



Datwyler strives to define the most environmentally friendly materials possible when developing sealing components.

RESOURCE-FRIENDLY PRODUCTION

For the Datwyler Group, a responsible attitude to natural resources represents an important principle that is enshrined in both the corporate values and the Code of Conduct.

Most of the sealing and electronic components at the Datwyler Group are small parts used in clients' systems, products or equipment. For example, Datwyler sealing components are used in every second car worldwide or one in every five syringes. As for Datwyler electronic components, they can be found in, say, robots or control systems for smart home systems or production facilities.

Focus on own production plants

During their useful life, the direct environmental impact associated with Datwyler components is negligible. And even the environmental impact associated with the disposal of Datwyler components is negligible compared with our customers' systems, products or equipment. As such, it quickly became clear in the materiality analysis that, as regards responsible use of natural resources, the Datwyler Group's focus is on resource-friendly production. And while the Group still wants to keep growing of course, Datwyler also wants to reduce consumption of resources such as heating energy, electricity and water for each revenue unit at the same time. The same applies to the volume of waste produced at the plants. Unsurprisingly, the production-oriented Sealing Solutions division uses considerably more resources than the distribution business at the Technical Com-

ponents division. Datwyler will continue to develop objectives for the use of resources over the next few years in addition to establishing and communicating quantitative goals. In doing so, the Group is making a contribution to achieving the UN Sustainable Development Goals.

Certified and integrated environmental management

The certified and integrated environmental management system provides the basis for optimising the use of resources. A number of Datwyler plants already have certification in accordance with the internationally recognised ISO 14001 standard. Other companies are striving to achieve ISO environmental certification. In Switzerland, the Sealing Solutions division plant has also been a member of the Energy Agency of the Swiss Private Sector (EnAW) since 2002. At the Sealing Solutions division, an overall Environment Health and Safety (EHS) Manager is responsible for coordinating issues relating to environmental management. This person is supported by a dedicated EHS officer at each plant. With the introduction of the integrated Datwyler Production System in spring 2017, environmental management will become an integral dimension of the drive for operational excellence. The other five dimensions are people, safety, quality, delivery and costs. The Production System enables Datwyler to develop uni-

77.8 million

CHF invested by the
Datwyler Group in 2016.

KEY POINTS IN BRIEF

- **Environmental** management is focused on the business's own production plants.
- **Datwyler** environmental management is certified in accordance with ISO 14001 at the majority of plants and is integrated into the new production system.
- **Datwyler** is striving to reduce consumption per revenue unit of resources such as heating energy, electricity and water, as well as reducing the amount of waste.
- **In** the reporting year, Datwyler managed to reduce consumption of direct energy and water in both absolute and relative terms. It proved possible to keep the volume of waste per revenue unit constant, while electricity consumption increased.

form production processes for all plants in every continent (see also p. 12 'Sustainable quality products and services'). And even as part of its existing environmental management work, Datwyler is keen to optimise the use of resources and minimise any significant impact on the environment. The Group is constantly investing in the maintenance and modernisation of its production plants worldwide. In the reporting year, investments in property, plant and equipment amounted to CHF 77.8 million (previous year: CHF 59.5 million). The impact on the use of resources is also considered when any investments are made in equipment and buildings.

Environmentally friendly component design

In addition to resource-friendly production, Datwyler also strives to define the most environmentally friendly materials and processes possible when developing sealing components. The idea is to reduce to a minimum the environmental impact of manufacturing, using and subsequently disposing of products (see also p. 12 'Sustainable quality products and services'). In several cases, the use of Datwyler seal components makes a direct contribution to environmental protection. Examples include seals for environmentally friendly natural gas drives and for technologies associated with the reduction of nitro-

gen oxide emissions from diesel vehicles in the automotive industry or facades and window profiles for improving insulation in buildings.

Higher energy consumption

While currency-adjusted revenue increased by 3.4%, absolute energy consumption at the Datwyler Group increased during the reporting year by 8.3% to 218'666 MWh (previous year: 201'945 MWh). Some 179'584 MWh or 82.2% of this relates to indirect energy such as electrical power or district heating. During 2016, absolute electricity consumption increased by 10.2%. One reason for this is the acquisition in September 2015 of O-ring manufacturer Origom, which was included in the figures for the first time. This equates to an increase of 7.0% for every million Swiss francs of currency-adjusted revenue. There are various reasons why Datwyler did not achieve the target reduction in relative electricity consumption per revenue unit for 2016. One such reason was the commissioning of a mixing facility (owned by the business) at the production site in China. Although this reduces the volume of elastomer compounds bought in, it also involves an appreciable increase in electricity consumption. It is worth noting, however, that the new, modern Datwyler mixing facility operates more efficiently than that of the previous Chinese supplier. As for the Czech plant, the improvement in air quality provided by a new cooling and ventilation system also means more electricity is consumed. Then there are changes in the product mix, with greater emphasis on more energy-intensive com-

ponents such as health care components from clean rooms. At 39'082 MWh or 17.8%, process and heating energy from the burning of fuels such as heating oil or natural gas at the business's own sites accounts for a much smaller share of energy consumption. This consumption declined by 1.2% in absolute terms compared with the previous year. For every million francs of currency-adjusted revenue, Datwyler managed to reduce fuel consumption by 4.5% in 2016. This was helped by the fact the heating needed to be turned on for fewer days and by energy optimisation measures adopted previously.

Increase in CO₂ emissions

With a view to reducing energy consumption per revenue unit, Datwyler is also striving to reduce CO₂ emissions per revenue unit. CO₂ emissions from direct and indirect energy consumption are calculated by an external specialist on the basis of recognised emission factors

69.2 %
of waste is recycled.



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At the Czech plant, Datwyler has improved air quality with a new cooling and ventilation system.

derived from reported energy volumes. Similar to the trend for energy consumption, Datwyler managed to reduce Scope 1 emissions from direct energy consumption slightly to 8'073 tonnes, while Scope 2 emissions from indirect energy consumption (associated with electricity consumption) increased to 79'333 tonnes. Overall, absolute CO₂ emissions at the Datwyler Group increased by 13 % to 87'406 tonnes (previous year: 77'230 tonnes). The disproportionately high increase can be explained by the growing production capacity at plants in China and India, which increase the average CO₂-intensity associated with the electricity consumed.

218'666

was the amount of energy consumed in 2016.

Decline in water consumption

Absolute water consumption at the Datwyler Group declined compared with the previous year by 6.3 % to 2.1 million m³ (previous year: 2.3 million m³). The reduction for every million Swiss francs of cur-

rency-adjusted revenue was 9.4 %. The main reason for the reduction are changes in the product mix associated with the decline in revenue within the Civil Engineering market segment, where profiles are cooled in the water bath. Datwyler has also improved the cooling system at the Korean site. The high water consumption at the Sealing Solutions division reflects the specific requirements of production processes. Particularly water-intensive are the cooling of sealing profiles used for construction and civil engineering applications, the washing of health care components, and the cooling equipment used for manufacturing in the Consumer Goods segment. The water demand at the Swiss production site of over 900'000 m³ (accounting

for over 40 % of water consumption across the Group) is largely covered by process water. In the reporting year, Datwyler invested CHF 3.7 million in a new, ecological cooling system at the Swiss site. The use of groundwater for air conditioning, ventilation and processes will reduce future electricity demand significantly compared with a conventional solution based on chillers.

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Annual saving of 3'600 tonnes of CO₂

The Swiss production site of the Sealing Solutions division provides a good example of how to use natural resources responsibly. Since the end of 2012, Datwyler has only been sourcing environmentally friendly electricity for the site – generated entirely from hydropower and originating from power plants with 'naturemade basic' certification belonging to the local electricity provider. This means more than 10 % of the electricity consumed across the Group comes from environmentally friendly hydropower. The resulting reduction in CO₂ emissions amounts to around 2'300 tonnes a year. The Swiss production site has been sourcing process and heating energy from a nearby wood-fired heating plant since as long ago as 2008. This allows Datwyler to save around 500'000 litres of heating oil a year and reduce annual CO₂ emissions by another 1'300 tonnes or so a year.

Volume of waste per revenue unit remains constant

The volume of waste at Group level increased in the reporting year in line with currency-adjusted growth in revenue by 3.5 % to 14'133 tonnes (previous year: 13'661 tonnes). The increase in the volume of waste was disproportionately low at the Sealing Solutions division, but disproportionately high at the Technical Components division as a result of one-off inventory adjustments. The recycling rate for the Group increased from 64.2 % to 69.2 %. This is a consequence of the efforts made at the Sealing Solutions division to find buyers for the process-related elastomer waste. The elastomer material concerned, which is of perfectly good quality, is used, for example, to manufacture floor coverings for sports facilities. But Datwyler also has a vested interest in achieving ongoing reductions in process-related elastomer waste by continuously looking to improve both production processes and the way components are engineered. This can save both costs and resources. At the Technical Components division, the recycling rate was slightly down in the reporting year but remained high at over 90 %.

SUMMARY OF **RESOURCE CONSUMPTION** ⁽¹⁾

	Unit	SEALING SOLUTIONS			TECHNICAL COMPONENTS			GROUP		
		2016 ⁽²⁾	2015		2016 ⁽²⁾	2015		2016 ⁽²⁾	2015	
Net revenue	million CHF	741,6	698,4	+ 6,2 %	455,6	459,3	– 0,8 %	1 197,2	1 157,6	+ 3,4 %
Energy										
Total energy consumption	MWh	212 890	196 771	+ 8,2 %	5 776	5 174	+ 11,6 %	218 666	201 945	+ 8,3 %
Heating fuels	MWh	37 287	37 861	– 1,5 %	1 795	1 708	+ 5,1 %	39 082	39 569	– 1,2 %
Energy generated externally	MWh	175 603	158 910	+ 10,5 %	3 981	3 466	+ 14,9 %	179 584	162 376	+ 10,6 %
of which electricity	MWh	170 700	154 426		3 981	3 466		174 681	157 892	
of which district heating	MWh	4 903	4 484		0	0		4 903	4 484	
Total energy consumption per net revenue	MWh / million CHF	287,1	281,8	+ 1,9 %	12,7	11,3	+ 12,5 %	182,6	174,5	+ 4,7 %
Greenhouse gas emissions CO₂ ⁽³⁾										
Total emissions	tonnes	85 560	75 611	+ 13,2 %	1 847	1 619	+ 14,1 %	87 406	77 230	+ 13,2 %
of which Scope 1	tonnes	7 711	7 889		363	345		8 073	8 234	
of which Scope 2	tonnes	77 849	67 721		1 484	1 274		79 333	68 996	
Total emissions per net revenue	tonnes / million CHF	115,4	108,3	+ 6,6 %	4,1	3,5	+ 15,0 %	73,0	66,7	+ 9,4 %
Water										
Drinking / industrial water consumption	m ³	2 117 336	2 260 017	– 6,3 %	6 625	5 607	+ 18,2 %	2 123 961	2 265 624	– 6,3 %
Water consumption per net revenue	m ³ / million CHF	2 855,1	3 236,1	– 11,8 %	14,5	12,2	+ 19,1 %	1 774,1	1 957,2	– 9,4 %
Waste										
Total waste	tonnes	13 191	12 907	+ 2,2 %	943	754	+ 25,1 %	14 134	13 661	+ 3,5 %
of which regular waste	tonnes	12 416	12 244		943	754		13 359	12 998	
of which special waste	tonnes	775	663		0	0		775	663	
Proportion of waste sent for recycling	%	68 %	63 %	+ 8,1 %	91 %	93 %	– 2,4 %	69 %	64 %	+ 7,7 %
Total waste per net revenue	tonnes / million CHF	17,8	18,5	– 3,8 %	2,1	1,6	+ 26,1 %	11,8	11,8	+ 0,0 %

⁽¹⁾ The focus is on 17 plants of the Sealing Solutions division and three distribution centres of the Technical Components division. This enables Datwyler to cover, at Group level, more than 98 % of resource consumption and waste and more than 90 % of the workforce. For newly acquired companies, resource consumption and net revenue are taken into account in the first full calendar year.

⁽²⁾ Net revenue for 2016 is adjusted for currency effects at 2015 exchange rates. Internal revenue between the two divisions is eliminated at Group level.

⁽³⁾ The CO₂ emissions are reported as direct (Scope 1) emissions, resulting from the combustion of fossil fuels at the Group's own facilities, and indirect (Scope 2) emissions, caused for example by the consumption of electricity and district heating. The CO₂ emissions from electricity consumption have been calculated using the so-called market-based approach. This value is also similar to those generated using a location-based approach.