 9001	2014

COMMITMENT TO CORPORATE SOCIAL RESPONSIBILITY

ENDORSED THROUGH EXTERNAL CERTIFICATION

In 2016, Indaver was awarded the EcoVadis Gold ranking with the mention 'Advanced Engagement' for our corporate social responsibility.

We are deeply committed to corporate social responsibility, and are proud that this commitment has once again been certified by EcoVadis. EcoVadis evaluates the commitment to corporate social responsibility of businesses worldwide under assignment to purchasing departments. You could say it is regarded as a Standard & Poor's® for CSR, which is why we ask them to evaluate our CSR, and why we value their assessment. This Gold ranking places us in the top 7% of suppliers to have been assessed by EcoVadis in the category of waste management.

During the most recent assessments we provided EcoVadis with extra information on environment (for example biodiversity), labour and human rights (for example anti-discrimination, structured employment relationships and employment conditions) and sustainable purchasing (for example suppliers' code of conduct).

Thanks to our commitment, policies and actions, we score very highly on themes such as environmental impact and employment practices/human rights. We are continuously striving for improvement, and on our list for 2017 is the documentation of our fair commercial practices and sustainable purchasing.

PEOPLE

We successfully deliver waste-management solutions because we invest in the safety and expertise of our people.

SAFE WORKPLACES AND TALENTED PEOPLE

OUR VISION

As an organisation defined by our commitment to sustainability, we are necessarily people-centred. Our waste management solutions benefit not only our customers, but society more broadly. We're able to deliver these solutions because we invest in the safety and expertise of our own people, as is illustrated in this chapter.

Safety is a fundamental value at Indaver. Our safety culture communicates the sense that safety is valued within our organisation, and that being attentive to safety will be rewarded. We've invested in tools and procedures to report, record, and monitor safety across the organisation. We provide safety training, health check-ups, and the correct protective equipment. We ensure that each of our facilities is a safe place to work.

Managers make a visible commitment to safety, and staff feel a sense of ownership for safety problems and solutions. Anyone who spots a safety risk is encouraged to report it promptly so that it can be investigated and addressed. This type of interdependent safety culture means that everyone is concerned about safety and looks after one another.

Looking after our employees goes beyond prioritising their safety. We want to attract, develop, and retain talent so that we can provide the best solutions for our customers. The waste industry is complex and fast-moving, so investing in our staff is good for business. We provide a learning environment to deepen and broaden our organisational expertise, and to create resilience and adaptability. Such an environment is good for our staff, many of whom develop their careers with us over years.

We support our people to make sure they remain motivated and engaged, while also feeling capable of adapting to change. We invest in training and development, and promote a healthy work-life balance. We have developed our own leadership model – Care, Connect, Coach – that is shared across all regions. We have our own leadership programme to foster future leaders and support those already in leadership positions. We encourage knowledge-sharing through national and international platforms and international operational centres of excellence. We conduct surveys because we want to hear our employees' ideas and opinions.

The cumulative effect of this approach is the creation of a strong feeling of camaraderie and friendly, relaxed working environments. As a consequence, we retain, engage, motivate, and challenge our staff throughout their careers with us.

SAFETY: AN INTEGRAL PART OF OUR MISSION

EMBEDDING SAFETY CULTURE AND MONITORING SAFETY PERFORMANCE

Safety underpins all of our activities here at Indaver and it is integral to our organisational mission. Our objective is to create sustainable waste management solutions for public and industrial customers, and sustainable solutions are necessarily those which are safe for both people and the environment. We have ensured that safety remains a lived value by taking steps to embed safety within our organisational culture, and by measuring and monitoring our safety performance.

Embedding Safety Culture

Indaver has a vision for safety in which, with support from the organisation, employees are accountable for their own safety and that of their colleagues. Of course, safety informs our policies, procedures, and our management systems, and we conform to safety regulations. However, we understand that people's behaviour is crucial to establishing safe working practices, and for ensuring that they stay up-to-date. Therefore, safety needs to be firmly embedded within our organisational culture.

This encourages a shared attitude that safe working practices are a must for everyone – regardless of their level of seniority or the nature of their role. We work to create an attitude of constructive intolerance when it comes to safety – our people do not accept unsafe conditions, and they do not take no for an answer when it comes to correcting them.

In order to embed this safety-conscious culture, we enshrined safety in the organisation's key documents, such as our Company Code. Our Company Code outlines our mission and our five core values, which are the foundations upon which the business operates. At the top of our list of core values is "demonstrating concern for people, safety, and the environment".

Rooted in our organisation's fundamental documents, this commitment to safety permeates every area of the organisation. The visible leadership commitment to safety includes the annual safety objectives that are set and agreed by the International Management Team. In addition, each member of the various Regional Management Teams prepares a safety plan for their own departments each year, and these are supported by internal audits, risk assessments, and the provision of training. Such organisational commitment makes it clear that we are committed to safety as part of our long term strategy.

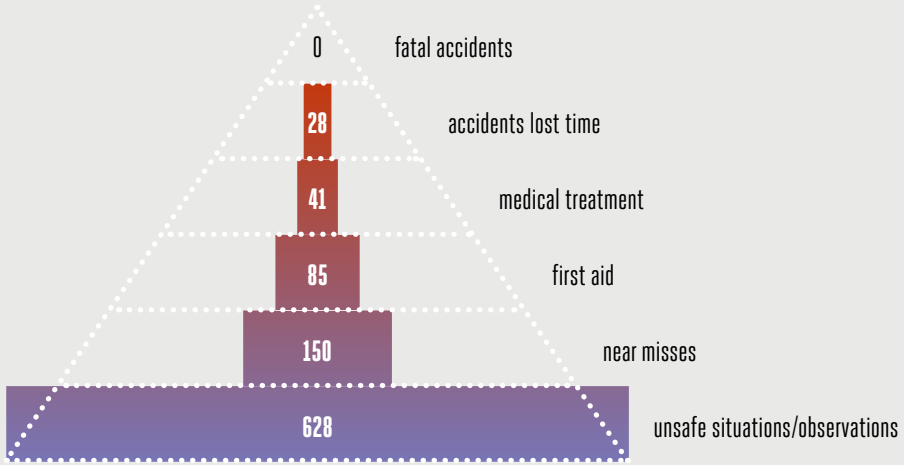
SAFETY CULTURE AND REPORTING

PRO-ACTIVE SAFETY CULTURE

For a safety culture to be effective, it must be pro-active and preventative, not merely re-active and corrective, and there must be ownership at all levels.

One of the ways we foster a pro-active culture, fully-owned by all employees, is by encouraging preventative reporting from everyone, and recording it alongside other corrective reports of accidents. Research has shown that making safety observations, and reporting near-misses and technical / property damage helps to prevent serious and fatal accidents. In fact, as safety observations and reports of near misses and property damage increase, the risk of all other types of accidents decreases. At Indaver, we have found this to be true, and use the concept of the safety pyramid to create safe work environments in each region.

Safety pyramid **2016**



Dedicated Incident Reporting and Monitoring System

All reporting on safety is recorded through our dedicated incident reporting and monitoring system. Each year, there is a group-wide safety campaign with a theme that is informed by the results reported through this system. The group-wide safety campaign for 2016 consisted of:

- A video of the CEO's safety message was distributed with high priority throughout the entire organisation.
- Planned **safety talks** by IMT members; visits to employees in their daily work environment to show that safety remains a top priority at all levels.
- **A series of posters** that focused on specific themes and the role of interaction between colleagues. The themes were chosen based on an evaluation of the safety figures and principal causes from 2015. Themes: the reporting of hazards, trips and falls, hand injuries, traffic management, working at heights/fall hazard, and contact with chemical products.

SAFETY SYSTEMS

MONITORING AND ANALYSING SAFETY PERFORMANCE

Finding the Cause, Addressing the Problem

Much of the work in receiving and treating waste involves manual handling. Further, we operate complex installations which must be monitored and maintained in order to ensure that the working environment remains safe. Therefore, it is not enough to record that an incident has occurred; it is necessary to discover how the incident came about in order to avoid recurrence, and this method of analysing the root cause of any incident is therefore an integral part of our incident management system. In 2016, we found that most lost time incidents had minor causes.

In 2016, we had a total of 41 incidents that resulted in lost time. Of these 41 incidents, 10 were as a result of contact with product; 13 were a result of falling and slips; and 22 were a result of handling.

Safety Database

As of 2016, Belgium, the Netherlands, Germany, and Ireland are all using the same system to report not only all safety incidents, but also the follow-up actions taken to address them. This system allows us to monitor key metrics, such as the time taken to follow-up and correct.

We report and record any safety incident that occurs, right down to observations on how conditions could be made safer. For example, if an employee in an office environment notices that the carpet has peeled up so as to cause a trip hazard, this will be recorded as a safety observation. By classifying and recording all types of incidents, we are able to monitor any emerging trends and to respond appropriately with targeted safety campaigns and tool-box talks. Because we record these incidents across the whole organisation, we ensure that everyone learns from the findings of any one region.

SAFETY DIALOGUES

CREATING CONVERSATION

As part of our pro-active safety culture, each year, the members of each Regional Management Team visit our sites for safety dialogues with people who work on the site.

Inge Baertsoen, the Communications Manager for Belgium, reflects on her safety dialogues for 2016.

"In 2016, I visited our sites in Doel and Antwerp twice each, and carried out seven safety dialogues altogether. The format of the safety dialogue is that the initiator visits the site accompanied by the safety or plant manager for the site. You have the opportunity to do behind-the-scenes tour of the facility, which is very interesting for me, as my day-to-day work is desk-based for the most part. As the tour continues, you observe people going about their work – employees and contractors, people working on maintenance or making deliveries to the site. Then, you take the opportunity to speak to someone you have observed. You have a conversation about what their work involves and what steps they take to stay safe.

I have found that people are very knowledgeable about their own safety procedures, and really take ownership of them. For example, last year, one of my visits took place during shutdown, when a great deal of maintenance work is done. Because of this, there can be more opportunity for accidents than at other times, and so everyone is extra vigilant. On this occasion, I had a safety dialogue with an Indaver employee who explained to me a new lock-out, tag-out procedure for hot work, such as welding. Hot work can be dangerous for not only the person doing it, but also for the people around him – and the person I spoke to talked about how the procedure kept everyone safe.

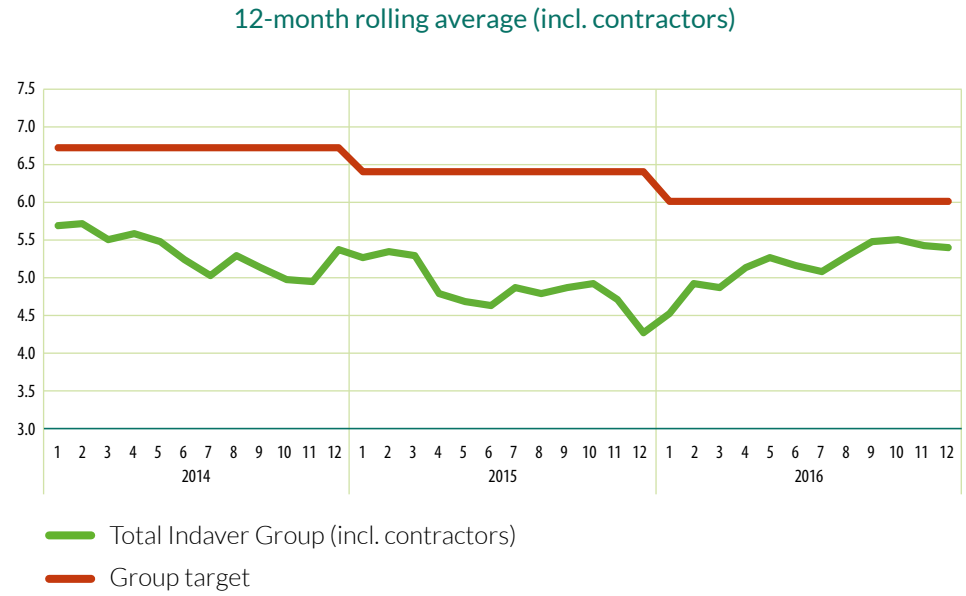
For me, the safety dialogues are very beneficial because I get an insight into what it looks like in practice to keep safe while working on site – you can read safety procedures, but it's much better to see things in action. I have been impressed by the knowledge and care of the people I spoke to. I think that they enjoy the safety dialogues also – they have the opportunity to explain their work and their innovations. They get to put a face to a name, too. The dialogues are very open and informal, so people feel comfortable making suggestions for how things could be improved and sharing their opinions and concerns. The dialogues create connection and also normalise conversations about safety. They are invaluable, I think."

▸ ***Click here*** *for a detailed case study of safety campaigns in the Netherlands.*

SAFETY METRICS

MONITORING SAFETY PERFORMANCE

Safety index **2014 - 2016**



Between 2012 and 2016, our safety index has steadily improved, though there was a slight increase in 2016. The safety data shown relates to our own staff and to regular subcontractors. The majority of incidents with lost work time at Indaver sites involved minor injuries. Injuries caused by trips, slips and handling accounted for more than half of all reported injury incidents.

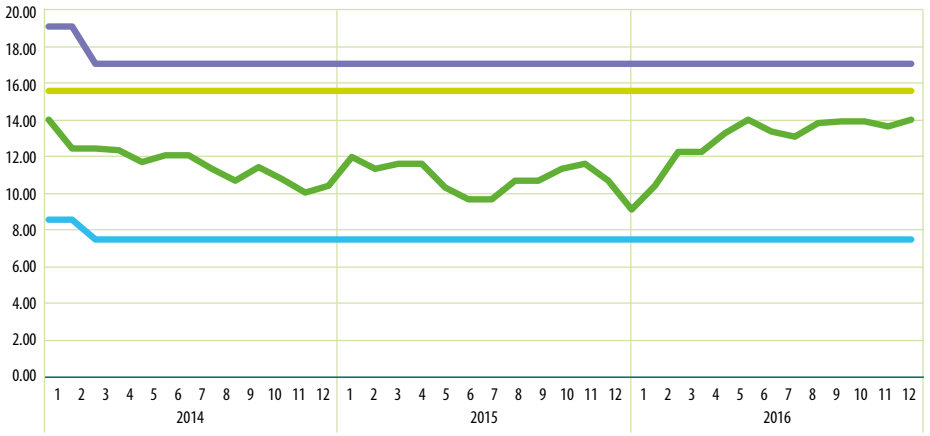
In 2016, Indaver's personnel safety score was not quite as good as the previous year, but remains significantly better than the average for companies in the waste sector.

SAFETY METRICS

BENCH-MARKING PERFORMANCE

LTIR **2014 - 2016**

LTIR* – 12-month rolling average (incl. contractors)



(*) LTIR (Lost Time Incident Rate) shows the frequency rate of the number of lost time accidents.

Lost time incidents

A lost time incident is one which results in a member of personnel having to take more than one day off work. Each region collects its own data, and we collate this and report as a group. In 2016, there were 41 lost time incidents, involving 34 staff and 7 subcontractors. The frequency rate was 13.8 in 2016, about the same level as in 2014, but not quite as good as 8.9 in 2015. In the first half-year there was a temporary peak when a number of incidents arose, followed by good results during the second six months. Overall, our performance continues to improve steadily over time. The severity rate was 0.25 in 2016. The severity is determined through a comparison of the number of lost days caused by lost time incidents per 1,000 working hours.

Comparison with the sector

There is no single publication that reports on safety figures for the waste and chemical sectors either internationally or in Europe. In Belgium figures are available for the waste sector and the chemical industry, and we use these as appropriate comparisons for our own safety data.

Frequency – According to the most recent data published by the Belgian federal government (2015) the average frequency rate in the waste treatment sector is 21.97. As our frequency rate of 13.8 demonstrates, the Indaver Group scores significantly better than the waste treatment sector. The average frequency rate across all sectors in Belgium is 16.25, and we are significantly below this figure also.

Real severity – Number of lost days per 1,000 working hours. This measure indicates the number of days during which personnel were unfit for work. Again, we compare our Group results against Belgian figures. In 2016, the real severity for Indaver was 0.25. The most recent data on real severity for the waste treatment sector in Belgium is 0.64. Not only is our score much better than the waste sector in general, it is on par with the chemical sector in Belgium, where the average real severity is 0.21. We score significantly better than the national average for all Belgian sectors of 0.40.
Taken together, these two scores show that not only are there fewer accidents in Indaver than in the Belgian waste sector, but that when accidents do occur, they result in fewer days off work than the average for the waste sector.

SUSTAINABLE EMPLOYMENT

DEVELOPING THE ORGANISATION

A stable and knowledgeable workforce

The waste market is competitive, technologically sophisticated, and is becoming globalized. Indaver must be both efficient and innovative in order to keep pace with this changing environment. By investing in our employees, we enhance the strength, flexibility, and performance of the organisation, and thus we are able to offer our customers the best solutions. We're cultivating an organisation where knowledge-sharing and people development are key.
As a knowledge-driven organisation, we both prioritise the development of our employees and work to retain knowledge and expertise within the organisation.

- **Number of employees**: 1,639 employees in the Indaver Group in December 2016, 48 less than in 2015 mainly due to the sale of the ZRD (Zeeuwse ReinigingsDienst) in the Netherlands.
- **Average staff turnover** remains stable at 8.19% if we exclude the sale of ZRD (including the sale it is 11.24%). Also the average absenteeism rate remains stable at 5.19% compared to 2015. We have some very long term sicknesses in Belgium, Germany and the Netherlands.
- In 2016 nearly 59,000 hours were invested in **training & development** of our people which is an average of 36 hours per employee per year.

Number of employees 2016

Total in Group: **1,639**

Training (in hours) 2016

WE DEMONSTRATE LEADERSHIP

STRENGTHENING INDAVER'S CULTURE

We believe in our mission. For Human Resources, this means focusing on sustainable employment to help the development of our organisation. A crucial element for sustainable employment is effective leadership.

Leadership is defined as "Leading by Triple C": Care, Connect, Coach. The concept of "Leading by Triple C" is incorporated in the Indaver competency model. By adopting a shared understanding of leadership, we strengthen and give depth to our team culture. This in turn helps us to achieve our local and international strategies within our matrix structure, and across the different languages and cultures in which we operate. In 2016 we continued to train and develop our leaders throughout our operational regions.

Investing in sustainable employability

In order to shape and deliver our business strategy and our future growth, we need to have people with the right competencies at the ready. This means that on the one hand we have to monitor our ageing workforce, to ensure retention of knowledge. On the other hand we have to focus on optimal and sustainable employability of our people to meet the demand for longer professional careers. We're proactive in managing the diversity of age groups within the organisation. We choose qualitative solutions in order to facilitate job mobility and learning and development. This learning and development approach requires a joint commitment from employees and the organisation. We have defined and continue to maintain four pillars that support sustainable employability.

SUSTAINABLE EMPLOYABILITY

A STRATEGY BUILT ON FOUR PILLARS

Health and well-being:

The physical and mental health of our personnel is paramount for us. We support our employees in maintaining both their physical and mental health. We offer health check-ups and relevant vaccinations. In order to attain long-term employment, we are adaptable when it comes to working conditions and circumstances. We encourage open communication and work with employees to find mutually beneficial solutions. We pro-actively monitor work places and identify the necessary ergonomic resources for optimal work performance.

Work-life balance:

We are clear about each employee's role and responsibilities and the expected results. We ensure our people have the knowledge and training they need to do their work, and support them where necessary. We provide our people with the tools they need to perform their duties efficiently and effectively. We want our employees to be empowered and responsible so that they can take full ownership of their own tasks. Empowered employees will take the initiative to improve efficiency of work processes on the work floor.

We offer, where possible, flexible working hours, work from home, and part-time work opportunities. Through open and honest dialogues, we create a working environment that provides personal benefit, benefit for the organisation, and for each team.

Developing careers and expertise:

We offer our employees opportunities to develop their competencies and skills through training and development, on-the-job-experiences, coaching, feedback exercises, and the assessment of their potential beyond their current role. We help them to find their personal career anchors in each life stage, and we facilitate job mobility. We empower our employees to take the initiative in developing their competencies and careers.

Commitment and engagement:

We support our employees on their own leadership journeys through our leadership model: "Care-Connect-Coach". The leadership model is predicated on trust, respect, and transparency. We clarify their personal contribution to the Indaver strategy and the team and involve them in decision-making. We give them the autonomy and authority to act. We help them to develop and to deal with a changing environment.

COMMITTED AND ENGAGED EMPLOYEES

EMPLOYEE ENGAGEMENT SURVEY

We know that committed and engaged employees are a crucial part of Indaver's success. We value the opinion of our employees, therefore, in 2016, we conducted an employee engagement survey.

This is the third time we've conducted such a survey in Belgium, the Netherlands and Ireland, and the first time in Germany.

The total Indaver group response rate was 72.5%, which is a good result. Employees were asked to score Indaver out of ten on a number of attributes, with the following results: 7.6 for commitment, 7.3 for satisfaction and 6.8 for engagement. The commitment score was higher than for the last survey, where it was 7.5, and it was significantly higher than the European benchmark of 6.8. For satisfaction and engagement we kept our scores in line with previous survey scores and more or less in line with European benchmarks.

The results were discussed by the management teams throughout the regions. In dialogue with their employees, the regional management teams drew up action plans to follow up on the results of the survey. Our employees believe that efficiency can be improved, and so this has become a focus at Indaver group level where we will be working on improving the efficiency of systems and processes.

Belgium: online management of training and evaluation

On 11 January 2016, People Platform went live in Belgium. People Platform is the digital platform that enables staff to take control of their own training. Each staff member has their own profile through which they can consult the organisation chart, and also personalise their own profile. Employees can also use People Platform to consult the catalogue of training courses, to request a training course, and to monitor their personal learning history.

The Netherlands: well-being and inclusivity in the workplace

▶ *Follow the links for insight into well-being and inclusivity in the workplace at Indaver in the Netherlands.*

COMMITTED AND ENGAGED EMPLOYEES

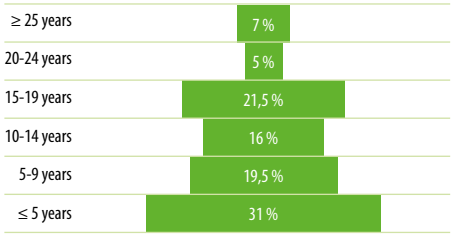
AGE AND SENIORITY FIGURES

Average seniority
11.47 years
BE 11 years
NL 11 years
DE 14 years
IE/UK 6 years

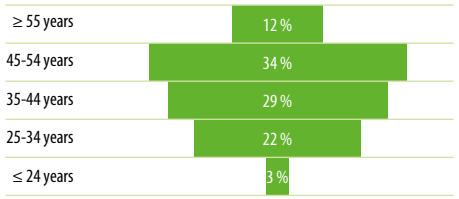
Average age
44.35 years
BE 43 years
NL 47 years
DE 46 years
IE/UK 41 years

As can be seen from the graphs below, the workforce in each region is different, and so each region has its own priorities. All of the regions work on sustainable employment.

Belgium 2016

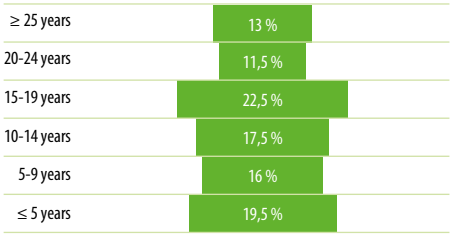


Average seniority pyramid

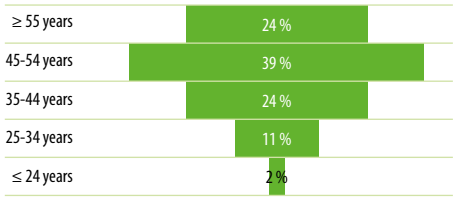


Average age pyramid

The Netherlands 2016

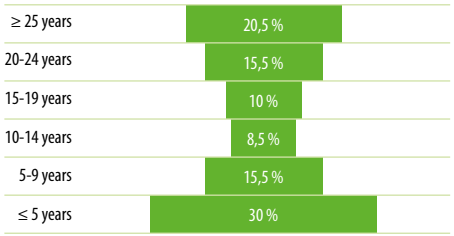


Average seniority pyramid

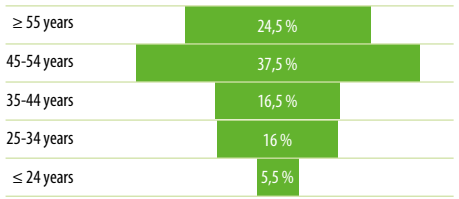


Average age pyramid

Germany 2016

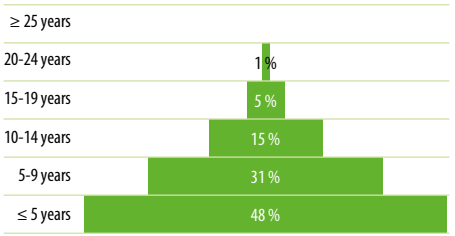


Average seniority pyramid

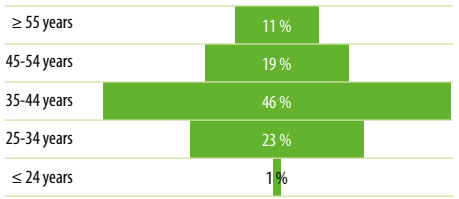


Average age pyramid

Ireland / UK 2016



Average seniority pyramid



Average age pyramid

PLANET

In its activities Indaver does its utmost to keep our planet livable by recovering as many materials as possible and limiting our impact on the environment.

MANAGING WASTE IN A SAFE AND SUSTAINABLE MANNER

OUR VISION

As a waste management company, we are in a position to show leadership in the creation of a circular economy. The policy chapter delineates Indaver's vision – our understanding of the circular economy and our role within it. In order to create a circular economy, we all need to reduce, reuse, recycle, and recover high-quality materials as efficiently as possible, and Indaver both enables and delivers these activities while simultaneously protecting the materials chain from contaminants. This chapter illustrates the practical approaches Indaver has adopted as an enabler and gatekeeper of the circular economy.

As a waste management company, we are aware of our environmental impact and seek to keep the environmental impact of our activities to a minimum. As you'll see, we monitor our own operations closely and strive to have minimal impact on air, water, and soil. When it comes to our own processes, we're economical in our use of water and energy. We are always looking for ways to reduce our use of raw materials and, where possible, we replace virgin materials with recovered materials. We seek to limit our ecological footprint in our transport of waste. We adhere to the strictest environmental standards.

We're also very attentive to efficiencies. At our high-tech facilities, we extract the maximum amount of high-grade materials from the waste we treat. These can then be reused as fresh components in new processes. We recover energy from waste through thermal treatment. Transported through district heating networks and electrical grids, this energy is supplied to commercial users as steam, heating, and electricity. There are many benefits to this approach. We avoid and reduce CO_2 emissions. We reduce reliance on finite fossil fuels and replace them with renewable energy sources; this diversifies the energy mix in the different countries in which we operate. We strive to be as efficient as possible in our energy use.

At the same time, we also protect against contamination of the environment and of the food and materials chains. On our own sites, we prevent contamination of the soil and groundwater. Our thermal processes not only recover energy, they also destroy the residual hazardous components in waste that should not be re-introduced into the materials chain. Where there are contaminants that cannot be destroyed, we treat them and / or store them safely.

INDAVER: ENABLER AND GATEKEEPER OF THE CIRCULAR ECONOMY

Our dual role in the circular economy entails both recovering energy and materials from waste and keeping hazardous waste components out of the food and materials chains.

In practice, this means that we guard the quality and affordability of recovered materials and we are careful to separate unwanted residues and materials out, both in an early stage (before treatment) and during/after the treatment process. Where we can, we destroy these harmful elements. Where this is not possible, we store them safely.

The remainder of this chapter illustrates the practical ways in which we fulfil our role as both enabler and gatekeeper of the circular economy while limiting any impact our activities might have on the environment or our surroundings.

▶ ***Click here*** *to watch the video about our role in the circular economy*

ENABLING ENERGY RECOVERY

WASTE AS ENERGY

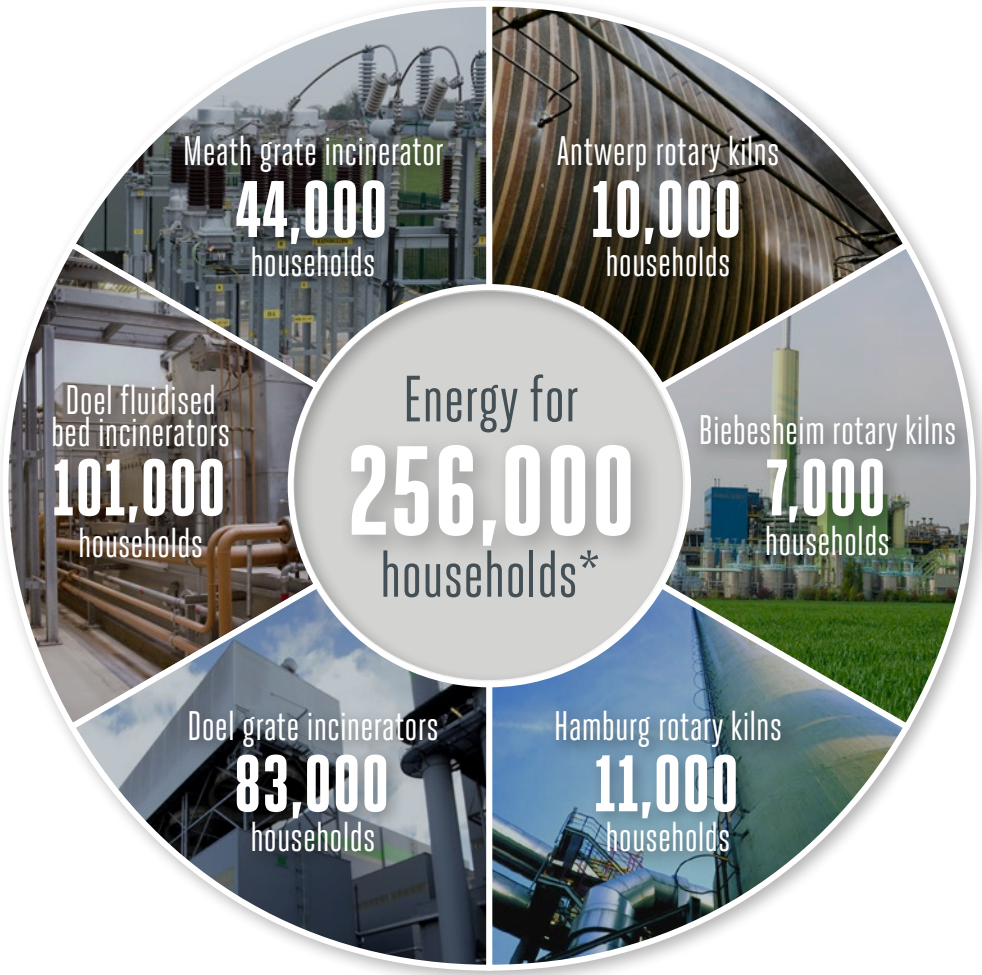
By 2020, Europe wants to see the emission of greenhouse gases cut by 20% compared with their 1990 levels. Energy consumption has to be reduced by 20% and 20% of the energy must be sustainable. Indaver is playing its part towards this European climate policy with its waste-to-energy strategy.

Incinerating facilities are power plants

Indaver's incinerating facilities are real power plants given that they convert as much waste as possible into energy. We use this energy for our own facilities and buildings and we supply it to households and neighbouring companies as both steam and electricity. If all the energy recovered during the thermal processes in 2016 were to be converted into electricity, this would equate to the average electricity consumption of 256,000 households.

Besides the energy generated by our incineration facilities, we also produce green gas and electricity out of organic residues in Alphen aan den Rijn (the Netherlands) and at our landfills in the Netherlands. Alphen aan den Rijn and the Dutch landfills provide energy for another 3,000 households (average consumption of 1,500 Nm^3/household per year).

The next page contains specific examples of Indaver's energy production, such as our ECLUSE steam network, the heat networks in Antwerp, and our partnership with EcoFuels in the Netherlands.



* Assuming that the total volume of recovered steam is transferred to electricity, calculated with an average consumption of 3.5 MWh/household per year.

ENABLING ENERGY RECOVERY

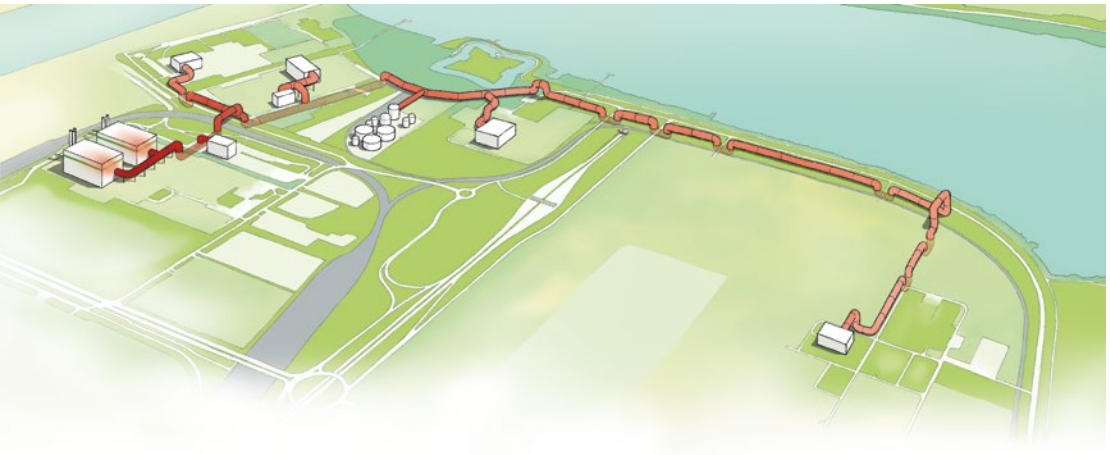
STEAM AND HEAT NETWORKS IN BELGIUM

Work has started on the ECLUSE steam network

The first pipeline for the new industrial steam network ECLUSE was laid in Waasland Port on 6 February 2017. When it's operational, this steam network will provide an annual CO_2-saving of 100,000 tonnes, equivalent to fifty wind turbines. It will produce five percent of the green heat in Flanders, providing reliable and cost-efficient energy to industry. Antwerp has the largest cluster of chemical companies in Europe, and ECLUSE will help to anchor industry there in years to come.

Starting in 2018, the network will convey the steam from Indaver and SLECO through a network of pipelines. Indaver/SLECO was already connected through a steam pipe with a neighbouring company. As of 2018 one company will draw on the process heat and five companies will draw on the steam as needed, allowing them to switch off their own steam boilers, which operate on gas, a fossil fuel. ECLUSE has double the capacity of the current demand for steam, which means that other companies will be able to join the original six at a later stage.

The ECLUSE project fits Indaver's vision on durability, providing economic benefits (competive prices that anchor industry in Antwerp Port), environmental benefits (CO_2 reduction) and societal benefits, since it generates the energy the circular economy needs to thrive. An important contributing factor to its success is the unique partnership between Indaver/SLECO and the companies drawing on the heat, those providing the terrain, infrastructure and financing, and the Flemish government.



▶ ***Click here*** *to watch the video*

Supplying heat to neighbouring businesses and residential areas

In Antwerp, Indaver already supplies residual heat in an energy cluster with **Amoras**, the dewatering project for dredger sludge from the Port of Antwerp. We are always looking for ways to expand as suppliers of heat, such as to Logistiek Park Schijns, a planned zone for logistics activities that is close to Amoras. Together with neighbouring communities and the City of Antwerp , we are also investigating ways of supplying sustainable heat from our Antwerp site for industrial companies and residential areas.

ENABLING ENERGY RECOVERY

GREEN ENERGY IN THE NETHERLANDS

Working together on EcoFuels in the Netherlands

We're always looking to work together as we know that innovation is fostered through sharing both knowledge and experience. One example of a sustainable collaboration is **EcoFuels** in the Netherlands.

EcoFuels innovative food and beverage (F&B) digester

Ten years ago in Well (Limburg), Laarakker Groenteverwerking together with Indaver in the Netherlands designed and built the EcoFuels F&B digestion facility. Since then EcoFuels has been producing high-quality products from leftovers from the food and beverage industry (F&B) with a low dry matter content, and from agricultural residual flows.

Green energy

EcoFuels was the first large-scale digester to generate green electricity from biogas. Indaver and Laarakker used the knowledge gained with EcoFuels to expand the FDT digestion facility in 2011. EcoFuels also produces green natural gas and liquid CO_2.

Better Biomass Certificate

In 2015 EcoFuels was awarded the NTA 8080 certificate, also known as the Better Biomass certificate. This certificate guarantees that EcoFuels has opted for the most sustainable method of treatment. For VGF waste this is a combination of digestion and composting. For the acceptance and treatment of residual flows from agriculture and leftovers from the food industry, customisation is a requirement. For each residual flow presented, EcoFuels works towards the most sustainable processing route. This also means that EcoFuels will not take a residual flow if it can be used more sustainably elsewhere.

EcoFuels B&V digestion facility in Well (NL)

ENABLING MATERIALS RECOVERY

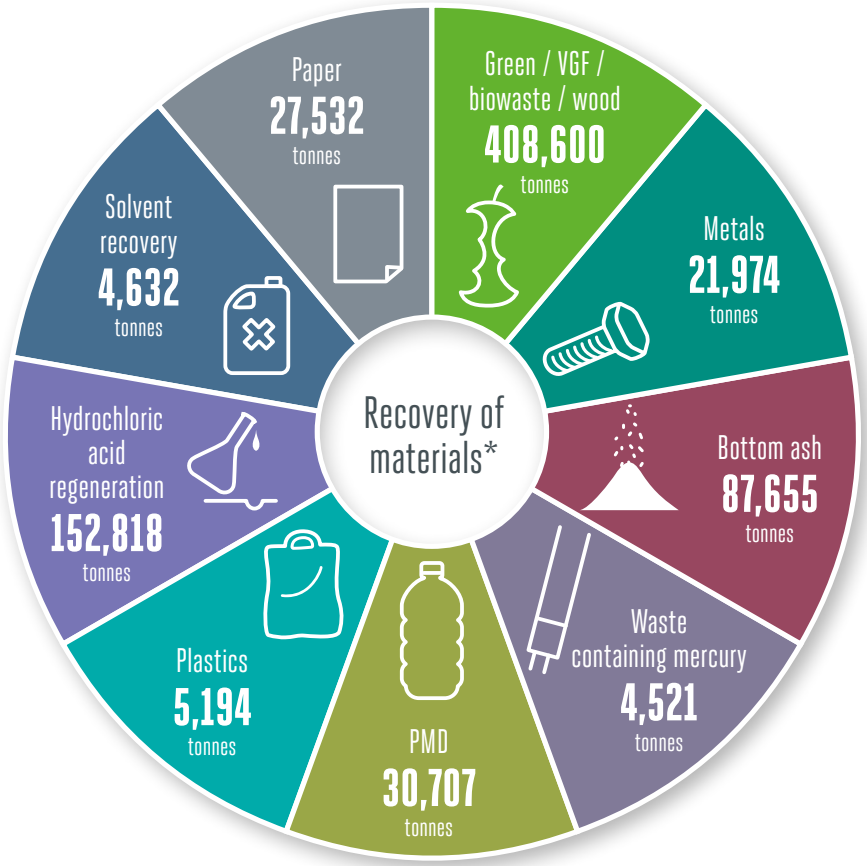
WASTE STREAMS FOR RECOVERY OF RAW MATERIALS

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

We recover as many materials as efficiently as possible in all our activities and at our facilities.

We view waste as a valuable material in itself, which is why we are working towards a society in which materials are used in a sustainable cycle. Closing the loop means re-using materials. Redundant products that are created from secondary materials must have the same high quality as products from unprocessed raw materials, and they must be just as safe. Indaver supplies these high-quality materials which can be used to make high-quality products.

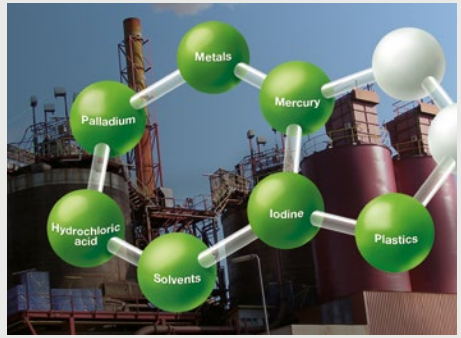
In 2016, 1.27 million tonnes of material were appointed for material recovery. Of this, Indaver processed 743,633 tonnes at our own facilities.



* Waste streams appointed for recovery of materials processed at Indaver facilities

Indaver Molecule Management

Glass, paper and plastic are now widely recycled. Our Indaver Molecule Management® takes the principle of recycling one step further. With our Indaver Molecule Management®, we recover the smallest components from chemical and pharmaceutical waste. We are currently recovering products like iodine, precious metals and rare earth metals. On a larger scale, we are working on recovery/recycling of hydrochloric acid (ARP, IndaChlor). Our latest project will involve recovery of chemicals from plastics.



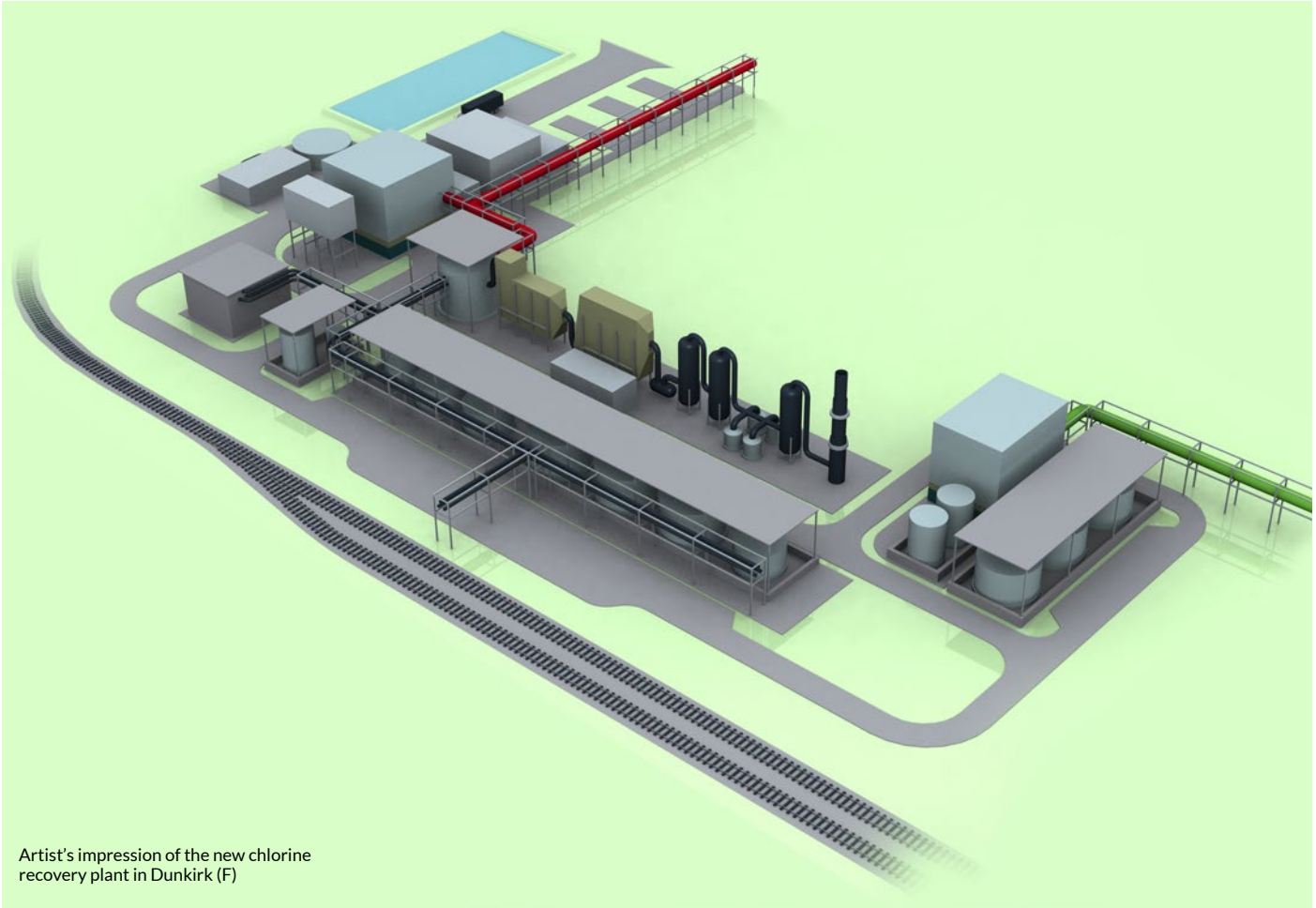
ENABLING MATERIALS RECOVERY

INDACHLOR®

IndaChlor®: sustainable solution for chlorinated production residues in Dunkirk

With IndaChlor®, Indaver is setting up a new treatment facility in Loon-Plage, in the port of Dunkirk in France, for recovering chlorine from production residues. The new plant has a capacity of 40,000 tonnes and will treat the residues to recover chlorine in the form of chloric acid. Chloric acid is used in the chemical, petrochemical, metallurgy and food industries. In a perfect example of industrial symbiosis, Ecophos, a food phosphates producer and a neighbouring company of IndaChlor®, will use the chloric acid in its production process. It will be supplied directly via pipelines. The energy created by IndaChlor's® treatment process will be supplied via a pipeline to another neighbouring company. Construction will start in 2017, and the plant will be operational by the end of 2018.

▶ ***Click here*** *to watch the video*



Artist's impression of the new chlorine recovery plant in Dunkirk (F)

ENABLING MATERIALS RECOVERY

OPTIMISING INFRASTRUCTURE AT INDAVER ARP

Acid Recovery Plant in the Netherlands

Since 2000, Indaver has been recovering hydrochloric acid from three of Tata Steel's pickling tanks in IJmuiden, the Netherlands. This is done at a dedicated hydrochloric acid recycling plant (ARP). After the steel plates have been rolled, hydrochloric acid is used to remove rust. ARP oxidises the contaminated pickling liquid in a process that produces regenerated hydrochloric acid and iron oxide. These are then reused as a raw material in Tata's production process.

In 2015, Tata Steel extended the contract with Indaver once again. In 2016, the first year of the new contract, ARP focused on further optimisation of the business automation and the infrastructure. To optimise process automation, we replaced hardware and updated software. We closed all of the open pipe sections and everything is now collected in an extra tank and sent to a waste water treatment plant. This measure provides additional soil protection on the premises.

To optimise the infrastructure, we reconstructed the oxide-loading bays and drainage channels and built a new office building. The latter provides a much-needed workplace and meeting room for subcontractors in which they can prepare their activities properly and safely.

Life cycle analysis reviewed

At the end of 2016, we reviewed our life cycle analysis of CO_2 emission reduction. Subsequent to the review, we can conclude that Indaver ARP's CO_2 footprint has reduced significantly from 10,000 tonnes of CO_2 avoided per year to over 50,000 tonnes of CO_2 avoided!

ENABLING MATERIALS RECOVERY

COMPOSTING AND DIGESTING VEGETABLE, GARDEN, AND FRUIT WASTE

Vegetable, Garden and Fruit Waste Digesting and Composting at Bio Power Alphen (NL)

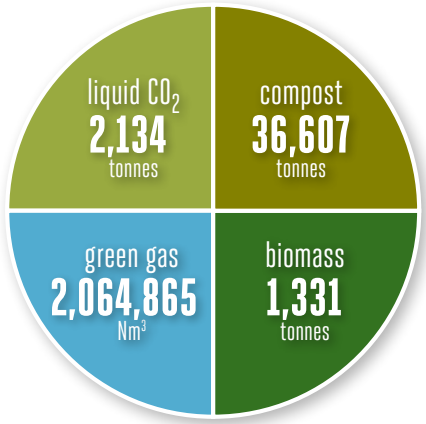
VGF waste provides four sustainable products

Bio Power Alphen is Indaver's cutting-edge VGF digester. When developing this facility, we drew on the experience of operating EcoFuels. The VGF waste comes from municipalities in the wider area. We recover these four valuable products from it, closing the materials loop in the process.

- **Compost:** a natural soil improver which replaces fossil peat or fertiliser.
- **Biomass:** a feedstock for energy generation which replaces fossil fuel.
- **Green Gas:** wet organic residue is digested into biogas, which is reprocessed into green gas. This green gas is of a very high quality and can therefore replace fossil natural gas.
- **Liquid CO_2:** CO_2 is released when biogas is refined into green gas. This is compressed into liquid CO_2, which can be used to stimulate plant growth in greenhouse farming among other things.

Certified best in class

From the outset in 2014, Bio Power Alphen has met the highest standards, and in 2016 the range of products for which we received certification expanded. This innovative anaerobic digestion facility has NTA 8080 certification for compost and biomass. The NTA 8080 certificate guarantees that products have sustainable origins. In the summer of 2016, the production of green gas through Bio Power was recognised as sustainable, and the certificate for liquid CO_2 production followed just six months later.



Providing green fuel

In 2016, Indaver in the Netherlands began working with PitPoint clean fuels to supply green gas as transport fuel. In March 2016, PitPoint opened a CNG filling station in Alphen aan den Rijn to provide vehicles from the municipal waste collection service with green gas from our anaerobic digestion facility.

In February 2016, EcoFuels, the energy supplier Greenchoice, and PitPoint signed off on an agreement for the production of green gas to the PitPoint filling stations.

Composting vegetable, garden and fruit (VGF) waste in Aalst (B)

The construction of the WIPS VGF composter has begun. In June 2016 WIPS (Indaver/Suez joint-venture) received the environmental license for the new composting plant in Aalst. WIPS has been running composting for the intermunicipal association 'ILvA' since 2001. The compost will be produced from around 28,000 tonnes of VGF waste a year, and will be sold as a soil improver in Belgium and abroad. In the application, Indaver took into account recommendations from the local area to limit the impact on the environment, and added a closed biofilter and a higher chimney to the construction plans. The plant itself is a tunnel composter in which the VGF waste will be composted for two weeks with a five-week maturation period. At the end of this process it will be sieved to obtain high-quality compost bearing the VLACO-quality control certificate. The plant is expected to open in autumn 2017.

ENABLING MATERIALS RECOVERY

IMPROVED FLUORESCENT LAMP RECYCLING

Indaver Relight – Improving fluorescent lamp recycling in Belgium

Indaver's Relight facilities in Doel, Belgium, treat all mercury-containing lamps which are collected selectively in Belgium, half the fluorescent lamps, low-energy light bulbs and other gas discharge lamps collected in the Netherlands, and a third of those collected in France. All together it accounts for around 30 million lamps a year. Up to 95% of the lamps is recycled, especially glass and metals which, cleared of mercury, are reused in the manufacture of new lamps or in the metal recycling industry. This is a fine example of the closed loop.

IndaTube: treatment of linear fluorescent tubes

Indaver has been treating linear fluorescent lamps with IndaTube since 2015. It recovers fluorescence powder, lime glass and the caps from the lamps. IndaTube removes the fluorescence powder more efficiently and extracts as many (environmental) pollutants as possible from the fractions.

The mercury is evaporated and converted into gaseous mercury in the IndaTube furnace. All the process air passes through an activated carbon filter which traps the mercury. With IndaTube, Indaver is able to keep the mercury concentration in the fractions structurally below the new and more stringent European limits.

Cut-sieve unit

The rest of the fluorescent lamps, low-energy lightbulbs and other mercury vapour lamps are treated in the cut-sieve unit. The lamps are first crushed by a crusher. A drum magnet separates the ferrous fraction. Afterwards, a sieve separates the non-ferrous fraction, plastics, glass and fluorescent powders.

Rare earth metals

The fluorescent powders are stored carefully. They contain rare earth metals, which are expensive raw materials used for new technologies. Indaver has contacts with other companies to assist with the recovery of rare earth metals.

Safety first

To prevent mercury or mercury vapours from entering the work areas, the treatment units are completely closed off; the processed air is extracted and purified. The glass and metals are post-heated, if necessary, to vaporise the mercury.

The employees at Indaver Relight measure the mercury concentrations continuously to ensure that they do not exceed the ceiling limit.

▶ *Click here to watch the video*

GATEKEEPER FOR THE CIRCULAR ECONOMY

PROTECTING MATERIALS LOOPS TO KEEP SOCIETY SAFE AND HEALTHY

Part of our role is to keep the materials cycle clean and safe. Our focus is on recovery, but not all components in waste can be recovered for reuse. When they are potentially harmful, they need to be taken out of the circular economy/materials cycle. This is why Indaver provides the "Safe Sink Guarantee": we destroy unrecoverable elements and capture the remaining potentially hazardous components in our high-tech final treatment facilities, thus removing them from the product chain. Our aim is to make sure they cannot cause any adverse effects – now or in the future.

If hazardous components cannot be recovered for good and safe use, they are destroyed in special rotary kilns.

This is done through a combination of high temperature, turbulence and time, resulting in homogenous and complete combustion. Extensive flue gas filtering and washing ensures clean emissions. The residue left behind by this complex process is further treated in Indaver's physicochemical installations.

Via a wet or dry chemical process, heavy metals and other remaining hazardous components are neutralised and permanently immobilised. The final product is then transported to Indaver's own landfill, where it is kept under special conditions. The landfill is carefully constructed, layer by layer, until completely filled and capped.

Measurements are performed throughout the process to verify that all hazardous components have indeed been incinerated or permanently immobilised. All waste materials are analysed upon arrival at the site, emissions are closely monitored and the results of the waste treatment process are also systematically checked.

After all, Indaver doesn't compromise on sustainability. Our Safe Sink warranty keeps both the environment and the circular economy clean and safe.

▶ ***Click here** to watch the video about our Safe Sink warranty*

Safe sink for hazardous waste

We seek to be as sustainable as possible in our own activities. We avoid the unnecessary use of virgin raw materials, and monitor our processes with an eye to efficiency and reducing wastage. We measure our inputs and outputs stringently, and monitor the make up of both our emissions and our residues very carefully. We monitor so carefully because we want to keep the environment clean and safe. You can rest assured that we react immediately when emissions seem higher than expected. Furthermore, such an in-depth understanding helps us to know what happens in our processes and and therefore how to reduce our impact and that of our customers on the environment.

Removing mercury

We also measure various specific hazardous substances. As an example, more than 99.9% of the mercury in our hazardous waste streams eventually ends up in the residues during the treatment in a rotary kiln. The residues, containing a non leachable and stable mercury compound are safely processed and stored on site. In 2016, out of 140,000 tons of waste, we captured more than 1,500 kg of mercury, thus removing it from the material cycle and by doing so, keeping the material cycle and the environment safe and clean.

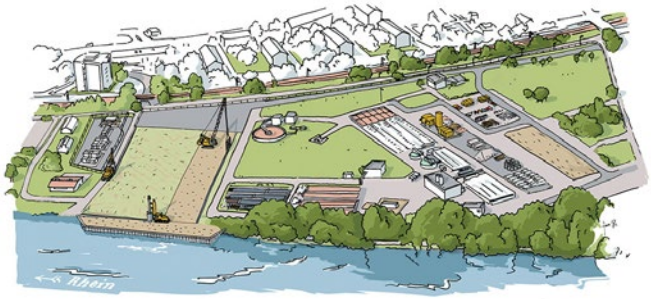
GATEKEEPER FOR THE CIRCULAR ECONOMY

REMEDIATION PROJECTS

Indaver is a major partner in the remediation of several sites across Europe, including sites in Switzerland, France, and Germany.

Kesslergrube

Indaver is a major partner for the chemical and pharmaceutical industry in the Basel region. Apart from the running remediation projects in Bonfol (Switzerland) and Huningue (France), in 2016 a new project started at Kesslergrube, a former landfill in the German municipality Grenzach-Wyhlen, north of Basel, directly located on the bank of the Rhine river. Indaver is responsible for the disposal of the seriously contaminated waste from this site. We expect waste deliveries until end of 2019.



© Kesslergrube

Bonfol

Since 2005, Indaver has been a major partner in the remediation of the landfill site for hazardous waste in the Swiss municipality of Bonfol. After an intensive phase of planning, permit procedures and construction works, the excavation of the landfill started in 2010. Indaver is responsible for the pre-treatment, the logistics and the thermal treatment of the contaminated material.
The chemical waste, deriving from the landfill itself, was treated in the incineration plants of Indaver, while the contaminated soil from the bottom of the landfill is shipped to the Netherlands for thermal desorption.
Step by step, the project is coming to an end now.

In 2016, another 28,000 tonnes of chemical waste have been disposed of at the Indaver plants, and the last train with waste left the site in October 2016. In total, Indaver took 206,000 tonnes of chemical waste from this project over a period of 6.5 years. At the moment, the shipments of contaminated soil are still running.

In parallel, the infrastructure (housings) and all technical equipment are being decontaminated and dismantled if not needed any more. The decontamination grade is checked very thoroughly with wipe tests of the surfaces.

GATEKEEPER FOR THE CIRCULAR ECONOMY

INVESTIGATING LANDFILL CAPACITY

Belgium

Landfill disposal is the last option in sustainable waste management, but it is still necessary for several types of waste that cannot be put to good use or treated thermally. As a result, we need to ensure that Indaver has sufficient landfill capacity, and looks for innovative solutions in this area. Specifically, we are considering our options as regards making optimum use of the space between the landfill sites in Antwerp and the adjacent landfill sites of Hooge Maey and Amoras.

Antwerp

The Netherlands

Indaver manages three landfill sites in the Netherlands. Two of them, Koegorspolder in the Zeeland province and Derde Merwedehaven in the South-Holland province, are closed to landfill waste. Only the Noord- en Midden-Zeeland waste disposal site is still open. Indaver continues to invest in all three landfill sites.

The final closure of the former Koegorspolder landfill site took place in 2016, and the necessary preparations have been made to give the site a new purpose. Indaver is currently discussing transfer of the site and long term after-care with the Zeeland province.

Derde Merwedehaven has been closed since 2013. In 2016 Indaver reached an agreement on the final closure plan for the landfill and the definitive landscape design for the Merwedeheuvel. Consultations were held with local residents, representatives from the municipalities of Dordrecht and Sliedrecht and from the province of South Holland. The tender for the final closure and recreational facility has also been prepared and a contractor is being sought.

The current landfill capacity for Noord- en Midden-Zeeland is almost full. Indaver is therefore investing in setting up a new phase. A good base liner is necessary to prevent rainwater running through the waste and into the groundwater. Drainage systems remove the leachate and a water purification plant purifies it. It is then pure enough to be released on the surface water. With this new phase the continuity of our service provision is guaranteed for five years. At the same time, we ensure that the final closure of the oldest phase of this landfill site, i.e. where it was first landfilled, is safe and sustainable in compliance with the license.

Derde Merwedehaven

MINIMAL IMPACT ON AIR, WATER, AND SOIL

USING TECHNOLOGY TO LIMIT IMPACT ON THE ENVIRONMENT

Indaver continuously strives for the best technology to treat complex and ever changing waste streams with maximum recovery of energy and materials. We develop new and innovative technologies to limit our impact on the environment.

We seek to be as sustainable as possible in our own activities. We avoid the unnecessary use of virgin raw materials, and monitor our processes with an eye to efficiency and reducing wastage.

We measure our inputs and outputs stringently, and monitor the make up of both our emissions and our residues very carefully. We monitor so carefully because such an in-depth understanding helps us to know and therefore reduce and mitigate our own impact on the environment.

Air

Indaver wants to keep the impact of its operations on people and the environment as low as possible. We are investing in new technologies and methods in order to further limit our air emissions.

▶ *The environmental results of our key facilities can be found on pages 51-63*

Soil

Indaver takes care that its activities have no impact on the soil. It takes the necessary preventive measures to prevent contamination of the soil and groundwater on its sites. Indaver ensures that waste is safely disposed of at its landfill sites.

▶ *You can read more about how we safe-guard the soil on page 64*

Water

Indaver uses water frugally. It invests in new technologies and methods in order to further reduce its water consumption and its impact on the environment.

▶ *See page 65 for more information.*

ROTARY KILNS ANTWERP

EMISSIONS AND ENVIRONMENTAL IMPACT

1. Mass balance

IN

Waste (*)	136,155	tonnes
Energy		
Heating oil	1,020	tonnes
Steam	143,287	GJ
Electricity	22,144	MWh
Flue gas cleaning additives		
CaO-quicklime	687	tonnes
NaOH	2,201	tonnes
Absorbent for dioxins and heavy metals	5	tonnes
Chalk	3,663	tonnes
TMT	55	tonnes
$FeCl_3$	410	tonnes
DeNOx reagent	353	tonnes
Water		
Mains water (**)	224,478	m^3
Ground water (**)	326,351	m^3
Reused water (**)	101,138	m^3

OUT

Emissions to atmosphere		
Flue gases	967,069,843	Nm^3
Energy		
Energy	1,002,626	GJ
Water discharged		
Waste water (**)	161,951	m^3
Residual products		
Bottom ash	22,493	tonnes
Fly ash and boiler dust	3,513	tonnes
Waste water purification residues (**)	9,744	tonnes

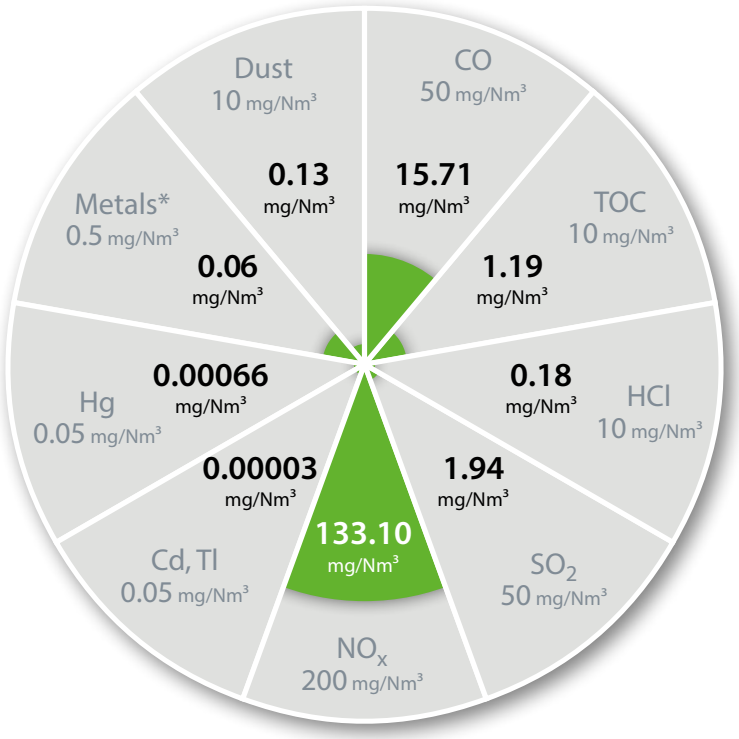
(*) Waste processed in the rotary kilns, includes lining material and waste oil, used instead of other primary materials.

(**) Calculated value

ROTARY KILNS ANTWERP

EMISSIONS AND ENVIRONMENTAL IMPACT

2. Performance relative to emission limit

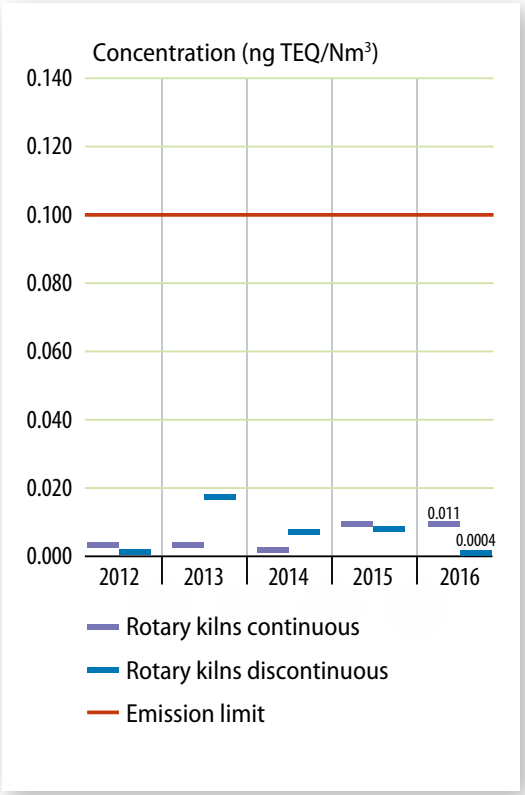


Daily average standard unless otherwise stipulated in environmental licence

Performance 2016

(*) Sum of Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V, Sn

3. Dioxin measurements



Dioxin pollutant volume = 4.9 mg TEQ (in normal conditions)

4. Volume of pollutants

Dust	0.1
CO	15.2
TOC	1.1
HCl	0.2
SO_2	1.9
NO_x	130.1
Cd, Tl	0.00003
Hg	0.00064
Metals*	0.05843

* Sum of Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V, Sn

Volumes of pollutants from contaminated components (in tonnes)

ROTARY KILNS BIEBESHEIM

EMISSIONS AND ENVIRONMENTAL IMPACT

1. Mass balance

IN

Waste (*)	131,355	tonnes
Energy		
Heating oil	423	tonnes
Waste oil/solvents (*)	864	tonnes
Electricity	22,891	MWh
Flue gas cleaning additives		
NaOH (50%)	5,366	tonnes
Adsorbent for dioxins and heavy metals	195	tonnes
Na -sulfide / -polysulfide	466	tonnes
DeNOx reagent	66	tonnes
Water		
Mains water	24,779	m^3
Groundwater	160,667	m^3
Process water	18,771	m^3

OUT

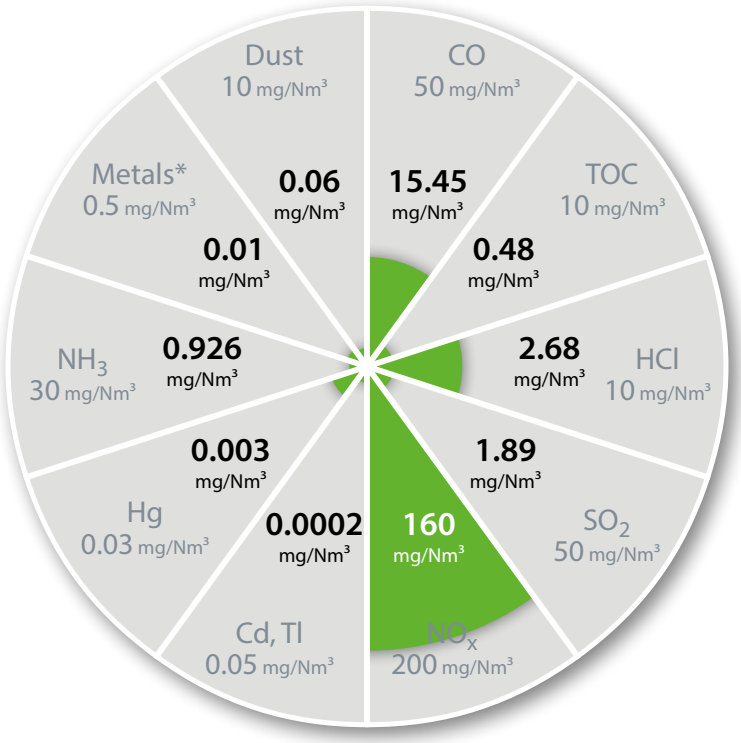
Emissions to atmosphere		
Flue gases	669,838,249	Nm^3
Energy		
Energy	766,898	GJ
Water discharged		
Waste water	63,112	m^3
Residual products		
Bottom ash	27,932	tonnes
Fly ash	8,034	tonnes

(*) Total volume waste processed in rotary kilns:
132,219 tonnes = 131,355 tonnes + 864 tonnes

ROTARY KILNS BIEBESHEIM

EMISSIONS AND ENVIRONMENTAL IMPACT

2. Performance relative to emission limit

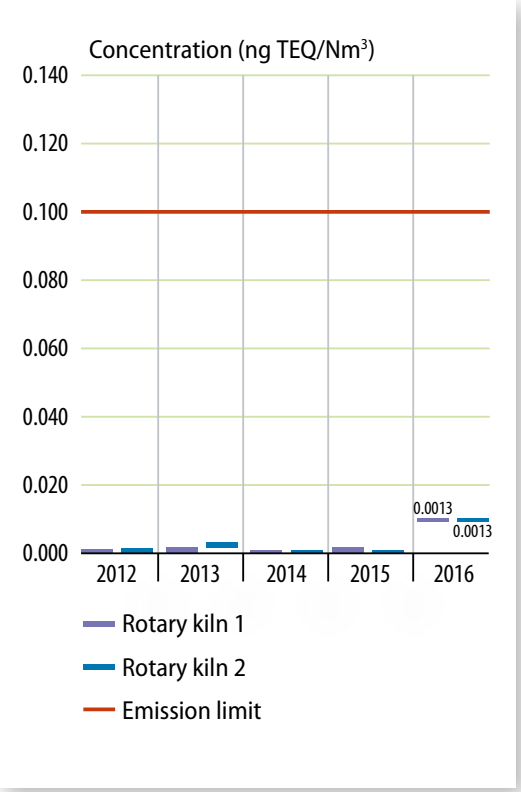


Daily average standard unless otherwise stipulated in environmental licence

Performance 2016

(*) Sum of Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V, Sn

3. Dioxin measurements



Dioxin pollutant volume = 0.9 mg TEQ (in normal conditions)

4. Volume of pollutants

Dust	0.0397
CO	10.3318
TOC	0.3223
HCl	1.7939
SO_2	1.2643
NO_x	106.7818
Cd, Tl	0.0001
Hg	0.0018
NH_3	0.6187
Metals*	0.0096

* Sum of Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V, Sn

Volumes of pollutants from contaminated components (in tonnes)

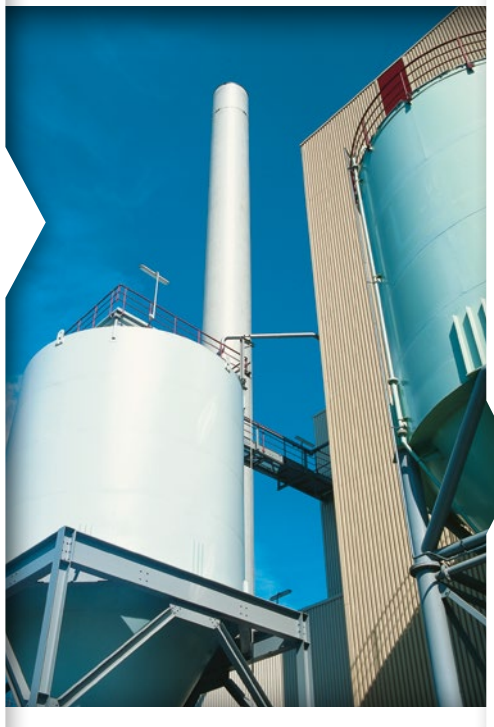
ROTARY KILNS HAMBURG

EMISSIONS AND ENVIRONMENTAL IMPACT

1. Mass balance

IN

Waste (*)	137,253	tonnes
Energy		
Heating oil	259	tonnes
Waste oil/solvents (*)	188	tonnes
Steam (on-site production)	469,023	GJ
Electricity (purchase)	21,240	MWh
Flue gas cleaning additives		
Lining material (KSP, sand, glass)	15	tonnes
Limestone	944	tonnes
Adsorbent for dioxins and heavy metals	378	tonnes
DeNOx reagent	256	tonnes
Water		
Mains water	4,336	m^3
Surface water	270,902	m^3
Rain and process water	14,900	m^3
Demineralised water	23,607	m^3



OUT

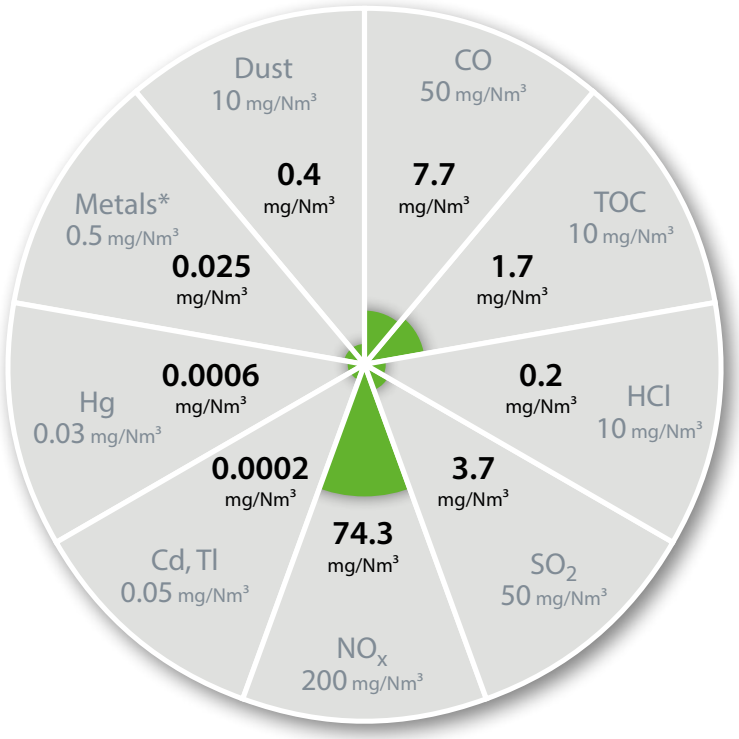
Emissions to atmosphere		
Flue gases	771,975,458	Nm^3
Energy		
Energy (Steam external use)	789,527	GJ
Water discharged		
Waste water	13,859	m^3
Residual products		
Bottom ash	36,657	tonnes
Fly ash and boiler dust	4,080	tonnes
Gypsum	1,388	tonnes

(*) Total volume waste processed in rotary kilns:
137,441 tonnes = 127,253 tonnes + 188 tonnes

ROTARY KILNS HAMBURG

EMISSIONS AND ENVIRONMENTAL IMPACT

2. Performance relative to emission limit

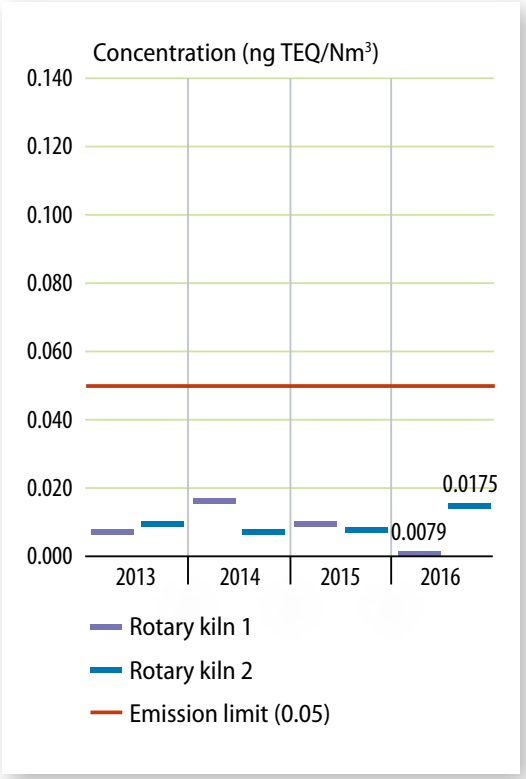


Daily average standard unless otherwise stipulated in environmental licence

Performance 2016

(*) Sum of Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V, Sn

3. Dioxin measurements



Dioxin pollutant volume = 9.9 mg TEQ (discontinuous measurements only)

4. Volume of pollutants

Dust	0.29
CO	5.98
TOC	1.31
HCl	0.15
SO_2	2.86
NO_x	57.34
Cd, Tl	0.00015
Hg	0.00046
Metals*	0.02

* Sum of Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V, Sn

Volumes of pollutants from contaminated components (in tonnes)

FLUIDISED BED INCINERATORS DOEL

EMISSIONS AND ENVIRONMENTAL IMPACT

1. Mass balance

IN

Waste	633,497	tonnes
Energy		
Heating oil	1,240	tonnes
Steam	125,819	GJ
Electricity	70,999	MWh
Flue gas cleaning additives		
Quicklime	9,003	tonnes
NaOH	334	tonnes
Adsorbent for dioxins and heavy metals	598	tonnes
DeNOx reagent (Carbamine)	1,046	tonnes
Incinerator additives		
Sand	3,730	tonnes
Water		
Mains water	321,879	m^3
Reused water	20,809	m^3

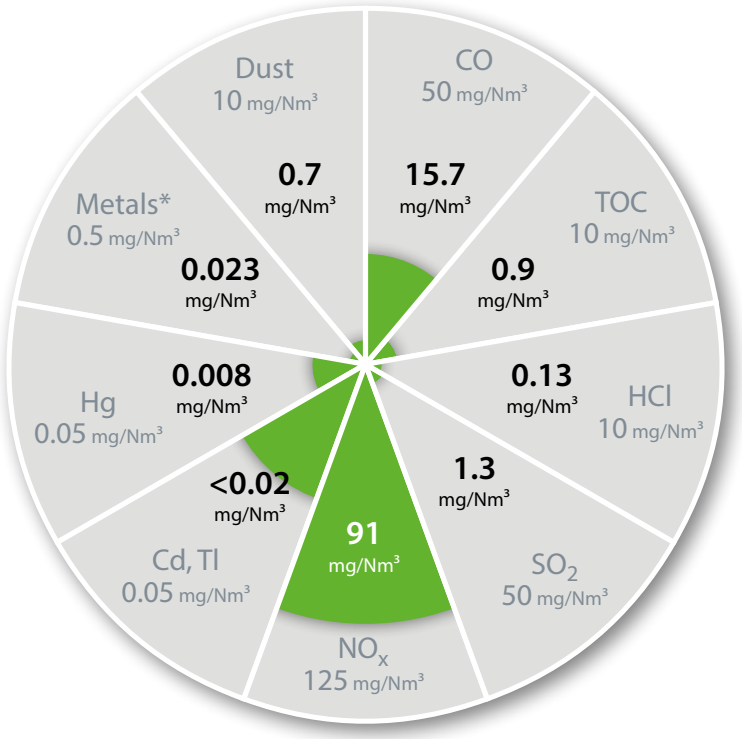
OUT

Emissions to atmosphere		
Flue gases	2,504,260,000	Nm^3
Energy		
Energy	4,261,527	GJ
Water discharged		
Waste water	0	m^3
Residual products		
Bottom ash	43,237	tonnes
Electrostatic filter and boiler ash	96,449	tonnes
Flue gas cleaning residue	15,262	tonnes
Scrap metals	2,070	tonnes

FLUIDISED BED INCINERATORS DOEL

EMISSIONS AND ENVIRONMENTAL IMPACT

2. Performance relative to emission limit

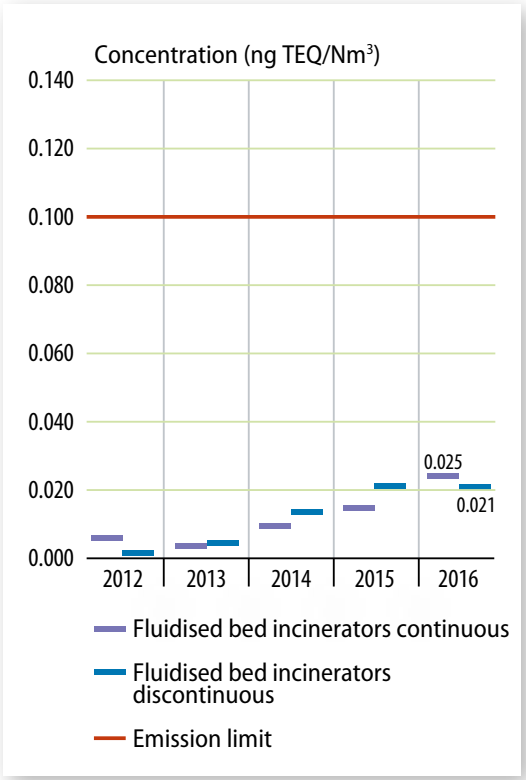


Daily average standard unless otherwise stipulated in environmental licence

Performance 2016

(*) Sum of Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V, Sn

3. Dioxin measurements



Dioxin pollutant volume = 58.4 mg TEQ (in normal conditions)

4. Volume of pollutants

Dust	1.7
CO	39.4
TOC	2.3
HCl	0.3
SO_2	3.2
NO_x	228.7
Cd, Tl	< 0.039
Hg	0.020
Metals*	0.057

* Sum of Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V, Sn

Volumes of pollutants from contaminated components (in tonnes)

GRATE INCINERATORS DOEL

EMISSIONS AND ENVIRONMENTAL IMPACT

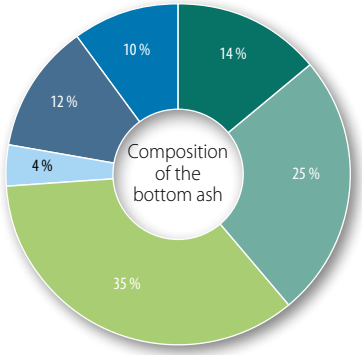
1. Mass balance

IN

Waste	407,394	tonnes
Energy		
Heating oil	491	tonnes
Steam	49,497	GJ
Electricity	44,690	MWh
Flue gas cleaning additives		
Quicklime	2,056	tonnes
Limestone	1,863	tonnes
Adsorbent for dioxins and heavy metals (active carbon + Dioxorb)	245	tonnes
DeNOx reagent (Carbamine)	1,229	tonnes
Water		
Mains water	156,619	m^3
Reused water (*)	17,306	m^3

OUT

Emissions to atmosphere		
Flue gases	2,245,283,654	Nm^3
Energy		
Energy	3,479,661	GJ
Water discharged		
Waste water	0	m^3
Residual products		
Bottom ash (**)	87,655	tonnes
Boiler ash	7,304	tonnes
Flue gas cleaning residue	8,419	tonnes
Gypsum	945	tonnes



Suitable for reuse	**74%**
ferrous/non-ferrous fractions	14%
granulates	25%
sand fractions	35%
Storage of residual streams	**26%**
weak ferrous fractions	4%
filtercakes	12%
residual fractions	10%

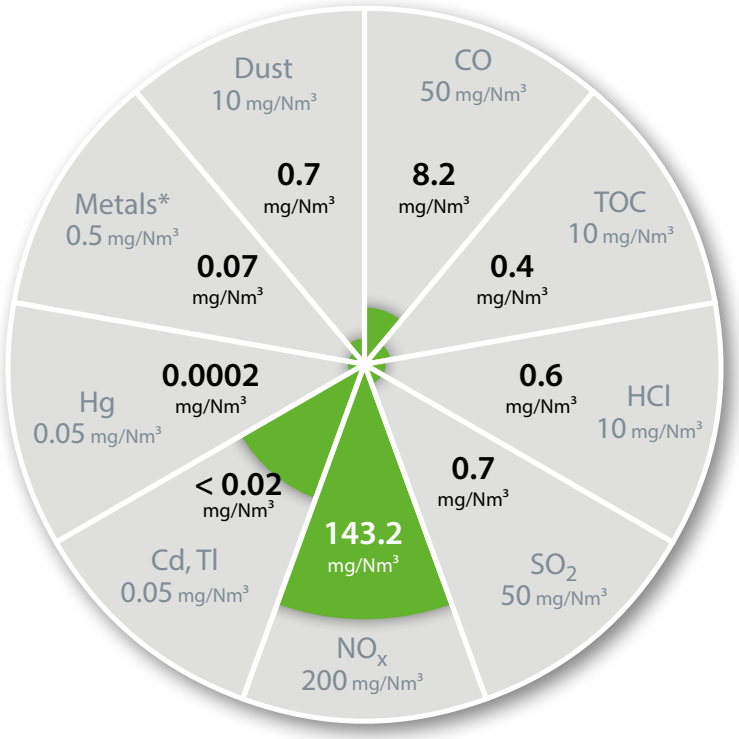
(*) Calculated value

(**) Composition of the bottom ash: see chart

GRATE INCINERATORS DOEL

EMISSIONS AND ENVIRONMENTAL IMPACT

2. Performance relative to emission limit

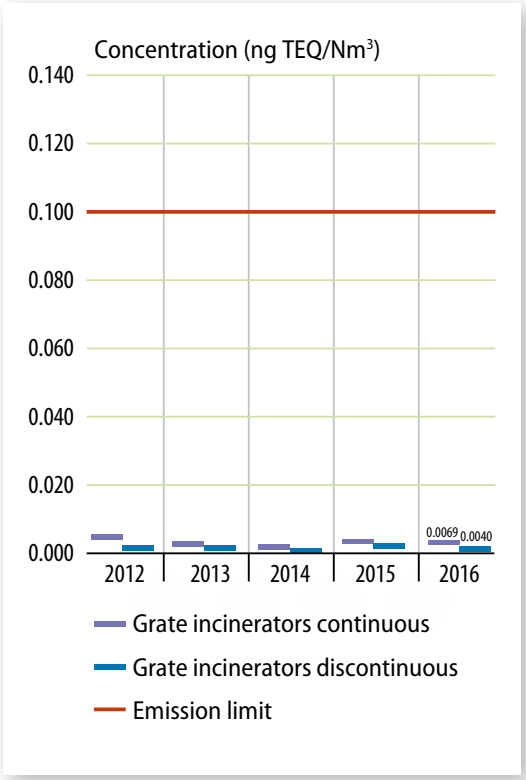


Daily average standard unless otherwise stipulated in environmental licence

Performance 2016

(*) Sum of Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V, Sn

3. Dioxin measurements



Dioxin pollutant volume = 13.4 mg TEQ (in normal conditions)

4. Volume of pollutants

Dust	1.5
CO	18.3
TOC	0.9
HCl	1.3
SO_2	1.7
NO_x	321.6
Cd, Tl	< 0.04491
Hg	0.00047
Metals*	0.162721

* Sum of Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V, Sn

Volumes of pollutants from contaminated components (in tonnes)

GRATE INCINERATOR MEATH

EMISSIONS AND ENVIRONMENTAL IMPACT

1. Mass balance

IN

Waste	229,122	tonnes
Energy		
Heating oil	290,405	l
Electricity	18,037	MWh
Flue gas cleaning additives		
Quicklime	2,653	tonnes
Hydrated lime	1,939	tonnes
Absorbent for dioxins and heavy metals	108	tonnes
Expanded Clay	213	tonnes
DeNOx reagent	395	tonnes
Water		
Groundwater	59,256	m^3

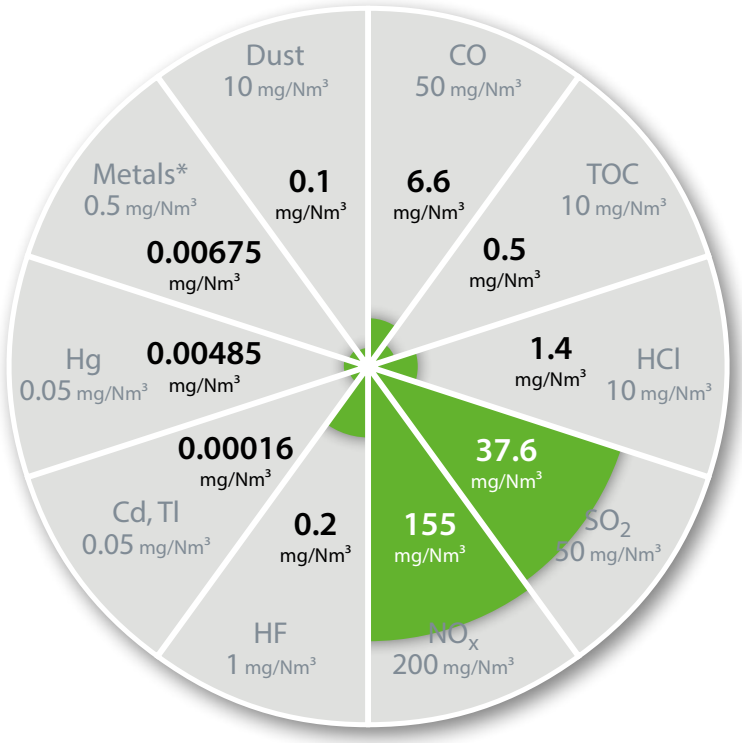
OUT

Emissions to atmosphere		
Flue gases	1,424,683,764	Nm^3
Energy		
Energy	1,890,634	GJ
Water discharged		
Waste water	0	m^3
Residual products		
Bottom ash (incl. ferro)	39,150	tonnes
Boiler ash	1,929	tonnes
Flue gas cleaning residue	9,266	tonnes

GRATE INCINERATOR MEATH

EMISSIONS AND ENVIRONMENTAL IMPACT

2. Performance relative to emission limit

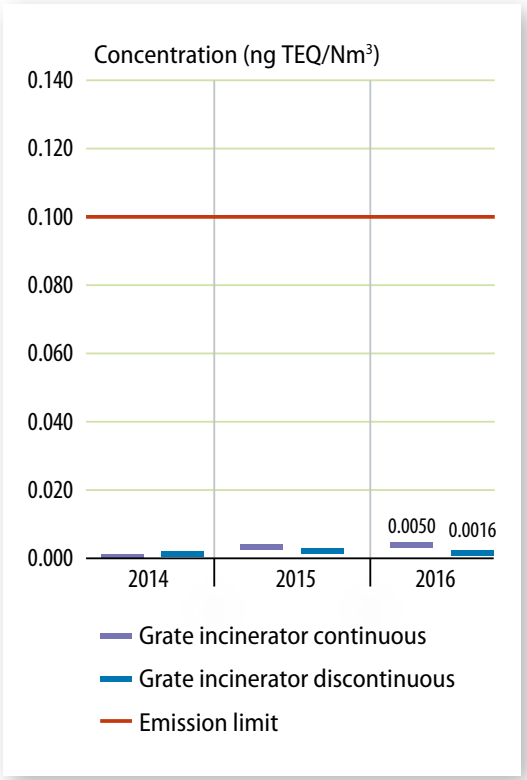


Daily average standard unless otherwise stipulated in environmental licence

Performance 2016

(*) Sum of Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V, Sn

3. Dioxin measurements



Dioxin pollutant volume = 4.9 mg TEQ (in normal conditions)

4. Volume of pollutants

Dust	0.11
CO	9.21
TOC	0.71
HCl	2.01
SO_2	53.30
NO_x	218.88
Cd, Tl	0.0002
Hg	0.01
Metals*	0.01

* Sum of Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V, Sn

Volumes of pollutants from contaminated components (in tonnes)

ARP IJMUIDEN

EMISSIONS AND ENVIRONMENTAL IMPACT

Mass balance

IN

Waste acid	152,818	tonnes
Energy		
Natural gas	11,183,307	m^3
Electricity	5,465,852	kWh
Additives		
Fresh acid	3,209	tonnes
Compressed air	180	m^3
Water		
Industrial water	115,457	m^3
Acid rinse water	312,015	m^3
Demineralised water	8,926	m^3
Mains water	255	m^3

OUT

Regenerated acid	157,943	tonnes
Emissions to atmosphere		
Flue gases	180,772	Nm^3
Water discharged		
Waste water	305,173	m^3
Residual products		
Iron oxide	20,653	tonnes

MINIMUM IMPACT ON SOIL

SAFEGUARDING THE SOIL AGAINST CONTAMINATION

We prevent contamination of the soil and groundwater on our sites, and we ensure that waste is safely disposed of at our landfill sites.

Protecting the Soil

Indaver exercises stringent supervision at all sites to ensure compliance with all statutory provisions governing soil remediation. We adopt all the necessary preventive and technical measures to control the risk of soil and groundwater contamination:

- all our operations take place on **paved surfaces**.
- storage tanks are installed **on the surface**, fitted with containment walls and equipped with the necessary monitoring and alarm systems.
- with **regular checks** and comprehensive procedures we reduce the risks to an absolute minimum and are able to respond immediately to any anomalies.

In Belgium Indaver uses an **electronic leak detection system** to check whether the soil is sufficiently protected against the infiltration of waste. In Billigheim, Germany, there is a comprehensive monitoring system of the groundwater with onsite/offsite control wells where regular samples are taken.

We also ensure that there are adequate financial reserves for **final capping and aftercare** once a landfill site is no longer in use.

MINIMUM IMPACT ON WATER

LIMITING OUR IMPACT IN TERMS OF BOTH INPUTS AND OUTPUTS

At Indaver, we have been monitoring our water consumption and have been working on reducing our consumption of primary water sources for many years. Our recent work on reducing primary consumption of water on our Antwerp site is a good example of our commitment to reducing water consumption.

Tracking consumption

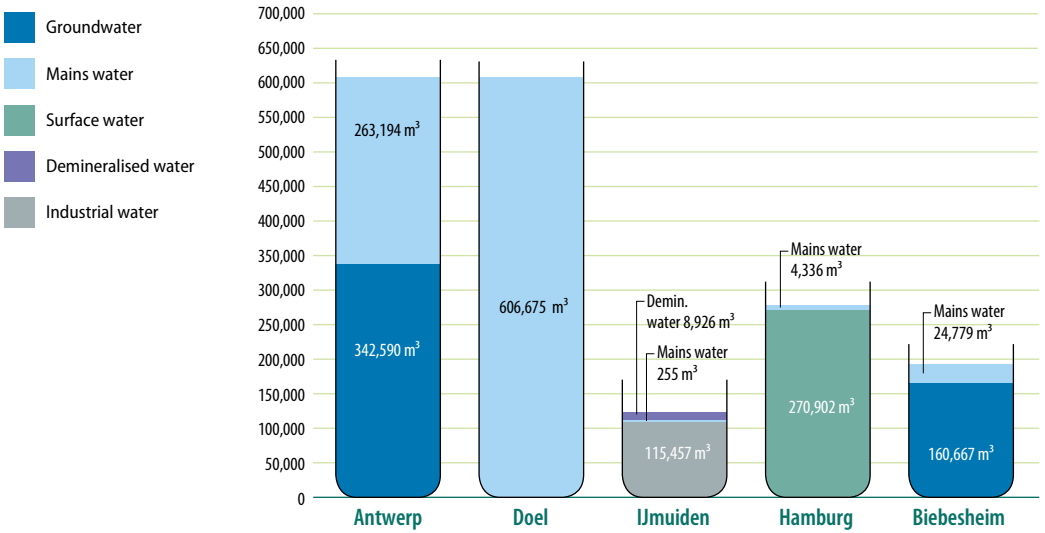
At Indaver, we use water frugally and keep track of our primary and secondary water consumption, as can be seen in the adjacent graph.
We invest in new technologies and methods in order to further reduce our impact on the water environment.

Replacing groundwater with recycled water in Antwerp

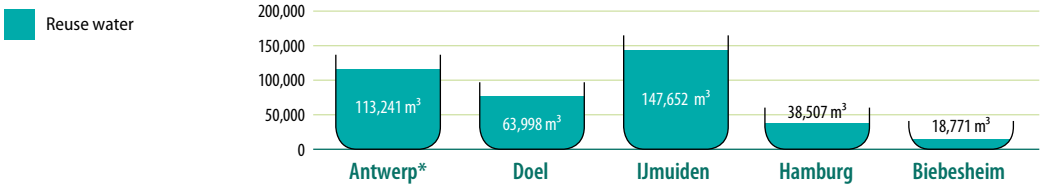
Our Antwerp site uses around 600 million litres of water each year, primarily mains water and groundwater. Therefore we have been working on reducing our consumption of primary water sources for years. Until now we achieved this by buffering and re-using specific waste water streams such as potentially contaminated rain water, run-off water of the landfill, rinsing water of the dioxin filters, etc.
Together with Amoras, a neighbouring company, the Antwerp site has begun a project to further reduce the consumption of groundwater. Amoras treats dredging spoils and stores the dewatered filter cakes in the former sand mining pit next to the Antwerp site. The Amoras waste water runs via the canal dock into the Schelde. Indaver intends to divert part of this flow and use it on the Antwerp site. Together with the expansion of our grey water network on site Indaver will be able to supplement approximately 50% of our groundwater requirement, thus further limiting our ecological footprint.

Water consumption per site 2016

Primary water consumption



Secondary water consumption



(*) including estimation for a specific part of the flow

MONITORING THE QUALITY AND SAFETY OF EXTERNAL WASTE TREATMENT CENTRES

We offer our customers the most ecologically and economically responsible solution for their waste. We either treat the waste ourselves in our own facilities, or have it treated in external treatment centres.

Treatment by third parties must be to the same standards as in our own facilities, and we monitor the external treatment centres closely to ensure that this is the case.

What are external treatment centres?

Indaver currently has a network of at least 500 external treatment centres in Europe to handle materials (waste and raw materials) from its customers. These range from very small, specific facilities (such as cleaning and repairing bins and large plastic containers) to very large, integrated enterprises (such as co-incineration plants with the associated pre-treatment platforms).

Why external treatment centres?

There are various reasons for treatment by third parties:

- External centres have more appropriate treatment technology, for treating gas cylinders, reconditioning drums or regenerating activated charcoal for example.
- To reduce transport costs, Indaver sometimes works jointly with local treatment centres. This is the case for instance for local treatment for specific foreign customers.
- An external centre can act as a backup in the event of maintenance work on Indaver facilities so as not to disrupt the regular supply and removal of waste.

Guarantee for the customer

Structured outlet management allows us to offer our customers the same guarantee for treatment of waste by third parties as for our own facilities. This is because Indaver checks that treatment is carried out in an environmentally safe manner, in accordance with local and EU legislation. We have set up special mechanisms for this purpose.

Qualification Guarantees (QG) must be available for all external treatment centres before an agreement is drawn up between Indaver and the outlet. This independent guarantee provides formal confirmation that the waste material can be accepted and treated by the external treatment centre. The guarantee varies according to the country or the region where the external treatment centre is based (e.g., EfB certificate – EntsorgungsfachBetrieb – in Germany, VLACO-certificate in Belgium). If there are no such guarantees, Indaver asks the treatment facility to complete a Pre- Qualification Questionnaire (PQQ). This confirms that it has the necessary licenses to be allowed to accept and treat specific waste.

In any processing route that Indaver views as critical, an additional 'QESH-approval' is required: 'Quality Environment Safety Health Approval'. An activity is considered critical if there is an elevated risk of contamination of the material chain or food chain, the existing legal framework is viewed as rather minimal and/or if it relates to specific critical waste streams (e.g. explosives, peroxides, radioactive waste, waste containing priority substances, etc.).

A 'QESH Approval' examines the applicable European and national waste legislation, Indaver's 'Best Practice Classification and Characterisation' procedure (BPCC), and applies our '10 Codes of good practice in waste management'. After this evaluation it is clear whether a particular critical activity can take place in the planned treatment centre. In certain cases an outlet's site will be subjected to a full audit.

REDUCING CO_2 EMISSIONS IN THE NETHERLANDS

CO_2 PERFORMANCE LADDER RAISES AWARENESS

13 CLIMATE ACTION

Every year Indaver provides information on what it is doing to raise awareness and reduce energy consumption within its organisation. The tool it uses for doing so, the CO_2 Performance ladder, is the benchmark for environmentally-aware businesses who want to use more sustainable business practices.

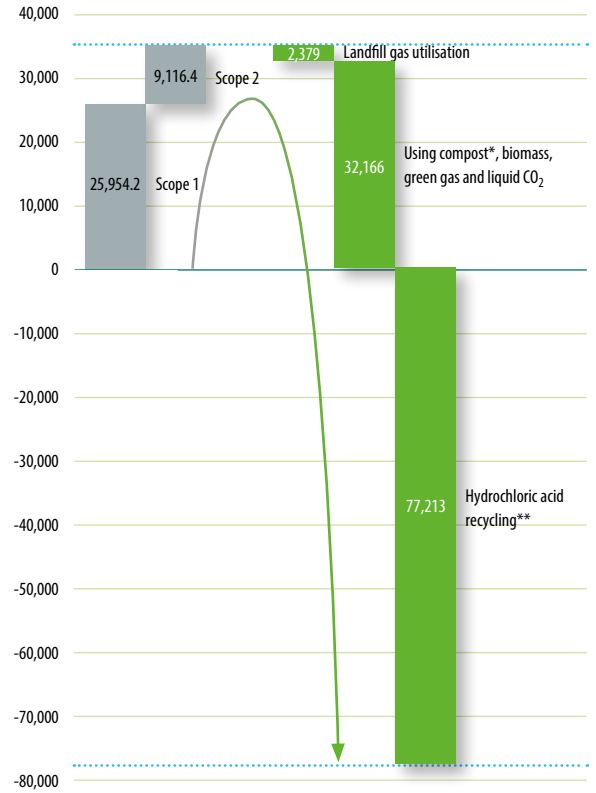
The use of the CO_2 Performance ladder leads to lower energy and materials costs as well as lower CO_2 emissions. The associated certificate is increasingly incorporated in tender processes.

Ambitious reduction of CO_2 emissions

Between 2014 and 2018, we plan to achieve a CO_2 reduction of 2% per tonne per year. This applies to both scope 1 (direct) emissions and scope 2 (indirect) emissions, with 2012 as the reference year. In 2016, we also worked on further reducing our energy consumption. The figures for that year (the 2016 CO_2-footprint) were validated and confirmed at the start of 2017. These confirm that Indaver is making significant savings on energy consumption.

CO_2-PRESTATIELADDER©

Reducing our carbon footprint (in tonnes CO_2) in The Netherlands 2016



CO_2 emissions, produced by Indaver in the Netherlands, are offset in excess by our recovery activities.

Scope 1: direct CO_2 emissions

Scope 2: indirect CO_2 emissions

CO_2 emissions(scope 1&2: extern gevalideerde data) (totale emissie: 35,071 tonnes)

Compensation (total: 111,758 tonnes)

* Utilization compost: calculated according to established method

** Avoided emissions: calculation based on emission factors (from literature)

INDAVER IN HAMBURG – CO_2 REDUCTION PROGRAM

The city of Hamburg leads the way in terms of climate policy and climate protection, demonstrated in its selection as European Green Capital in 2011. Business and industry have a key role to play in helping the city meet its ambitious goals as set out in its Action Plan.

Indaver in Hamburg has voluntarily participated in the CO_2-reduction program since its introduction in 2008, and renewed its commitment to the program in 2013. Indaver also implemented an energy management system, in accordance with the DIN EN ISO 50001 standards, to integrate energy management into its overall efforts to improve quality and environmental management. The CO_2-reduction program which will run until 2018, has resulted in the execution of at least one leading project for CO_2-reduction per year.

Since the re-signing of the program in 2013, Indaver in Hamburg has achieved a CO_2-reduction in the range of 2,000 tonnes per year. The automatic boiler cleaning system which was implemented on line 2 in August 2015 and on line 1 in January 2016 has played a significant role in achieving these reductions. The boiler efficiency has improved by 1-2%, and health and safety conditions during the maintenance of the boiler system have also improved.

In the next few years, the installation of a turbine with an electrical output of 0.9 MW, using part of the steam produced during the incineration process, will be the largest project for CO_2-reduction at Indaver in Hamburg. The turbine will be operational in 2019. We predict a potential reduction of another 2,000 tonnes CO_2 per year via this initiative. While most of the steam is currently used in the district heating network in Hamburg, some of the energy could be used in the future for power production, with only a minor effect on the steam supply. This co-generation will significantly increase the energy efficiency of the plant and reduce the purchase of power from the public network.

SUSTAINABILITY BEGINS AT HOME

CONSERVING RAW MATERIALS

We optimise our production processes to use fewer raw materials, and to replace scarce raw materials with those that are more readily available, or even with an alternative material such as waste.

Saving lime during the flue gas treatment process in Doel, Belgium

In our fluidised bed incinerators in Doel, we use lime, dioxorb, and sodium hydroxide to capture the pollutants from the flue gases that are produced as part of the incineration process. We analysed some residues from the incineration process and found that they still contained non-activated lime. The residues contained this non-activated lime as a result of the technology and related process limitations.

We predicted that we could reduce our lime consumption by lowering the minimum dosing rate and preventing exceedances in dosing. In order to do so, we installed raw gas measurements, which allow us to monitor the acid pollutants in the waste gases continuously, and then dose the lime according to a fixed minimum stoichiometric factor.

Each kilo of lime that we avoid using counts as a double saving: we consume less lime and produce fewer residues for transportation and treatment at the physico chemical treatment site in Antwerp.

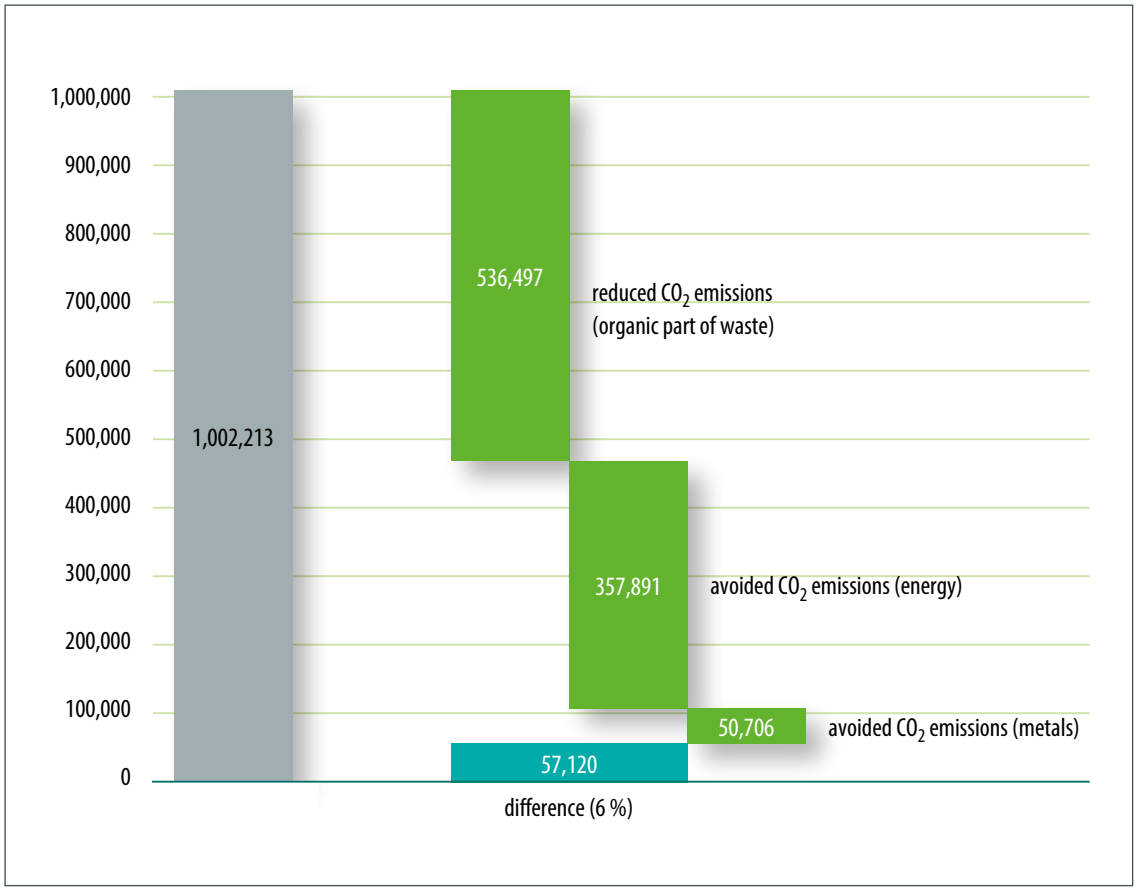
Study into limiting raw material consumption in rotary kiln incinerators

Several raw materials are used in the waste gas washing in the rotary kiln incinerators. The pH measurement is the most important parameter that influences raw material consumption.
Indaver is currently examining the relationship between the correct pH value and control system and the cost-effective use of raw materials.

Use of highly calorific waste in the firing of the rotary kiln incinerators

In addition the firing of the rotary kiln after a shut down requires litres of heating oil. A test set-up looks at how specific high calorific waste can be used as an alternative fuel. As these alternative fuels are burned at low temperatures, we can rely on only very specific waste streams with a low level of contamination. It is anticipated that approximately 50% of the primary fuel consumption, or around 600 tonnes of heating oil, can be substituted with waste.

DOEL AIMING TO BECOME CLIMATE-NEUTRAL



Indaver's Doel site strives to be climate neutral. By recovering energy Indaver avoids the need for CO_2 to be emitted elsewhere for generating energy with fossil fuels. Around one-half of the waste treated is biowaste and is therefore regarded as CO_2 neutral.

The calculations are based upon scientific methods:

- based upon the "methodological agreements made by the International Panel on Climate Change (IPCC) in the framework of the UN Convention of Climate Change"
- and executed by KU Leuven.

CO_2 emission in tonnes

avoided and reduced CO_2 emissions

difference

PROSPERITY

Indaver continues to demonstrate that achieving good results goes hand-in-hand with maintaining the highest environmental and safety standards.

CREATING VALUE

OUR VISION

At Indaver, value is an integral part of our vision for sustainable production and consumption practices within a circular economy. We understand that qualitative and quantitative value must be created and protected at each stage within the circular economy. As a waste management company, we play a crucial role here. We recover energy and high-quality materials from the waste that we treat while simultaneously protecting the food and materials chains from contamination. As we continue to remain a strong, profitable organisation, we also continue to offer continuity of service to our customers with our well-maintained, up-to-date facilities. In our focus on sustainable growth, we are supported by our shareholder, Katoen Natie, who encourages us to invest and facilitates our growth.

Over the last few years, Indaver has grown steadily. Whereas in the past, development had been quite focussed in Belgium, we are now achieving a turnover that is more balanced, with strong performance from Germany, Ireland, and the Netherlands also. Because of this growth, we're in an excellent position to offer trans-European services to our customers, a significant proportion of whom are multi-nationals operating in an increasingly globalised and interconnected economy. With our trans-European operation, we have the scale to offer our customers the best solution at the best price.

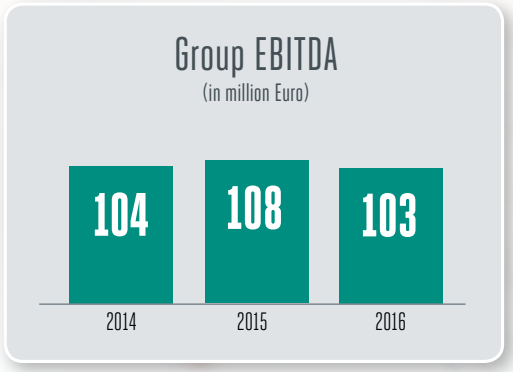
We have outstanding growth prospects in those services that are based on the drive towards the circular economy, and the accompanying goals of a cleaner and safer environment, high-quality recovery, and continued competitiveness for our customers. In order to respond to the challenge of transitioning to a circular economy, we have developed a growth model focussing on three priority areas: improving process efficiency; focusing on organic growth; fostering breakthrough innovation. Within the emerging circular economy, we have a particular role to play as a creator and protector of valuable materials. Our growth model ensures that while we continue to expand and to develop new services and technologies, we remain focussed on improving efficiencies within our core activities. In the regions where we operate and the companies we acquire, we always remain true to our own vision and values. Indaver continues to demonstrate that achieving good results goes hand-in-hand with maintaining the highest environmental and safety standards.

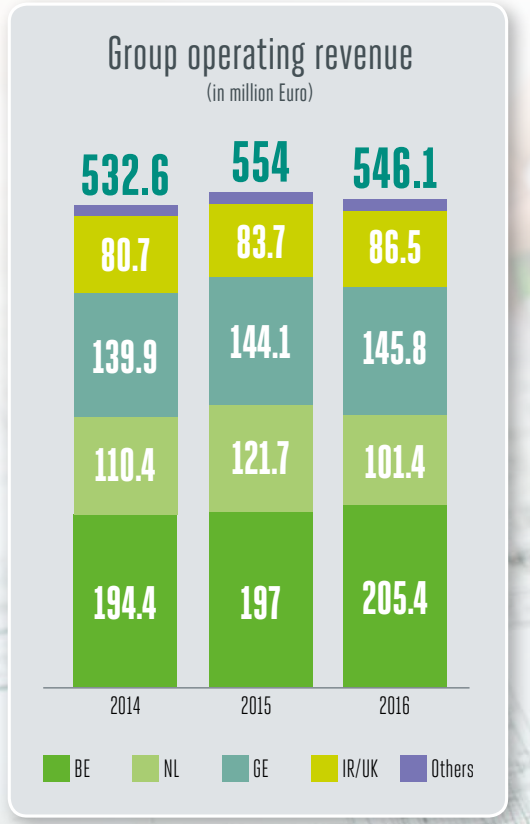
FINANCIAL FIGURES

Over the last three years, Indaver has remained stable in challenging economic conditions.

In 2016 Indaver achieved an operating revenue of 546.1 million euros and EBITDA of 103 million euros.

The financial results provide a solid platform to develop new investment and growth opportunities.





OUR MODEL FOR SUSTAINABLE GROWTH

FOCUSING ON OPERATIONS, GROWTH, AND INNOVATION

Here at Indaver, we focus on three areas of growth in order to create value, improve the services we deliver, and develop the business.

Our growth comes from knowledge and drive. Then, our well-established structure and methodology help us to seize opportunities, stay in control, and keep the momentum going.

1

Operational excellence

We're always looking for ways to improve existing Indaver processes, in order to improve our services and decrease costs. Some examples of our well-established structure and methodologies include quality management systems, Lean Six Sigma methodology, 5 steps project procedure, our Business Teams, and our International Operational Competence Centres.

2

Organic growth and acquisition

We endeavour to improve Indaver's presence in the market. One way we do this is through building and operating our own facilities and applying our own existing technologies, services and processes to new locations. A second approach is to acquire existing facilities and align them with our way of working. This way, we are able to offer our knowledge and service standards in more locations and to more customers. We increase our portfolio and thereby negotiation power in the market and we obtain economies of scale. Our growth is controlled. Acquisitions only take place when they fit with our strategy and don't jeopardize the future of our organisation.

3

Break-through innovation

We foster new technology and/or business models in order to stay aligned with changing customer requirements and increasingly stringent EU targets. We are interested in opportunities that align with our focus on developing the circular economy, which are feasible from a technological and economic point of view, and which take into account expected energy and material price developments. Any innovation is considered carefully to be sure that it is feasible, reliable, and affordable. We search and evaluate new opportunities in light of their fit with our strengths and our strategy.

DEVELOPMENTS ON THE ISLAND OF IRELAND

INVESTING IN SUSTAINABLE WASTE MANAGEMENT INFRASTRUCTURE

Cork

The Cork region in Southern Ireland has a long established need for waste treatment as there have been limited outlets for a number of years. Indaver submitted an application to the Irish planning authority in 2016 to develop a project in Ringaskiddy, Co. Cork. The infrastructure in question is a 240,000 tonnes per annum waste-to-energy facility (waste incinerator with energy recovery) for the treatment of household, commercial, industrial, non hazardous and suitable hazardous waste. Similar to Indaver's operational facility in Co. Meath and valued at €160 million, the proposed development in Ringaskiddy will treat non-recyclable waste as a resource, recovering electricity and other valuable materials from it. Using an indigenous source of energy, the facility will generate approximately 18.5 MW of electricity for export to the national electricity grid. This will be enough to supply the power needs of approximately 30,000 households. The application is currently at an advanced stage of the planning decision process.

Artist's impression of the waste-to-energy facility in Cork

Belfast

In response to the requirements identified by arc21, the waste management group representing six Councils to the east of Northern Ireland, the Becon Consortium has developed plans to co-locate a mechanical biological treatment (MBT) plant, an energy-from-waste (EfW) plant and a visitor centre near Belfast, Northern Ireland. The Becon Consortium was formed to pursue the opportunity created by arc21's public procurement for its residual waste treatment project. The company behind the Becon Consortium is Indaver (Northern Ireland) Ltd. The proposed infrastructure will complement existing recycling and composting facilities in Northern Ireland which process material collected by the arc21 councils.

At present, arc21's region accounts for 55% of all Northern Ireland's municipal waste. The technology proposed is part of the overarching solution to radically improve waste management in the arc21 area and is identified as part of the preferred mix of treatment solutions set out in the arc21 Waste Management Plan. The proposed development involves a £240m initial capital investment. It will divert up to 250,000 tonnes of waste from landfill per year, and it will supply 14MW of electricity to the national grid. The development of these facilities is subject to the completion of the ongoing arc21 procurement process, securing planning permission and the attainment of various regulatory permits.

Artist's impression of the proposed infrastructure near Belfast

INDAVER IMPEX
SUSTAINABLE GROWTH

International growth
In 2016, Indaver Impex achieved substantial growth of its market share, particularly in the United Kingdom. Using innovative techniques and with the help of experienced operators, Impex improved and further refined the dewatering process at a number of wastewater treatment plants run by UK water boards. By dewatering the sludge on the customer's site, Indaver Impex substantially reduces the volume to be transported away. This saves transport and treatment costs and also limits the CO_2 emissions.

This way, Indaver Impex contributes to close the materials loops in wastewater treatment. Creating international sustainable opportunities for the industry by delivering its innovative sludge dewatering services is one of Impex's major goals for the future.

Expanding the fleet
In 2016, Indaver Impex invested in new energy-efficient generating sets to use on mobile projects. These are in line with the latest technological standards. In addition, Indaver Impex developed and built a dredger in-house tailored to its own specifications. This dredger has been used successfully on a number of dewatering projects. The boat is compact, making it versatile and manoeuvrable. It can be used for a range of projects, such as cleaning open tanks, foil lagoons, and on Carrousel systems. The nozzle and drive system enables dredging and manoeuvring to be done with minimal agitation of sludge. As a result, dredging can be carried out with minimal disruption to the customer's production process.

Indaver Impex acquired the old water purification plant at the Derde Merwedehaven landfill site in the Netherlands. This plant was no longer needed at the landfill site, so Impex dismantled the plant in-situ and removed it. The plant was then made into separate, easy-to-move units, and is now being used for mobile dewatering projects – an excellent example of product reuse.

Special projects
In 2016, Indaver Impex was able to supply replacement dewatering capacity to customers' sites at very short notice. Following the incident at Indaver Antwerp, Indaver Impex assisted by taking on some of the operational management by providing a mobile dewatering installation. Other special projects in 2016 were:

- the complete drying and cleaning of a fermentation tank at a water board in the Netherlands.
- dredging a large cold water basin for an industrial client in Antwerp.

RESEARCH AND DEVELOPMENT

Indaver invests in research and development so that it keeps setting the standard for waste management.

Our employees are an invaluable resource here, as they always have an eye to continuous improvement of not only our facilities, but also our processes, services and systems.

At present there are around 80 research and development projects under way. Experimental and industrial research and software development are key factors in these projects. In general, we are focusing on:

- The development of efficient material recovery for useful application or recycling; the improvement/ reduction in use of primary raw materials; research in order to further reduce our impact on air, water and soil.
- Seeking new ways of using recovered energy; research in order to increase our energy efficiency and research into energy clusters.
- The use of Life Cycle Analysis Research helps customers chart their waste stream and treatment and to find the best and most environmentally-friendly option for the best price; research into the modal shift (the shift from road transport to water transport) and into the improvement of the environmental performance of our facilities.
- Cooperation with research institutes.

Plastics2Chemicals

Indaver intends to build new plants in Europe to recover raw materials for the chemical industry from used plastics, the types which cannot be/are currently not being recycled. The new facilities will break the plastics down into shorter hydrocarbon chains that serve as feedstock for the chemical industry. This process is known as depolymerisation. The thermal molecular recycling process produces high-quality materials which can then be used to make high-quality products. The first plant is probably located in Flanders and the others in other parts of Europe, so that treatment can be decentralised and waste will not have to be transported over long distances.

PARTNERSHIPS

To help realise a circular economy, we're working together with our own people, with the waste management industry, and with partners across other sectors.

WORKING TOGETHER TO MAKE A DIFFERENCE

OUR VISION

A defining feature of the circular economy is its reliance on a collaborative approach. The realisation of the circular economy requires a complete transformation in the way we use our resources, and it will affect every stage in the production and consumption process. As a result, everyone – government bodies, manufacturers, research institutions, consumers, and citizens – will be involved in making the transition. In fact, this transformation to a more sustainable way of living cannot happen without input and action from all stakeholders.

It is because the transition cannot be delivered by a single sector or entity that each of us has a particular role to play. As a waste management company, we have a significant role to play. Indaver enables the circular economy by recovering and recycling materials and energy; we also protect the entire materials chain by destroying or safely storing contaminants thus preventing them from re-entering the loop.

As a knowledge-based organisation, we are also in the vanguard of those implementing and championing the transition to the circular economy. We know that a transition to the circular economy is possible only if everyone develops sustainable technology and business models. To further these ends, we do joint research with knowledge centres. We form partnerships within the waste sector and across industry more broadly. We work within consortia to design and implement innovative projects. The ECLUSE project is an excellent example of the benefits that accrue from such collaboration. We also support social initiatives in which citizens and organisations encourage the necessary behavioural changes in their own way.

We pride ourselves on creating open, constructive dialogue with our customers. We hold co-creative workshops to be sure that we have understood the specific requirements and context of the customer, and so are able to come up with the solution that is most suited to their needs.

In this chapter, you'll read more about some of our communications initiatives in 2016, from our industry partnerships, to our open days for our local communities, to the specialist conferences we've spoken at.

WORKING TOGETHER

PARTNERSHIPS FOR A SUSTAINABLE FUTURE

An award-winning partnership

In 2016, the ECLUSE steam network won the Port of Antwerp's Sustainability Award, highlighting the importance and benefits of the network. An important contributing factor to the success of the ECLUSE project is the unique partnership between Indaver/SLECO, the companies drawing on the heat, those providing the terrain, infrastructure and financing, and the Flemish government.

Starting in 2018, the network will convey the steam from Indaver and SLECO through a network of pipelines. The ECLUSE project fits Indaver's vision on durability, providing economic benefits (competitive prices that anchor industry in Antwerp Port), environmental benefits (CO_2 reduction) and societal benefits, since it generates the energy the circular economy needs to thrive.

▸ *For more about ECLUSE, see **page 40** and **www.ecluse.be***

Advising on energy and infrastructure in Ireland

Engineers Ireland, the professional body representing engineers in Ireland, writes an annual 'State of Ireland' report. In 2016, John Ahern, the Executive Chairman of Indaver Ireland, was invited to sit on the Energy Advisory Group as Engineers Ireland prepared its report with a particular focus on energy infrastructure.
The 2016 "State of Ireland" report used the expert insight of the Advisory Group to formulate proposals challenging industry and partners, including Government, to tackle climate change. The report was launched in May by the Minister for Communications, Climate Change and Natural Resources, and received national media coverage. In the report, Engineers Ireland urges the Government to adopt a leadership role on climate action, saying the country's energy future depends on taking bold steps now to progressively transition to a carbon-free society. The recommendations regarding waste specifically includes prioritising the development of indigenous waste treatment facilities in order to avoid over-reliance on the export of waste.

▸ *The report can be found here: **www.engineersireland.ie/publications***

Germany – creating sustainable industry

Indaver in Germany is working with the Hamburg-based industrial sector's energy efficiency network to reduce CO_2 emissions. The network received approving mention in the latest national newsletter of the Federal Ministry of the Economy.

The energy efficiency network was founded on April 22nd of 2016, when Indaver and 12 other Hamburg-based industrial companies, collectively undertook to reduce CO_2 emissions by a total of 60,000 tonnes between now and 2018. The federal government's "energy efficiency networks" initiative was started together with the umbrella organisations DIHK and ZDH and a wide range of professional associations. The companies will voluntarily adopt goals for using energy more efficiently. It is expected that around 500 such associations, with 8-15 companies each, will be formed by 2020.

▸ ***Click here to find** the full report in the Federal Ministry of the Economy's newsletter.*

Energiewende Umschalten auf Zukunft

SHARING EXPERTISE

THOUGHT LEADERS FOR THE CIRCULAR ECONOMY

We share our aims and vision by participating at conferences and trade shows, and by holding open days.

Sharing our vision in the Netherlands

In 2016, Indaver in the Netherlands shared its expertise and vision at several major conferences focusing on the transition to a circular economy. Paul De Bruycker, our CEO, was the key-note speaker at the Circular Economy Congress held in February 2016 in Den Bosch. Peter Louwman, Director of Indaver in the Netherlands spoke about the recycling of waste streams at the Waste and Recycling Industry Congress in Schiedam in June 2016. Both speakers argued for the need for recycling to be about not only quantity but also quality. After all, if materials are going to be re-introduced into the materials chain, they must have the same quality as raw materials for the end product to be high-quality. However, such quality recycling will require innovative solutions worked out in collaboration.

Since 2015, Indaver in the Netherlands has been publishing a digital newsletter for municipal policy makers with waste management in their portfolio. The analytics show that the newsletter is widely read, and the infographics series was particularly well-received thanks to its clear layout and practical, useful tips.

Conversations about sustainable energy in Ireland

The International Energy Research Centre (IERC) is an industry-led collaborative research centre in the field of integrated sustainable energy systems, and is jointly funded by the Irish government and industry members. It is one of the largest funded technology centres in Ireland. In 2016, Indaver was invited to speak at the IERC annual conference, and John Ahern spoke about energy hubs and the potential for an energy hub in Ireland on a panel on low-carbon heating and cooling. He noted that decarbonising heat is a significant challenge that requires new fuels, new conversion technologies and improved means of distribution and delivery. This requires innovative solutions. Indaver, with its experience in Europe, is a proven partner for this necessary transition.

SHARING EXPERTISE

THOUGHT LEADERS FOR THE CIRCULAR ECONOMY

We share our expertise in a number of ways. We held a number of open days at various facilities last year for the local community. We've presented at specialist conferences and exhibited at trade shows. In addition, we've communicated through newsletters and infographics.

Behind the scenes of sustainable waste management in Belgium

'Open Bedrijvendag' (Open Day for Companies) is an annual event in Flanders when hundreds of companies open their doors to the general public. On that day, the Indaver site in Doel gave visitors a look behind the scenes and provided information on the role Indaver plays in transitioning to a circular economy. Participants undertook a survey, and 74% said that they knew a lot more about waste treatment after the visit. The tours were given by Indaver staff, who shared with visitors the knowledge they use every day. The landfill that Indaver manages at Hooge Maey and Indaver Antwerp also took part in the Open Day. These sites were stops on a bus tour of the energy cluster in the port of Antwerp region. At Hooge Maey, there was particular interest in the cultivation of algae to produce biomass as a raw material for the chemical industry.

Indaver at IFAT Messe Munich

In 2016, we attended IFAT, the world's leading trade fair for waste, water, sewage and raw material management in Munich, Germany. Indaver had a large, open stand attended by our sales team, who offered customers a range of information from our role in the circular economy to our European-wide network of installations. The interactive virtual 3D-tour through our rotary kilns was particularly eye-catching. Viewers got a behind-the-scenes look in and around our 'virtual' 3D rotary kiln, with the camera changing position by the movement of their body and arms. They controlled the camera and could choose which part of the treatment process they wished to see. The interactive show has been transformed into a video. This video will be used for education purposes, and will be shared with employees, students, and neighbours.

GOOD NEIGHBOURS IN THE LOCAL COMMUNITY

At Indaver, we understand that each of our facilities is a part of the local community. We strive to be good neighbours. We maintain open channels of communication and good relationships, and we hold regular open days. We are responsive to any complaints or concerns.

Bio Power Alphen Adjustments (NL)

At the Bio Power Alphen VGF digester the local residents were being affected by odour from the digester. Indaver drew up an action plan that targeted the sources of the odour. The sources – the composter, the biofilter and the conveyor belts on the digesters – were dealt with in 2016. We held information meetings to explain the cause and solution, and offered local residents a tour of the facility. In addition, local residents and other interested parties receive a special digital newsletter on a regular basis.

Merwedeheuvel (NL)

As Derde Merwedehaven, a former landfill site, is being repurposed, it is receiving a new name: Merwedeheuvel. Following construction, Merwedeheuvel will be accessible to the public in 2023. Indaver in the Netherlands drew up plans for the area in 2016, and part of the process included a walk over the site with representatives from the Dordrecht and Sliedrecht local authorities and interested parties. The design plan in which the agreed landscape design was elaborated on, was definitively confirmed in the same year.

▶ *Developments at Merwedeheuvel can be viewed on* ***www.merwedeheuvel.nl****.*

Design of the 'Merwedeheuvel' © Proav

Antwerp Neighbourhood Council: 25 years of open communication

The first waste was delivered to the depot on the Antwerp site in 1987, and a few years later Indaver organised its first neighbourhood council for the site. In 2016, we celebrated the council's 25th anniversary. Direct and transparent communication has always been a priority. Through the neighbourhood council, we keep the local area informed about our activities, projects, and licence applications and renewals. We provide figures on quantities, safety and the environmental impact such as emission results. We make time for questions and comments and inform people about incidents quickly. At the first neighbourhood council in 1991 there were 11 members from the neighbourhood of Indaver's Antwerp site. 57 meetings later there are 54 members. The neighbourhood council meets on average twice a year and has grown over those twenty five years into a forum where other companies and local authorities also meet. Now, every operational Indaver site in Belgium has its own neighbourhood council or consultation group.

BUILDING KNOWLEDGE, SHARING EXPERTISE – DIGITALLY

Go4Circle-award for Kiosk, digital home for drivers and operators

After receiving a Go4Circle award in the 'best safety project' category in 2015, Indaver also won an award for the best social initiative in 2016 with "Kiosk: digital home for drivers and operators". Go4Circle represents waste companies and companies that produce biomass and soil remediation centres. Indaver set up the kiosk project as part of our sustainable employment policy, in order to help all of our staff have access to digital services. The kiosks are shipping containers that have been re-purposed into flexible work stations with computers. There are a number on a range of different sites. Staff use them to read company information, to surf the net, to follow training courses, or to request holiday time electronically. The express purpose of the kiosks is to give staff a place where they have access to digital Indaver. As a result, staff are more easily involved with what is going on in the company and getting the best out of what Indaver has to offer in terms of training opportunities and professional development. And, at the same time, they're developing their computer skills. The kiosks are an easy and effective solution for an organisation like ours, where we have staff on a number of different locations.

Knowledge sharing platform

To share the expertise and exchange knowledge on remediation projects on an international basis within the Indaver Group, a centralized platform was set up. This e-database displays all of the important information related to each project, such as the region, Indaver's role, the treatment, what installations were used, etc. It's a very effective way to share knowledge, as the key information for each project is collected in one place and organized according to the same structure.

Right first time with Unity

Indaver is working on the development of Unity, a common ICT platform used throughout the whole group. Unity will enable us to offer our customers integrated services that are both standardised and flexible across the whole of Europe. Our external stakeholders in the various regions might already be familiar with applications such as Supplier Zone and Customer Zone. We are in the process of developing and rolling out the Unity platform across all of our regions and business lines. Though the use of Unity, we are beginning to transfer our right first time service approach through a digital platform.

PLATFORMS AND MEMBERSHIPS

Indaver works with partners at international level to share knowledge and experience concerning sustainable waste management, and to monitor the development and application of the legislation for the sector, by providing information to the most important European institutions. That way, these European sustainable waste management partners are always looking to tighten up standards in this area.

Eurits: gatekeeper of the circular economy

Indaver was one of the founding members of Eurits, the European Union for the Responsible Incineration and Treatment of Special Waste.

Eurits represents more than 90% of the specialist waste incineration sector in the European Union. It holds a watching brief on safe, lawful and environmentally sound waste incineration. Indaver has held either the chairmanship or the technical directorate since 1997.

Eurits offers Indaver a European platform to communicate its vision. For Eurits, hazardous waste incineration facilities are the gatekeepers of the circular economy. This waste incineration prevents hazardous waste from ending up in recycled products or in the food chain.

Eurits offers a forum for the exchange of technical and operational information to encourage good practices. It represents the specialist waste incineration sector and monitors the development and application of the legislation for the sector by providing information to the most important European institutions.

ISWA: sustainable waste management worldwide

Indaver cooperates on an international level with partners to share knowledge and experience in the area of sustainable waste management. One such platform is ISWA (International Solid Waste Association).

ISWA strives towards sustainable and professional waste management worldwide. It promotes efficient use of raw materials via sustainable production and consumption, improves waste management via education and training, and promotes the most appropriate and Best Available Technology and practices.

ISWA offers scientific, economic and social instruments, such as an international network for sharing knowledge and experience in the field of sustainable waste management and the battle against climate change; working groups of experts to increase knowledge and expertise; education and training; and professional publications and partnerships with all stakeholders in waste management, in particular with the national ISWA members as well as with international organisations and institutions.

CEWEP: focus on waste-to-energy

Through the recovery of energy and materials, Indaver's waste-to-energy plants contribute to a sustainable society. Indaver also shares its expertise on the international stage. One platform for this is CEWEP (Confederation of European Waste-to-Energy Plants).

CEWEP is the umbrella association of owners and operators of waste-to-energy plants in Europe, representing 394 waste-to-energy plants from 18 European countries. Together they make up 86 % of the waste-to-energy capacity in Europe. Indaver, via BW2E (Belgian Waste-to-Energy), and CEWEP Ireland are members.

CEWEP aims to give alternative energy from waste a boost and demonstrate that waste-to-energy plants reduce dependence on dumping and fossil fuels. It represents waste-to-energy plants at European level and takes part in the decision-making process. Furthermore it promotes the exchange of experience, research and development between members.

INDAVER AND THE SUSTAINABLE DEVELOPMENT GOALS

In September 2015, the United Nations General Assembly adopted an unprecedented global new sustainable development agenda: the 17 Sustainable Development Goals (SDGs). Each goal has specific targets to be achieved over the next 15 years.

For the first time, business was represented at the negotiation table. Alongside other societal actors, business has a crucial role in helping to achieve these ambitious goals. The ISWA's vision "to create a world where no waste exists" and support towards this new 2030 Agenda was extremely helpful in identifying the goals suitable for a sound sustainable waste management.

Throughout this Sustainability Report, Indaver makes a clear reference to 8 out of the 17 SDGs which will, collectively, transform our world.

Ensure healthy lives and promote well-being for all at all ages

Ensuring healthy lives and promoting the well-being for all at all ages is essential to sustainable development. Significant strides have been made in increasing life expectancy and reducing some of the common killers associated with child and maternal mortality. Major progress has been made on increasing access to clean water and sanitation, reducing malaria, tuberculosis, polio and the spread of HIV/AIDS. However, many more efforts are needed to fully eradicate a wide range of diseases and address many different persistent and emerging health issues.

Ensure access to water and sanitation for all

Clean, accessible water for all is an essential part of the world we want to live in. There is sufficient fresh water on the planet to achieve this. But due to bad economics or poor infrastructure, every year millions of people, most of them children, die from diseases associated with inadequate water supply, sanitation and hygiene.
Water scarcity, poor water quality and inadequate sanitation negatively impact food security, livelihood choices and educational opportunities for poor families across the world. Drought afflicts some of the world's poorest countries, worsening hunger and malnutrition. By 2050, at least one in four people is likely to live in a country affected by chronic or recurring shortages of fresh water.

Ensure access to affordable, reliable, sustainable and modern energy for all

Energy is central to nearly every major challenge and opportunity the world faces today. Be it for jobs, security, climate change, food production or increasing incomes, access to energy for all is essential.
Sustainable energy is opportunity – it transforms lives, economies and the planet.

Promote inclusive and sustainable economic growth, employment and decent work for all

Roughly half the world's population still lives on the equivalent of about US$2 a day. And in too many places, having a job doesn't guarantee the ability to escape from poverty. This slow and uneven progress requires us to rethink and retool our economic and social policies aimed at eradicating poverty.
A continued lack of decent work opportunities, insufficient investments and under-consumption lead to an erosion of the basic social contract underlying democratic societies: that all must share in progress. The creation of quality jobs will remain a major challenge for almost all economies well beyond 2015.
Sustainable economic growth will require societies to create the conditions that allow people to have quality jobs that stimulate the economy while not harming the environment. Job opportunities and decent working conditions are also required for the whole working age population.

INDAVER AND THE SUSTAINABLE DEVELOPMENT GOALS

Make cities inclusive, safe, resilient and sustainable

Cities are hubs for ideas, commerce, culture, science, productivity, social development and much more. At their best, cities have enabled people to advance socially and economically.

However, many challenges exist to maintaining cities in a way that continues to create jobs and prosperity while not straining land and resources. Common urban challenges include congestion, lack of funds to provide basic services, a shortage of adequate housing and declining infrastructure.

The challenges cities face can be overcome in ways that allow them to continue to thrive and grow, while improving resource use and reducing pollution and poverty. The future we want includes cities of opportunities for all, with access to basic services, energy, housing, transportation and more.

Ensure sustainable consumption and production patterns

Sustainable consumption and production is about promoting resource and energy efficiency, sustainable infrastructure, and providing access to basic services, green and decent jobs and a better quality of life for all. Its implementation helps to achieve overall development plans, reduce future economic, environmental and social costs, strengthen economic competitiveness and reduce poverty.

Take urgent action to combat climate change and its impacts

Climate change is now affecting every country on every continent. It is disrupting national economies and affecting lives, costing people, communities and countries dearly today and even more tomorrow.

People are experiencing the significant impacts of climate change, which include changing weather patterns, rising sea level, and more extreme weather events. The greenhouse gas emissions from human activities are driving climate change and continue to rise. They are now at their highest levels in history. Without action, the world's average surface temperature is projected to rise over the 21st century and is likely to surpass 3 degrees Celsius this century – with some areas of the world expected to warm even more. The poorest and most vulnerable people are being affected the most.

Affordable, scalable solutions are now available to enable countries to leapfrog to cleaner, more resilient economies. The pace of change is quickening as more people are turning to renewable energy and a range of other measures that will reduce emissions and increase adaptation efforts.

Revitalize the global partnership for sustainable development

A successful sustainable development agenda requires partnerships between governments, the private sector and civil society. These inclusive partnerships built upon principles and values, a shared vision, and shared goals that place people and the planet at the centre, are needed at the global, regional, national and local level.

Urgent action is needed to mobilize, redirect and unlock the transformative power of trillions of dollars of private resources to deliver on sustainable development objectives. Long-term investments, including foreign direct investment, are needed in critical sectors, especially in developing countries. These include sustainable energy, infrastructure and transport, as well as information and communications technologies. The public sector will need to set a clear direction. Review and monitoring frameworks, regulations and incentive structures that enable such investments must be retooled to attract investments and reinforce sustainable development. National oversight mechanisms such as supreme audit institutions and oversight functions by legislatures should be strengthened.

INDAVER AND GRI REPORTING

At Indaver, sustainability is integral to our commitment to the circular economy. In this Sustainability Report, we refer to the GRI criteria that are relevant to our sector. See the table for ease of reference.

GRI is an international independent organisation that helps businesses, governments and other organisations understand and communicate the impact of business on critical sustainability issues such as those described in the UN's SDGs. While business and government leaders can agree with international principles, GRI's guidance helps to put these principles into practice.

GRI provides the world's most widely used standards on sustainability reporting and disclosure, enabling businesses, governments, civil society and citizens to make better decisions based on information that matters.

GENERAL STANDARD DISCLOSURES			
Standard Disclosure	**Correspondance INDAVER Sustainaibilty Report 2016**	**Page**	**Indicator**
STRATEGY AND ANALYSIS			
G4-1	"Indaver has long been aware that a sustainable world is possible only if we manage our waste cleverly and carefully. In fact, Indaver came into being because government and industry needed a safe, sustainable solution for the waste produced in Antwerp Port." statement by CEO Paul de Bruycker	p. 2	Provide a statement from the most senior decision-maker of the organisation (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organisation and the organisation's strategy for addressing sustainability.
ORGANISATIONAL PROFILE			
G4-3	"Indaver nv"	p. 9	Report the name of the organisation
G4-4	"Indaver's core activity is the management and treatment of industrial and municipal waste in specialist facilities." "Enabler and gatekeeper of the Circular Economy" "Industrial waste services"	p. 5 to 9 p. 10 to 14 p. 16	Report the primary brands, products, and services.
G4-5	"Indaver NV is registered in Burcht Singelberg, Blok D (Lady Hedwige Tower), Ketenislaan 1, Haven 1548, BE-9130 Kallo, Belgium."	p. 9	Report the location of the organisation's headquarters.
G4-6	"Locations and volumes managed in 2016"	p. 15	Report the number of countries where the organisation operates, and names of countries where either the organisation has significant operations or that are specifically relevant to the sustainability topics covered in the report.
G4-7	"Indaver NV is registered in Burcht Singelberg"	p. 9	Report the nature of ownership and legal form.
G4-8	"Locations and volumes managed in 2016" Belgium, The Netherlands, Ireland, United Kingdom, Germany, Portugal, Spain, Italy"	p. 15	Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).

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G4-9	"Sustainable Employability" "Creating Value"	p. 31 to 35 p. 72 to 77	Report the scale of the organisation.
G4-10	"Sustainable Employability"	p. 31 to 35	Total number of employees (permanent and temporary) by employment type, by region and by gender (and variations).
G4-12	"A full service provider"	p. 14	Describe the organisation's supply chain.
G4-13	"Indaver and Katoen Natie"	p. 11	Substantial changes in the organisation's size, structure, capital or procurement chain.
G4-14	"Minimal impact on air, water and soil"	p. 50 to 70	Report whether and how the precautionary approach or principle is addressed by the organisation.
G4-15	"10 codes of good practices" "Lean Six Sigma" "Auditing and ISO 9001, ISO 14001, OHSAS 18001 certificates" "Corporate social responsibility (EcoVadis Gold-rating)"	p. 18 p. 19 p. 20 to 21 p. 22	Externally developed economic, environmental and social charters, principles, or other initiatives to which the organisation subscribes or which it endorses.
G4-16	"Platforms and Memberships"	p. 85	Memberships of associations (such as professional associations) and national or international advocacy organisations.
STAKEHOLDER ENGAGEMENT			
G4-25	"Anticipating expectations"	p. 7	Report the basis for identification and selection of stakeholders with whom to engage.
G4-26	"The stakeholders are mapped here according to their interest in and potential impact upon Indaver. The report will be distributed to these stakeholders as well as being freely available on our website to all interested readers."	p. 7	Report the organisation's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.
REPORT PROFILE			
G4-28	January 2016 - December 2016		Reporting period (such as fiscal or calendar year) for information provided.
G4-29	Sustainability Report 2015		Date of most recent previous report (if any).
G4-30	Annual		Reporting cycle (such as annual, biennial).
G4-31	Inge Baertsoen, Communications Manager Belgium		Provide the contact point for questions regarding the report or its contents.
G4-32	The "Core" option was chosen.		GRI G4 compliance option chosen by the organisation ("Core" or "Comprehensive") and reference to the external audit report.
G4-33	Declaration Of Validation Bureau Veritas	p. 93	Seeking external review.
ETHICS AND INTEGRITY			
G4-56	"Vision, mission, strategy, method, scope, stakeholders"	p. 5 to 8	The organisation's values, principles, standards and norms of behaviour such as codes of conduct and codes of ethics.

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SPECIFIC INFORMATION BY THEME			
Specific Standard Disclosure	**Correspondance INDAVER Sustainaibilty Report 2016**	**Page**	**Indicator**
Economic Performance			
G4-EC1	Financial Figures	p. 72	Direct economic value generated and distributed
Environment			
G4-EN2	"Waste streams for recovery of raw materials."	p. 37 to 70	Percentage of materials used that are recycled input materials.
G4-EN3	"Every year Indaver provides information on what it is doing to raise awareness and reduce energy consumption within its organisation."	p. 69	Energy consumption within the organisation.
G4-EN10	"Dewatering projects."	p. 37 to 70	Percentage and total volume of water recycled and reused.
G4-EN15	"Using technology to limit impact on the environment"	p. 37 to 70	Total direct greenhouse gas emissions.
G4-EN16	"Emissions and environmental impact"	p. 37 to 70	Total indirect greenhouse gas emissions.
G4-EN19	"Emissions and environmental impact"	p. 37 to 70	Reduction of greenhouse gas (GHG) emissions.
G4-EN21	"Using technology to limit impact on the environment"	p. 50 to 70	NOx, SOx, and other significant air emissions
G4-EN23	"Waste as energy"	p. 39 to 70	Total weight and percentage of waste collected by processing channel.
G4-EN27	"Managing waste in a safe and sustainable manner."	p. 37	Reduction of scale of environmental impact of products and services.
G4-EN30	"Why external treatment centres."	p. 66	Significant environmental impact of transport of products, other goods and materials for operations, and of transport of members of the organisation.
Social			
G4-LA1	"Sustainable Employment."	p. 31 to 35	Total number and percentage of new employees hired and employee turnover by age group, gender and geographical region.
G4-LA6	"Sustainable Employment."	p. 31	Levels and types of workplace accidents, workrelated illnesses, absenteeism, proportion of lost work days and total number of work-related fatalities, by geographic region and by gender.
G4-LA9	"Developing the organisation."	p. 31 to 35	Average number of training hours per year, broken down by employee, by gender and by professional category.
G4-PR4	"Embedding safety culture and monitoring safety performance."	p. 24 to 30	Number of incidents relating to non-conformity to rules and voluntary codes on information and labeling of products and services, by result type.
G4-SO1	"Working together to make a difference."	p. 79 to 85	Percentage of operations with implemented local community engagement, impact assessments, and development programs.

GLOSSARY

Anaerobic composting (digester) A method to convert organic waste into compost via bacteria. This method does not require oxygen.

ARP Acid Recovery Plant

Biomass A feedstock for energy generation which replaces fossil fuel.

Circular economy Economic system in which resource inputs and waste and energy leakage are minimised by slowing, closing, and narrowing material and energy loops. This can be achieved through long-lasting design, maintenance, repair, reuse, remanufacturing, refurbishing, and recycling.

Climate-neutral Achieving net zero carbon emission by balancing a measured amount of carbon released with an equivalent amount sequestered or offset.

Cooperation Agreement The agreement ensuring that Indaver's operating procedures and service provision are similar across the regions in which it operates.

Dioxins Compounds that are toxic environmental persistent organic pollutants; often, they are the by-product of industrial processes.

EcoVadis Independent assessment agency that evaluates the commitment to corporate social responsibility of businesses worldwide under assignment to purchasing departments.

Emission The release of a particular substance from a particular place (e.g. a chimney) expressed in volume/m3.

Emission measurement The measurement of the volume/ concentration of a particular substance emanating from a particular place.

Emission limit value Emission standard, the maximum volume/ concentration that may be emitted.

Energy cluster Heat from Indaver's plants supplied to neighbouring companies and residential areas.

Environmental performance The performance of an organisation with respect to the environment.

Fluorescence powder Powder from fluorescent tubes which contains rare earth metals. These are expensive raw materials used for new technologies.

Fly ash Residue collected from the electrostatic filter in rotary kiln/fluidised bed incinerators.

Frequency rate Legally established safety indicator that takes account of accidents sustained by in-house personnel in which more than one day is taken off work.
Fr = (A*1,000,000) / B
A = number of accidents involving time off work
B = total number of hours of exposure per annum (sum of all personnel)

Green gas Gas reprocessed from biogas, which in turn is obtained from digested wet organic residue. This green gas is of a very high quality and can therefore replace fossil natural gas.

Grate incinerator Incinerator with energy recovery for thermal treatment of non-recyclable fractions of non-hazardous household waste and commercial waste.

Green heat Heat derived from sources of renewable energy, in the case of Indaver the source of renewable energy is biowaste.

HDPE High Density Polyethylene

Indachem Liquids Physicochemical unit for treating inorganic liquid waste.

Indachem Solids Physicochemical unit for treating inorganic solid waste.

Indatube Unit for treatment of linear fluorescent tubes.

Indaver Molecule Management Recovering molecules from pharmaceutical and chemical waste for reuse in industrial processes.

Industrial symbiosis System in which raw materials are recovered from one company's waste to be used in another company's manufacturing processes.

Intermodal transport The combination of different modes of transportation, i.e. road, water, rail, to transport waste.

GLOSSARY

ISO International Organisation for Standardization

IWS Industrial Waste Services

LSS Lean Six Sigma

Mass balance The mass balance is the visual representation of each thermal process. The 'in' side shows the quantities of additives, water and energy needed to treat the waste efficiently. The 'out' side shows the quantity of solid residual materials remaining after the process, the quantity of flue gases emitted and the quantities of waste water and energy released during treatment.

Materials loop System in which raw materials are being constantly recovered, reused, recycled in a safe manner.

MSW Municipal solid waste (household waste).

Outlet Third-party waste treatment centre.

People Platform Digital platform that enables staff to take control of their own training.

Physicochemical treatment Immobilisation, fixation, solidification and stabilization – techniques or methods for the treatment of hazardous waste, so that the waste can be safely deposited in a class 1 landfill site.

PMD Plastic bottles, metal packaging and drinks cartons (selectively collected).

PwPS Public waste Partnerships

QESH Quality, Environment, Safety and Health – usually referring to an Indaver policy or department.

Residue Waste materials that cannot be further recycled or treated after sorting, purification or treatment.

Rotary Kiln Incinerator An incinerator with energy recovery for thermal treatment of hazardous waste.

Safety index Weighted average of the number of accidents (in which the severity of the accident is the determining factor for the weighting assigned) relative to the number of employees.

Safe Sink Guarantee Destruction by Indaver of unrecoverable elements in waste and capture of the remaining potentially hazardous components in our high-tech final treatment facilities, thus removing them from the product chain.

SEVESO European Directive on the management of risks associated with the storage and handling of hazardous waste.

Shut-down The temporary closure of a treatment unit for major overhaul and / or maintenance.

SDG Sustainable Development Goals defined by the United Nations.

Sustainable employability HR-policy to take sustainable measures for long-term, healthy, enjoyable and productive participation in the labour process.

Total Cost of Ownership Financial estimate intended to help buyers and owners determine the direct and indirect costs of a product or system.

Total Waste Management Service model which provides industrial clients with a worry-free customised solution.

Triple C Indaver's Leadership Model: Care, Connect, Coach

VFG Vegetable, fruit and garden waste.

Volume of pollutants Pollutant volumes equate to the quantity of contaminated components that the incinerator stacks emit a year. These volumes are expressed in tonnes.

Waste-to-energy Recovery of energy from the thermal treatment of waste, which is then converted into steam or electricity and supplied to neighbouring companies, commercial users (district heating) or the electricity grid.

DECLARATION OF VALIDATION BUREAU VERITAS

BUREAU VERITAS
Certification

Declaration of Validation

Awarded to

Indaver nv

Bureau Veritas Certification Belgium NV/SA hereby declares that the 2016 Sustainability Report , online and printed (in summary) was verified and validated on 07/06/2017,
with the Bureau Veritas reference BE010520-1.

The report is well structured, is easily readable and is well-organised, both on the website and in the printed brochure.

The text, data and facts in the online Sustainability Report are relevant, verifiable, reliable and reproducible. All of the selected items for the environmental, social and economic aspects are of sufficient importance and are dealt with adequately in the Sustainability Report. The printed brochure is a true summary of the full online reporting.

Data and facts can be systematically kept and reported as a result of the management systems which Indaver uses. The integrated management systems which Indaver uses fit into the ISO-9001, ISO-14001and OHSAS-18001 approach.

Validation declaration no.: **BE010520-1**

Issue date: ***20/07/2017***

Anton Kerbusch - Certification Manager Belgium
For Bureau Veritas Certification Belgium N.V./S.A.

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