



Uppgiftslämnaren reserverar sig för eventuella fel i produktinformationen eller felaktigt registrerade uppgifter och förbehåller sig rätten att korrigera och/eller komplettera produktinformation utan föregående avisering

## 1 GRUNDDATA

### Varubeskrivning

Cirkulationspump för tappvatten

### Övriga upplysningar

### Klassificeringar

ETIM >	-EC010980 -
BK04 >	
BSAB >	
UNSPSC >	

### Leverantörsuppgifter

#### Företagsnamn

WILO Nordic AB

#### Organisationsnummer

5560124769

#### Adress

Isbjörnsvägen 6

#### Hemsida

www.wilo.se

#### Miljökontaktperson

##### Namn

Rolf Jonasson

##### Telefon

0470-727616

##### E-post

rolf.jonasson@wilo.com

## 2 HÅLLBARHETSARBETE

### Företagets certifiering

- ISO 9001
- ISO 14001
- Carbon Neutral Company

## Policys och riktlinjer

Wilo has developed an explicit sustainability strategy until 2025. The central tenet of this strategy is to provide more people with clean water while simultaneously reducing the ecological footprint. A total of 17 strategic objectives have been formulated within four strategic action areas: Water, Energy&Emissions, Material&Waste, Employees&Society. Details are described in the annual sustainability report of the Wilo group.

## 3 INNEHÅLLSDEKLARATION

<b>Kemisk produkt</b>	Nej
<b>Innehåller produkten elektronik</b>	Ej angivet
<b>Omfattas varan av RoHs-direktivet</b>	Ja
<b>Varan omfattas av följande undantag enligt RoHs</b>	6B
<b>Undantaget upphör att gälla</b>	2024-07-21
<b>Varans vikt</b>	1 kg

## Vara / Delkomponenter

Koncentrationen har beräknats på hela varan

Ingående material /komponenter	Vikt-% i komponent	CAS-nr (alt legering)	EG-nr (alt legering)	Vikt % i produkt	Kommentar
Silicone LST70T				0,02%	
EPDM EP4270				0,08%	
PA66 Latamid 66H2 G/25 V0KB				1,02%	
aghesif				0,062%	
Tin, dibutylbis(2,4-pentanedionato-O,O')-		22673-19-4	245-152-0	0,0001%	
1,3-Butadiene, 2-chloro-, homopolymer, Polykloropren, Neoprengummi, Chloroprene rubber (CR), Chlorobutadiene polymer		9010-98-4		0,09%	
Polyamid 6,6, PA66, Nylon 66, Poly[imino(1,6-dioxo-1,6-hexanediy)imino-1,6-hexanediy], Adipic acid-hexanediamine polymer SRU		32131-17-2	Saknas	0,2%	
PA66 Technyl A 50H1				0,57%	
Silicone KE 931-U				0,09%	
PE 50g/l				0,7%	
Carbon Grafitte Resine HT204				0,7%	
Cellular Rubbe 43/22-42				0,09%	

EPDM EP 856				0,09%	
EPDM 7EP1197				0,09%	
EPDM 07096-80				0,044%	
POM-plast		9001-81-7		0,37%	
Polyamid 6,6, PA66, Nylon 66, Poly[imino(1,6-dioxo-1,6-hexanediy)]imino-1,6-hexanediy], Adipic acid-hexanediamine polymer SRU		32131-17-2	Saknas	0,67%	
plast PBT		26062-94-2	Saknas	0,8%	
Polyamid 6,6, PA66, Nylon 66, Poly[imino(1,6-dioxo-1,6-hexanediy)]imino-1,6-hexanediy], Adipic acid-hexanediamine polymer SRU		32131-17-2	Saknas	0,9%	
PC280				4,5%	
Polyfenyleter, PPE		Övrigt, polymer		0,19%	
Lexan 925				2,1%	
Rostfritt stål EN 1.4303, 11-13% Ni, Bedömning på legeringsnivå		12597-68-1	603-108-1	2,1%	
Aluminiumlegering GD-ALS19CU3, Pb 0,2%, Ni 0,3%, Zn 1,2%		Övrigt, metaller		3,18%	
M800-65A(1.0827) Steel			EN10106-2007	9,71%	
Magnet Strontiumferrit Sr(Fe12O19)		12023-91-5	234-685-4	1,05%	
Ceramic. OXIDE CERAMICS TOLOX 95				0,37%	
Koppar emalj			934-451-8	4,95%	
Rostfritt stål EN 1.4404, Ni ≤13%, bedömning på legeringsnivå		12597-68-1	603-108-1	0,67%	
Rostfritt stål EN 1.4301, 8-10,5%, Bedömning på legeringsnivå		12597-68-1	603-108-1	1,68%	
Rostfritt stål EN 1.4310, 6-9,5 % Ni, Bedömning på legeringsnivå		12597-68-1	603-108-1	0,053%	
Rostfritt stål EN 1.4307, 8-10,5%, Bedömning på legeringsnivå		12597-68-1	603-108-1	0,59%	
Mässing CW506L (CuZn33), Pb ≤0,05%		Övrigt, metaller		0,035%	
Mässing CW452K (CuSn6), Pb ≤0,02%		Övrigt, metaller		0,51%	
Mässing CW617N (CuZn40Pb2) Pb ≤2,5%		Övrigt, metaller		62,72%	
Mässing CW612N (CuZn39Pb2), Pb ≤2,5%		Övrigt, metaller		0%	
Mässing CW614N (CuZn39Pb3), Pb ≤3,5%		Övrigt, metaller		0,52%	

**Del av materialinnehållet som är deklarerat**

**101,51%**

### Särskilt farliga ämnen

Följande ämnen finns med på kandidatförteckningen i en koncentration och som överstiger 0,1 vikts-%:

Namn	CAS-nr	EG-nr	Vikt % i produkt
Bly	7439-92-1	231-100-4	Inget angivet

**Utgåva av kandidatförteckningen som har använts**  
2023-06-14

### Nanomaterial

**Innehåller produkten tillsatt nanomaterial, som är medvetet tillsatta för att uppnå en viss funktion?:** Nej

### Tillsatt högflourerade ämnen (PFAS)

**Innehåller produkten tillsatt högflourerade ämnen (PFAS), som är aktivt tillsatta för att uppnå en specifik funktion?:** Nej

### Begränsningslistan

**Innehåller varan (eller någon av dess delkomponenter) ämnen som finns i begränsningslistan?:** Nej

### POPs-förordningen

**Innehåller varan (eller någon av dess delkomponenter) ämnen som finns i POPs-förordningen?:** Nej

### Övrigt

Ämnen är redovisade ned till 0,1% viktprocent enligt iBVDs redovisningskrav. Eventuell avvikelser från redovisningskraven redovisas nedan

## 4

## RÅVAROR

## Återvunnet material

Innehåller varan återvunnet material: Ja

Specifikation av vilka material och andel som utgörs av den totala varans vikt

1. Återvunnet material
2. Andel (%) av totala varans vikt
3. Andel (%) av det återvunna materialet vilket **inte** har passerat konsumentledet
4. Andel (%) av det återvunna materialet vilket har passerat konsumentledet

1	2	3	4
Stainless steel	0,9 %	40 %	60 %
Aluminium	3 %	40 %	60 %
Plastics	1 %	90 %	10 %

## Träråvara

Träråvara ingår i varan: Nej

## 5

## MILJÖPÅVERKAN

Finns en miljövarudeklaration framtagen enligt EN15804 eller ISO14025 för varan

Nej

Finns annan miljövarudeklaration

Nej

**Om miljövarudeklaration eller annan livscykelanalys saknas, beskriv hur miljöpåverkan av varan beaktas ur ett livscykelperspektiv**

The main impact on environment of pumps is the consumption of electricity in the usage phase. The improvement of the energy efficiency of our products and solutions is therefore the most important sustainability target.

## 6

## DISTRIBUTION

**Beskrivning av emballagehantering för distribution av varan**

Main packaging material is cardboard and low percentage of foil.

7

**BYGGSCKEDET**

**Ställer varan särskilda krav vid lagring?** Ja

The requirements are defined in respective operating manual of the product

**Ställer varan särskilda krav på omgivande byggvaror?** Nej

8

**BRUKSSKEDET**

**Finns skötselansvisningar/skötselråd?** Ja

**Finns en energimärkning enligt energimärkningsdirektivet (2017/1369/EU) för varan?** Nej

9

**RIVNING**

**Kräver varan särskilda åtgärder för skydd av hälsa och miljö vid rivning/demontering?** Nej

10

**AVFALLSHANTERING**

**Omfattas den levererade varan av förordningen (2014:1075) om producentansvar för elektriska och elektroniska produkter när den blir avfall?** Ja

**Är återanvändning möjlig för hela eller delar av varan?** Ja

If the product is fully functional it can be reused.

**Är materialåtervinning möjlig för hela eller delar av varan?** Ja

All parts of the pumps can be recycled: cast iron, stainless steel, aluminum, plastics etc. All products are WEEE relevant products. Due to that they are recycled only with certified disposal companies

**Är energiåtervinning möjlig för hela eller delar av varan?** Nej

**Har leverantören restriktioner och rekommendationer för återanvändning, material- eller energiåtervinning eller deponering?** Ja

See Swedish ordinance (2014:1075) on Producer Responsibility for electrical and electronic products: WEEE 4562

**När den levererade varan blir avfall, klassas den då som farligt avfall?** Nej

**Avfallskod (EWC) för den levererade varan**

170407

<b>RSK-nummer</b>	<b>Eget Artikel-nr</b>	<b>GTIN</b>
580 60 00	4132760	4048482094151

**Produktdatablad**                      PROD\_3\_5806000 Star Z Nova.pdf

**Prestandadeklaration**

**Säkerhetsblad**

**RoHs-intyg**                              TYPG\_3\_5806000 Star Z Nova.pdf

**Miljövarudeklaration**

**Skötselanvisning**                      DOS\_3\_5806000.pdf

**Övriga bifogade dokument**

-REACH\_3\_5758986.pdf

-Wilo Sustainability report 2022.pdf

-WILO\_SE\_(GROUP)\_Scorecard\_2023\_10\_18 ecovadis.pdf



[Onlinekatalog >>](#)

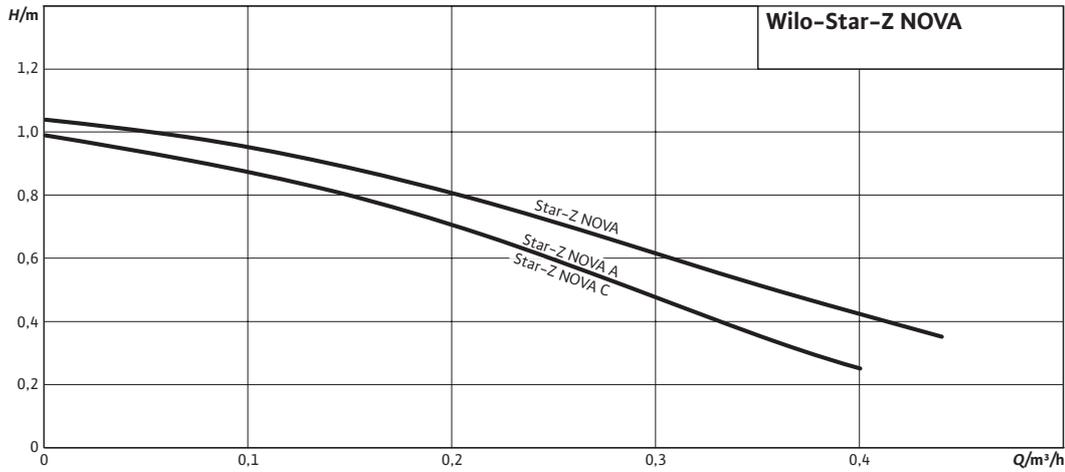
## Wilo-Star-Z NOVA - tappvarmvattenpump (VVC)

# Optimal för VVC i villor och mindre fastigheter

### Speciella egenskaper/produktfördelar

- Kapacitetsmässigt anpassad för tappvarmvatten i mindre fastigheter till minsta möjliga energikostnad
- Max effektförbrukning endast max 5 W
- Klarar upp till 20° dH
- Högklassiga material för högsta hygienstandard
- Försedd med snabbanslutning för smidig elektrisk installation, "Wilo-Connector"
- Passar inbyggnadsmässigt (både pumphus och drivsida) mot äldre Z 15-pumpar och motsvarande pump typer av annat fabrikat
- Tystgående

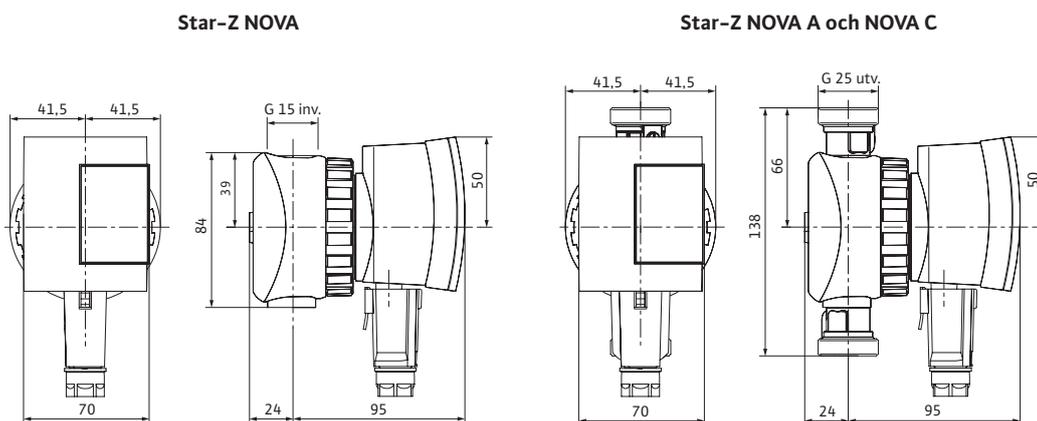
Kapacitetsöversikt



Motordata, mått, vikt, artikel- och RSK-nummer

Pumpbeteckning	Art.nr	RSK	Tillförd effekt $P_1$ (W)	Märkström 1~230 V (A)	Kabelgenomföring	Vikt (kg)
Star-Z NOVA	4132760	580 60 00	3-5,0	0,05	PG 11	0,9
Star-Z NOVA A	4132761	580 60 01	3-5,0	0,05	PG 11	1,1
Star-Z NOVA C	4132762	580 60 03	3-5,0	0,05	PG 11	1,3
DS Star-Z NOVA	4132763	580 60 02	3-5,0	0,05	PG 11	0,8

Måttskiss





[Onlinekatalog >>](#)

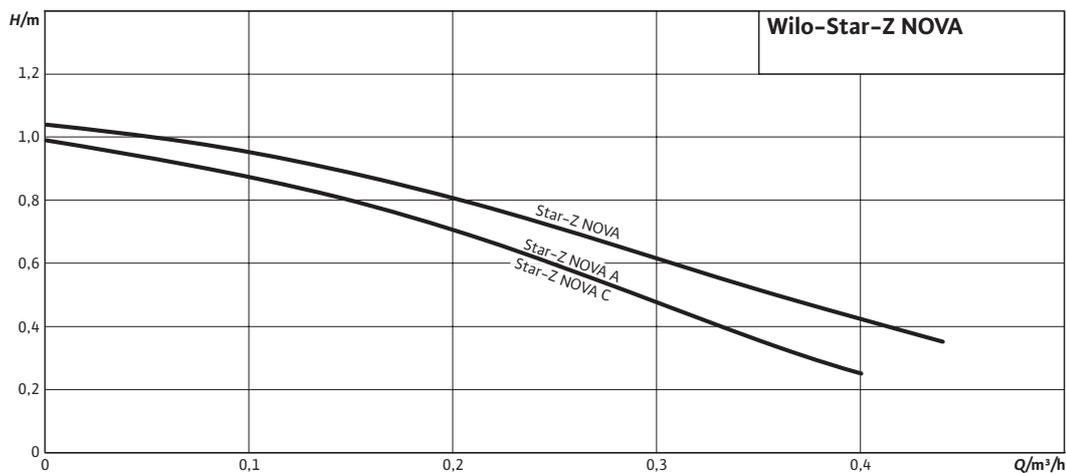
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Kapacitetsöversikt



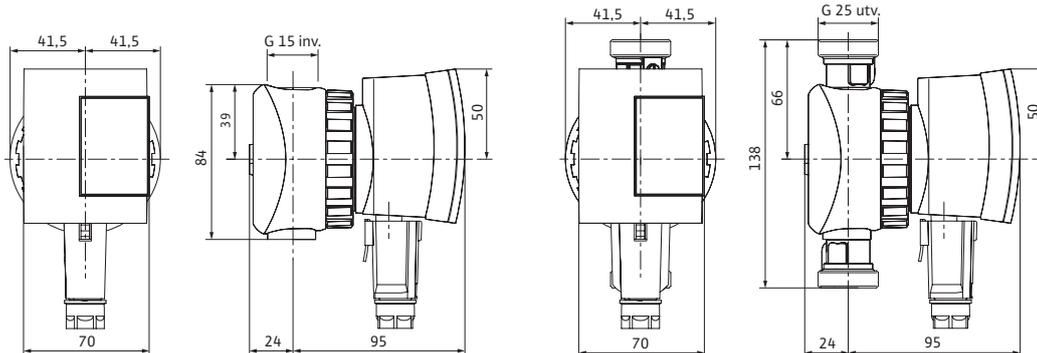
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Måttskiss

Star-Z NOVA

Star-Z NOVA A och NOVA C



**EU/EG KONFORMITÄTSERKLÄRUNG**  
**EU/EC DECLARATION OF CONFORMITY**  
**DECLARATION DE CONFORMITE UE/CE**

Als Hersteller erklären wir hiermit, dass die Nassläufer-Umwälzpumpen der Baureihe  
*We, the manufacturer, declare that these glandless circulating pump types of the series*  
*Nous, fabricant, déclarons que les types de circulateurs de la série*

**Star-Z NOVA**

*(Die Seriennummer ist auf dem Typenschild des Produktes angegeben / The serial number is marked on the product site plate / Le numéro de série est inscrit sur la plaque signalétique du produit)*

in der gelieferten Ausführung folgenden einschlägigen Bestimmungen entsprechen :  
*In their delivered state comply with the following relevant directives :*  
*dans leur état de livraison sont conformes aux dispositions des directives suivantes :*

- \_ **Niederspannungsrichtlinie 2014/35/EU ab 20 April 2016**
- \_ **Low voltage 2014/35/EU from April 20th 2016**
- \_ **Basse tension 2014/35/UE à partir du 20 avril 2016**
  
- \_ **Elektromagnetische Verträglichkeit-Richtlinie 2014/30/EU ab 20 April 2016**
- \_ **Electromagnetic compatibility 2014/30/EU from April 20th 2016**
- \_ **Compabilité électromagnétique 2014/30/UE à partir du 20 avril 2016**

und entsprechender nationaler Gesetzgebung,  
*and with the relevant national legislation,*  
*et aux législations nationales les transposant,*

sowie auch den Bestimmungen zu folgenden harmonisierten europäischen Normen :  
*comply also with the following relevant harmonized European standards :*  
*sont également conformes aux dispositions des normes européennes harmonisées suivantes :*

**EN 60335-2-51**

Dortmund,

**H. HERCHENHEIN**  
**Senior Vice President - Group ITQ**

N°2117826.04 (CE-A-S n°4177772)

**wilo**

**WILO SE**  
**Nortkirchenstraße 100**  
**44263 Dortmund - Germany**

<p align="center"><b>(BG) - български език</b> <b>ДЕКЛАРАЦИЯ ЗА СЪОТЕТСТВИЕ ЕО</b></p> <p>WILO SE декларира, че продуктите посочени в настоящата декларация съответстват на разпоредбите на следните европейски директиви и приелите ги национални законодателства:</p> <p>Ниско Напрежение 2014/35/ЕО ; Електромагнитна съвместимост 2014/30/ЕО</p> <p>както и на хармонизираните европейски стандарти, упоменати на предишната страница.</p>	<p align="center"><b>(CS) - Čeština</b> <b>ES PROHLÁŠENÍ O SHODĚ</b></p> <p>WILO SE prohlašuje, že výrobky uvedené v tomto prohlášení odpovídají ustanovením níže uvedených evropských směrnic a národním právním předpisům, které je přejímají:</p> <p>Nízké Napětí 2014/35/ES ; Elektromagnetická Kompatibilita 2014/30/ES</p> <p>a rovněž splňují požadavky harmonizovaných evropských norem uvedených na předcházející stránce.</p>
<p align="center"><b>(DA) - Dansk</b> <b>EF-OVERENSSTEMMELSESERKLÆRING</b></p> <p>WILO SE erklærer, at produkterne, som beskrives i denne erklæring, er i overensstemmelse med bestemmelserne i følgende europæiske direktiver, samt de nationale lovgivninger, der gennemfører dem:</p> <p>Lavspændings 2014/35/EF ; Elektromagnetisk Kompatibilitet 2014/30/EF</p> <p>De er ligeledes i overensstemmelse med de harmoniserede europæiske standarder, der er anført på forrige side.</p>	<p align="center"><b>(EL) - Ελληνικά</b> <b>ΔΗΛΩΣΗ ΣΥΜΜΟΡΦΩΣΗΣ ΕΚ</b></p> <p>WILO SE δηλώνει ότι τα προϊόντα που ορίζονται στην παρούσα ευρωπαϊκά δήλωση είναι σύμφωνα με τις διατάξεις των παρακάτω οδηγιών και τις εθνικές νομοθεσίες στις οποίες έχει μεταφερθεί:</p> <p>Χαμηλής Τάσης 2014/35/ΕΚ ; Ηλεκτρομαγνητικής συμβατότητας 2014/30/ΕΚ</p> <p>και επίσης με τα εξής εναρμονισμένα ευρωπαϊκά πρότυπα που αναφέρονται στην προηγούμενη σελίδα.</p>
<p align="center"><b>(ES) - Español</b> <b>DECLARACIÓN CE DE CONFORMIDAD</b></p> <p>WILO SE declara que los productos citados en la presenta declaración están conformes con las disposiciones de las siguientes directivas europeas y con las legislaciones nacionales que les son aplicables :</p> <p>Baja Tensión 2014/35/CE ; Compatibilidad Electromagnética 2014/30/CE</p> <p>Y igualmente están conformes con las disposiciones de las normas europeas armonizadas citadas en la página anterior.</p>	<p align="center"><b>(ET) - Eesti keel</b> <b>EÜ VASTAVUSDEKLARATSIOONI</b></p> <p>WILO SE kinnitab, et selles vastavustunnistuses kirjeldatud tooted on kooskõlas alljärgnevale Euroopa direktiivide sätetega ning riiklike seadusandlustega, mis nimetatud direktiivid üle on võtnud:</p> <p>Madalpingeseadmed 2014/35/EÜ ; Elektromagnetilist Ühilduvust 2014/30/EÜ</p> <p>Samuti on tooted kooskõlas eelmisel leheküljel ära toodud harmoniseeritud Euroopa standarditega.</p>
<p align="center"><b>(FI) - Suomen kieli</b> <b>EY-VAATIMUSTENMUKAI SUUSVAKUUTUS</b></p> <p>WILO SE vakuuttaa, että tässä vakuutuksessa kuvatut tuotteet ovat seuraavien eurooppalaisten direktiivien määräysten sekä niihin sovellettavien kansallisten lakiasetusten mukaisia:</p> <p>Matala Jännite 2014/35/EY ; Sähkömagneettinen Yhteensopivuus 2014/30/EY</p> <p>Lisäksi ne ovat seuraavien edellisellä sivulla mainittujen yhdenmukaistettujen eurooppalaisten normien mukaisia.</p>	<p align="center"><b>(GA) - Gaeilge</b> <b>EC DEARBHÚ COMHLÍONTA</b></p> <p>WILO SE ndearbhaíonn an cur síos ar na táirgí atá i ráiteas seo, siad i gcomhréir leis na forálacha atá sna treoracha seo a leanas na hEorpa agus leis na dlíthe náisiúnta is infheidhme orthu:</p> <p>Ísealvoltais 2014/35/EC ; Comhoiriúnacht Leictreamaighnéadach 2014/30/EC</p> <p>Agus siad i gcomhréir le forálacha na caighdeáin chomhchuibhithe na hEorpa dá dtagraítear sa leathanach roimhe seo.</p>
<p align="center"><b>(HR) - Hrvatski</b> <b>EZ IZJAVA O SUKLADNOSTI</b></p> <p>WILO SE izjavlja da su proizvodi navedeni u ovoj izjavi u skladu sa sljedećim prihvaćenim europskim direktivama i nacionalnim zakonima:</p> <p>Smjernica o niskom naponu 2014/35/EZ ; Elektromagnetna kompatibilnost - smjernica 2014/30/EZ</p> <p>i usklađenim europskim normama navedenim na prethodnoj stranici.</p>	<p align="center"><b>(HU) - Magyar</b> <b>EK-MEGFELELŐSÉGI NYILATKOZAT</b></p> <p>WILO SE kijelenti, hogy a jelen megfélelősségi nyilatkozatban megjelölt termékek megfelelnek a következő európai irányelvek előírásainak, valamint azok nemzeti jogrendbe átültetett rendelkezéseinek:</p> <p>Alacsony Feszültségű 2014/35/EK ; Elektromágneses összeférhetőségre 2014/30/EK</p> <p>valamint az előző oldalon szereplő, harmonizált európai szabványoknak.</p>
<p align="center"><b>(IS) - Íslenska</b> <b>EB LEYFISYFIRLÝSING</b></p> <p>WILO SE lýsir því yfir að vörurnar sem um getur í þessari yfirlýsingu eru í samræmi við eftirfarandi tilskipunum ESB og landslögum hafa samþykkt:</p> <p>Lágspennutilskipun 2014/35/EB ; Rafseguls-samhæfni-tilskipun 2014/30/EB</p> <p>og samhæfða evrópska staðla sem nefnd eru í fyrri síðu.</p>	<p align="center"><b>(IT) - Italiano</b> <b>DICHIARAZIONE CE DI CONFORMITÀ</b></p> <p>WILO SE dichiara che i prodotti descritti nella presente dichiarazione sono conformi alle disposizioni delle seguenti direttive europee nonché alle legislazioni nazionali che le traspongono :</p> <p>Bassa Tensione 2014/35/CE ; Compatibilità Elettromagnetica 2014/30/CE</p> <p>E sono pure conformi alle disposizioni delle norme europee armonizzate citate a pagina precedente.</p>
<p align="center"><b>(LT) - Lietuvių kalba</b> <b>EB ATITIKTIES DEKLARACIJA</b></p> <p>WILO SE pareiškia, kad šioje deklaracijoje nurodyti gaminiai atitinka šių Europos direktyvų ir jas perkeliančių nacionalinių įstatymų nuostatus:</p> <p>Žema įtampa 2014/35/EB ; Elektromagnetinis Suderinamumas 2014/30/EB</p> <p>ir taip pat harmonizuotas Europos normas, kurios buvo cituotos ankstesniame puslapyje.</p>	<p align="center"><b>(LV) - Latviešu valoda</b> <b>EK ATBILSTĪBAS DEKLARĀCIJU</b></p> <p>WILO SE deklarē, ka izstrādājumi, kas ir nosaukti šajā deklarācijā, atbilst šeit uzskaitīto Eiropas direktīvu nosacījumiem, kā arī atsevišķu valstu likumiem, kuros tie ir ietverti:</p> <p>Zemsprieguma 2014/35/EK ; Elektromagnētiskās Saderības 2014/30/EK</p> <p>un saskaņotajiem Eiropas standartiem, kas minēti iepriekšējā lappusē.</p>

<p align="center"><b>(MT) - Malti</b> <b>DIKJARAZZJONI KE TA' KONFORMITÀ</b></p> <p>WILO SE jiddikjara li l-prodotti speċifikati f'din id-dikjarazzjoni huma konformi mad-direttivi Ewropej li jsegwu u mal-leġislazzjonijiet nazzjonali li japplikawhom:</p> <p>Voltaġġ Baxx 2014/35/KE ; Kompatibbiltà Elettromanjetika 2014/30/KE</p> <p>kif ukoll man-normi Ewropej armonizzati li jsegwu imsemmija fil-paġna preċedenti.</p>	<p align="center"><b>(NL) - Nederlands</b> <b>EG-VERKLARING VAN OVEREENSTEMMING</b></p> <p>WILO SE verklaart dat de in deze verklaring vermelde producten voldoen aan de bepalingen van de volgende Europese richtlijnen evenals aan de nationale wetgevingen waarin deze bepalingen zijn overgenomen:</p> <p>Laagspannings 2014/35/EG ; Elektromagnetische Compatibiliteit 2014/30/EG</p> <p>De producten voldoen eveneens aan de geharmoniseerde Europese normen die op de vorige pagina worden genoemd.</p>
<p align="center"><b>(NO) - Norsk</b> <b>EU-OVERENSSTEMMELSESERKLÆING</b></p> <p>WILO SE erklærer at produktene nevnt i denne erklæringen er i samsvar med følgende europeiske direktiver og nasjonale lover:</p> <p>EG–Lavspenningsdirektiv 2014/35/EG ; EG–EMV–Elektromagnetisk kompatibilitet 2014/30/EG</p> <p>og harmoniserte europeiske standarder nevnt på forrige side.</p>	<p align="center"><b>(PL) - Polski</b> <b>DEKLARACJA ZGODNOŚCI WE</b></p> <p>WILO SE oświadcza, że produkty wymienione w niniejszej deklaracji są zgodne z postanowieniami następujących dyrektyw europejskich i transponującymi je przepisami prawa krajowego:</p> <p>Niskich Napięć 2014/35/WE ; Kompatybilności Elektromagnetycznej 2014/30/WE</p> <p>oraz z następującymi normami europejskich zharmonizowanymi podanymi na poprzedniej stronie.</p>
<p align="center"><b>(PT) - Português</b> <b>DECLARAÇÃO CE DE CONFORMIDADE</b></p> <p>WILO SE declara que os materiais designados na presente declaração obedecem às disposições das diretivas europeias e às legislações nacionais que as transcrevem :</p> <p>Baixa Voltagem 2014/35/CE ; Compatibilidade Electromagnética 2014/30/CE</p> <p>E obedecem também às normas europeias harmonizadas citadas na página precedente.</p>	<p align="center"><b>(RO) - Română</b> <b>DECLARAȚIE DE CONFORMITATE CE</b></p> <p>WILO SE declară că produsele citate în prezenta declarație sunt conforme cu dispozițiile directivelor europene următoare și cu legislațiile naționale care le transpun :</p> <p>Joasă Tensiune 2014/35/CE ; Compatibilitate Electromagnetică 2014/30/CE</p> <p>și, de asemenea, sunt conforme cu normele europene armonizate citate în pagina precedentă.</p>
<p align="center"><b>(RU) - русский язык</b> <b>Декларация о соответствии Европейским нормам</b></p> <p>WILO SE заявляет, что продукты, перечисленные в данной декларации о соответствии, отвечают следующим европейским директивам и национальным предписаниям:</p> <p>Директива ЕС по низковольтному оборудованию 2014/35/ЕС ; Директива ЕС по электромагнитной совместимости 2014/30/ЕС</p> <p>и гармонизированным европейским стандартам, упомянутым на предыдущей странице.</p>	<p align="center"><b>(SK) - Slovenčina</b> <b>ES VYHLÁSENIE O ZHODE</b></p> <p>WILO SE čestne prehlasuje, že výrobky ktoré sú predmetom tejto deklarácie, sú v súlade s požiadavkami nasledujúcich európskych direktív a odpovedajúcich národných legislatívnych predpisov:</p> <p>Nízkonapäťové zariadenia 2014/35/ES ; Elektromagnetickú Kompatibilitu 2014/30/ES</p> <p>ako aj s harmonizovanými európskych normami uvedenými na predchádzajúcej strane.</p>
<p align="center"><b>(SL) - Slovenščina</b> <b>ES-IZJAVA O SKLADNOSTI</b></p> <p>WILO SE izjavlja, da so izdelki, navedeni v tej izjavi, v skladu z določili naslednjih evropskih direktiv in z nacionalnimi zakonodajami, ki jih vsebujejo:</p> <p>Nizka Napetost 2014/35/ES ; Elektromagnetno Združljivostjo 2014/30/ES</p> <p>pa tudi z usklajenimi evropskih standardi, navedenimi na prejšnji strani.</p>	<p align="center"><b>(SV) - Svenska</b> <b>EG-FÖRSÄKRAN OM ÖVERENSSTÄMMELSE</b></p> <p>WILO SE intygar att materialet som beskrivs i följande intyg överensstämmer med bestämmelserna i följande europeiska direktiv och nationella lagstiftningar som inför dem:</p> <p>Lågspännings 2014/35/EG ; Elektromagnetisk Kompatibilitet 2014/30/EG</p> <p>Det överensstämmer även med följande harmoniserade europeiska standarder som nämnts på den föregående sidan.</p>
<p align="center"><b>(TR) - Türkçe</b> <b>CE UYGUNLUK TEYİD BELGESİ</b></p> <p>WILO SEbu belgede belirtilen ürünlerin aşağıdaki Avrupa yönetmeliklerine ve ulusal kanunlara uygun olduğunu beyan etmektedir:</p> <p>Alçak Gerilim Yönetmeliği 2014/35/AT ; Elektromanyetik Uyumluluk Yönetmeliği 2014/30/AT</p> <p>ve önceki sayfada belirtilen uyumlaştırılmış Avrupa standartlarına.</p>	

**05.10.21**

## **REACH Verordnung / REACH Regulation**

Sehr geehrter Kunde,  
Sehr geehrte Damen und Herren

Dear Customer,  
Dear Sir or Madam,

wir haben Ihre Anfrage zur Einhaltung der Verordnung (EG) Nr. 1907/2006 (REACH-Verordnung<sup>1</sup>) erhalten:

We received your request regarding compliance with the regulation (EC) No 1907/2006 (REACH Regulation<sup>3</sup>).

Unsere an Sie gelieferten Produkte sind Erzeugnisse, aber nicht Stoffe oder Zubereitungen im Sinne der REACH Verordnung. Daher ist für uns keine Registrierung gemäß REACH erforderlich. Gleichfalls müssen wir kein Sicherheitsdatenblatt (SDB) für unsere gefertigten Produkte liefern.

Under the terms of this Regulation, the products sold to you are articles, not substances or preparations. Therefore, no registration in accordance with REACH is required for us. Likewise, no Safety Data Sheet (SDS) has to be provided with our finished products.

Der Artikel 33 soll sicherstellen, dass ein Kunde eines Produktes in der Lage ist, alle sicherheitstechnischen Maßnahmen, die für einen sicheren Betrieb des Erzeugnisses notwendig sind, einzuleiten, wenn SVHC Substanzen der Kandidatenliste<sup>2</sup> oberhalb des meldepflichtigen Wertes vorhanden sind. Das angehängte Dokument enthält die aktuell bekannten SVHC Substanzen, welche in den genannten Produkten oberhalb

Article 33 intends to enable customers of supplied products to take all relevant risk management measures that may arise from the presence of Substances of Very High Concern listed in the candidate list for authorization with a concentration over 0.1% w/w in articles in order to guarantee their safe use. The attached document contains the actually known SVHCs that are

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<sup>1</sup> VERORDNUNG (EG) Nr. 1907/2006 DES EUROPÄISCHEN PARLAMENTS UND DES RATES vom 18. Dezember 2006 zur Registrierung, Bewertung, Zulassung und Beschränkung chemischer Stoffe (REACH), zur Schaffung einer Europäischen Chemikalienagentur, zur Änderung der Richtlinie 1999/45/EG und zur Aufhebung der Verordnung (EWG) Nr. 793/93 des Rates, der Verordnung (EG) Nr. 1488/94 der Kommission, der Richtlinie 76/769/EWG des Rates sowie der Richtlinien 91/155/EWG, 93/67/EWG, 93/105/EG und 2000/21/EG der Kommission

<sup>2</sup> Liste der besonders besorgniserregenden Stoffe (Substances of Very High Concern, SVHCs) der Europäischen Chemikalienagentur (ECHA)

<sup>3</sup> REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

des Grenzwertes von 0,1 Gew. % in bestimmten verwendeten Erzeugnissen vorhanden sind. Diese Informationen stammen aus der Lieferkette oder aus eigenen Produktdaten.

Gemäß unserer Verpflichtung als Produzent von Erzeugnissen, werden wir Sie über relevante Veränderungen unserer Produkte basierend auf Überarbeitungen der REACH-Verordnung oder bei Erlangen weiterer Kenntnisse aus der Lieferkette informieren.

Aus unseren Pumpen oder deren Zubehör soll unter normalen und vernünftigerweise vorhersehbaren Verwendungsbedingungen kein Stoff im Sinne der REACH-Verordnung freigesetzt werden, so dass eine Exposition von Mensch und Umwelt sehr unwahrscheinlich ist.

Bitte haben Sie Verständnis, dass wir keine Fragebögen etc. ausfüllen und betrachten Sie diese Kundeninformation als entsprechenden Ersatz.

Mit freundlichen Grüßen



ppa. Holger Herchenhein  
Senior Vice President  
Group Quality & Qualification  
Group Local Management

present greater than 0.1% w/w within used articles in the referenced products. It is based on information received from our supply chain and our own product data.

According to our obligations, as a producer of articles, we will inform you about any relevant change in our products due to revisions of the REACH Regulation or change of knowledge from our supply chain.

Under normal and reasonably foreseeable conditions of use and maintenance, our pumps and their accessories have a very low potential that the substances are released and that humans or the environment are exposed to these SVHCs.

Please understand that we will not fill out any questionnaires and consider this customer information as a respective substitute.

Best regards



ppa. Dr. Jörg Praczyk  
Senior Vice President  
Group Research & Development

ANNEX

Auf Grund unserer Informationspflicht zu SVHC nach Art. 33 der REACH Verordnung (EG/1907/2006) stellen wir ihnen die folgenden Informationen für unsere Produkte zur Verfügung:

Material	SVHC		Verwendung als:	Betroffene Produkte
	Stoff-name:	CAS:		
Kupfer Legierungen wie Messing, Bronze	Blei	7439-92-1	Pumpengehäuse, Lagerschild, Kabel, Motorwicklungen, Elektronik; könnte Bestandteil in Zubehör und Ersatzteilen sein	Alle Pumpen
Aluminium Legierungen	Blei	7439-92-1	Module, Motorteile; könnte Bestandteil in Zubehör und Ersatzteilen sein	Alle Pumpen
Niedrig und Unlegierte Stähle	Blei	7439-92-1	Motorteile; könnte Bestandteil in Zubehör und Ersatzteilen sein	Alle Pumpen
Keramik, Glas	Blei	7439-92-1	Elektronik; könnte Bestandteil in Zubehör und Ersatzteilen sein	Alle Pumpen
Keramik, Glass	Bleimonoxid (Bleioxid)	1317-36-8	Elektronik - PCBA - Dioden	Stratos, Stratos para, Yonos Pico, Yonos Para
-	1,2-Dimethoxyethan; Ethylen glycol dimethyl ether (EGDME)	110-71-4	Batterie	Stratos Maxo
Metallische Kontakte	Cadmium	7440-43-9	Elektronik - Kontakt/ Relais	Stratos, Stratos-D, Stratos-Z, IP-E, DP-E

Da Blei Bestandteil der Legierung ist, welches für die Eigenschaften des Materials erforderlich ist, kann dieses nicht substituiert werden. Blei wird bestimmungsgemäß nicht freigesetzt.

According to our duty to inform our customers on SVHC (Art. 33 of REACH regulation – EC/1907/2006), the following information on our products is given:

Material	SVHC		Use as	Affected products
	Substance name:	CAS:		
Copper alloys like brass, bronze	Lead	7439-92-1	Pump housing, thrust plate, cable, motor windings, electronics; could be part of accessories and spare parts	All pumps
Aluminium alloys	Lead	7439-92-1	Modules, Motor parts; could be part of accessories and spare parts	All pumps
Low or non-alloyed steel	Lead	7439-92-1	Motor parts; could be part of accessories and spare parts	All pumps
Ceramics, glass	Lead	7439-92-1	Electronics; could be part of accessories and spare parts	All pumps
Ceramics, glass	Lead monoxide (Lead oxide)	1317-36-8	Electronics - PCBAs - Diodes	Stratos, Stratos para, Yonos Pico, Yonos Para
-	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	Batteries	Stratos maxo
Metallic contacts	Cadmium	7440-43-9	Electronics - Contact/Relais	Stratos, Stratos-D, Stratos-Z, IP-E, DP-E

As lead is part of the alloy, and is necessary for the behavior of the material, a substitution is not possible. There is no intended release of lead.

Revision date: October 5<sup>th</sup>, 2021

ANNEX

Auf Grund unserer Informationspflicht zu SVHC nach Art. 33 der REACH Verordnung (EG/1907/2006) stellen wir ihnen die folgenden Informationen für unsere Produkte zur Verfügung:

Material	SVHC		Verwendung als:	Betroffene Produkte	Sichere Handhabung
	Stoffname:	CAS:			
Kupfer Legierungen wie Messing, Bronze	Blei	7439-92-1	Pumpengehäuse, Lagerschild, Kabel, Motorwicklungen, Elektronik; könnte Bestandteil in Zubehör und Ersatzteilen sein	Alle Pumpen	Keine Freisetzung, Bestandteil der Legierung
Aluminium Legierungen	Blei	7439-92-1	Module, Motorteile; könnte Bestandteil in Zubehör und Ersatzteilen sein	Alle Pumpen	Keine Freisetzung, Bestandteil der Legierung
Niedrig und Unlegierte Stähle	Blei	7439-92-1	Motorteile; könnte Bestandteil in Zubehör und Ersatzteilen sein	Alle Pumpen	Keine Freisetzung, Bestandteil der Legierung
Keramik, Glas	Blei	7439-92-1	Elektronik; könnte Bestandteil in Zubehör und Ersatzteilen sein	Alle Pumpen	Internes Bauteil; kein Kontakt während der Verwendung
Keramik, Glass	Bleimonoxid (Bleioxid)	1317-36-8	Elektronik - PCBA - Dioden	Stratos, Stratos para, Yonos Pico, Yonos Para	Internes Bauteil; kein Kontakt während der Verwendung
-	1,2-Dimethoxyethan; Ethylen-glycol dimethyl ether (EGDME)	110-71-4	Batterie	Stratos Maxo	Internes Bauteil; kein Kontakt während der Verwendung
Metallische Kontakte	Cadmium	7440-43-9	Elektronik - Kontakt/ Relais	Stratos, Stratos-D, Stratos-Z, IP-E, DP-E	Internes Bauteil; kein Kontakt während der Verwendung

According to our duty to inform our customers on SVHC (Art. 33 of REACH regulation – EC/1907/2006), the following information on our products is given:

Material	SVHC		Use as	Affected products	Safe use
	Substance name:	CAS:			
Copper alloys like brass, bronze	Lead	7439-92-1	Pump housing, thrust plate, cable, motor windings, electronics; could be part of accessories and spare parts	All pumps	No release of substance, constituent of alloy
Aluminium alloys	Lead	7439-92-1	Modules, Motor parts; could be part of accessories and spare parts	All pumps	No release of substance, constituent of alloy
Low or non-alloyed steel	Lead	7439-92-1	Motor parts; could be part of accessories and spare parts	All pumps	No release of substance, constituent of alloy
Ceramics, glass	Lead	7439-92-1	Electronics; could be part of accessories and spare parts	All pumps	Internal part; no contact during use phase
Ceramics, glass	Lead monoxide (Lead oxide)	1317-36-8	Electronics - PCBAs - Diodes	Stratos, Stratos para, Yonos Pico, Yonos Para	Internal part; no contact during use phase
-	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	Batteries	Stratos maxo	Internal part; no contact during use phase
Metallic contacts	Cadmium	7440-43-9	Electronics - Contact/Relais	Stratos, Stratos-D, Stratos-Z, IP-E, DP-E	Internal part; no contact during use phase

Revision date: October 5<sup>th</sup>, 2021



# WE STAY CONNECTED

Building Bridges

# WILO PROFILE

The Wilo Group is one of the **world's leading premium suppliers** of pumps and pump systems for the building services, water management and industrial sectors. In the past decade, we have developed from a hidden champion into a visible and **connected champion**. Today, Wilo has **8,457 employees** worldwide.

Our innovative solutions, smart products and individual services move water in an **intelligent, efficient and climate-friendly** manner. We are also making an important contribution to climate protection with our **sustainability strategy** and in conjunction with our partners. We are systematically pressing ahead with the digital transformation of the Group. We are already the **digital pioneer** in the industry with our products and solutions, processes and business models.

# MARKET SEGMENTS



## BUILDING SERVICES RESIDENTIAL

We are a full-range supplier and customers' first choice.



## BUILDING SERVICES COMMERCIAL

We are a market, innovation and smart solutions leader.



## OEM

We are the preferred partner for smart integrated solutions.



## WATER MANAGEMENT

We are a global market player and digital solutions provider.



## INDUSTRY

We specialise in selected sectors and applications.

## NET SALES

# EUR 1,885.7 million

The Wilo Group continued on its profitable growth path with strong net sales growth of 14.2 percent. Net sales increased to EUR 1,885.7 million.

## EMPLOYEES

# 8,457

The employees of the Wilo Group are the foundation and the driving force behind its business success. Their dedication made an important contribution to the company's sustainable and profitable development in the year under review. Wilo employed an average of 8,457 people over the year.

## EBITDA

# EUR 196.7 million

Despite the challenging environment, Wilo also recorded a year-on-year increase in EBITDA to EUR 196.7 million.

## INVESTMENTS

# EUR 155.3 million

Wilo continues to invest heavily in the future. Among other things, EUR 155.3 million was invested in the construction and expansion of new and existing sales and production locations, the modernisation and capacity expansion of production machinery and company acquisitions. A new facility in Cedarburg, Wisconsin (USA) was opened in June, and state-of-the-art new production and administrative buildings are currently being constructed in China and India.



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# MAKING MAJOR PROGRESS TOGETHER

DEAR READERS,

Let's stay connected! During these times of ongoing crises, it is more important than ever to build economic, political and personal bridges. 2022 was marked not only by Russia's shocking war of aggression against Ukraine, but also by persistent strains in supply chains and energy shortages. And we cannot relegate to the background the fact that 2022 was also a year of extreme weather: heatwaves, cold periods, torrential rain, drought – around the world we saw clear demonstrations of how dangerous climate change is. There can be no doubt that the climate crisis is one of the greatest challenges of our times.

## A climate protection pioneer by tradition

When it comes to climate protection, Wilo had traditionally been leading the way as a pioneer. A glance at the range of products and solutions we offer already provides evidence of this. Wilo pumps and pump systems are synonymous with high efficiency. Worldwide, up to 246 terawatt-hours in electricity for heating, cooling and air conditioning applications alone could be saved if outdated pumps were replaced by the latest generation models – that is equivalent to the capacity of around 80 medium-sized coal-fired power plants that would no longer be required. We play an important role here. But we also consider ourselves to be a climate protection company above and beyond our product and solutions portfolio.

We express this identity through our commitment to the Sustainable Development Goals. We were able to show our partners, customers and employees what this commitment looks like in practice in the course of the SDG Action Days that we held in September. During the interactive online events, internal and external experts and other contributors gave presentations and exchanged views on current sustainability issues in a series of keynote speeches and panel discussions.

## Hydrogen – a key technology

Wilo's sustainability commitment also enjoyed an important day on 9 September 2022 when we opened the H<sub>2</sub>POWERPLANT at the Wilopark during an international industry conference. The pilot hydrogen plant generates CO<sub>2</sub>-neutral hydrogen and stores it as an emergency and back-up power supply for the smart factory. In the future, it will supply the site with green energy. Climate-positive production is just around the corner. It is our firm conviction that hydrogen is a key technology for achieving the Paris climate targets – the H<sub>2</sub>POWERPLANT, which we are now marketing around the world as a system solution, is major step forward along this road.

Our commitment to sustainability was recognised when we were awarded the platinum rating by EcoVadis in 2022. This independent rating agency has assessed 90,000 companies – but has awarded the platinum rating to just one percent of them. After receiving a silver medal in 2019 and 2020 and a gold medal in 2021, we have now been awarded the highest EcoVadis rating for the first time. This development is testament to our ambition constantly to become more sustainable.



**Georg Weber**, member of the Executive Board and CTO of the Wilo Group, is responsible for sustainability management. His other areas of responsibility include research and development, procurement and supply chain management, operations, quality and location management.

Other results of our sustainability efforts in the past year include:

- ✓ Production at our plants in Aubigny (France) and Bari (Italy) has been climate-neutral since last year. The carbon footprint of all Wilo plants in Europe is thus neutral. TÜV Rheinland has checked and confirmed that the data is correct. Moreover, we have reduced our Scope 1 and Scope 2 emissions by another 17 percent. Set against the benchmark year of 2018, the reduction amounts to a grand total of 36 percent.
- ✓ We have made further investments in generating electricity ourselves. We successfully installed new solar photovoltaic plants at our sites in Hof (Germany), Kesurdi (India) and Cedarburg (USA). Adding the existing plants in Dortmund (Germany) and Kolhapur (India), five of Wilo's primary production sites now have sustainable technology.
- ✓ We formulated specific emissions targets and sent them to the Science Based Targets initiative for validation. With these targets we also took Scope 3 emissions into account for the first time and have undertaken to reduce them by at least 25 percent by 2030. The SBI initiative calls on companies and organisations to play their part in limiting global warming to 1.5°C by implementing their own specific measures.

✓ We continued to drive the expansion of sustainable water solutions, achieving growth of 12 percent here. By developing water infrastructure in the area of agriculture, for example, we are directly improving people's living conditions. Examples of this include our contributions to the Toshka project (Egypt) and to irrigation in Talawi (Indonesia), where our pumps and pump systems play a key role in supplying food for the population.

✓ We have made further important steps along the path to an integrated circular economy approach. We are now deriving additional potential for improvements from the ecological footprints that have been calculated for our products during their entire life cycle. These are aimed in particular at the use of more sustainable materials as well as enhancements relating to reparability and recyclability.

This progress is the product of a genuine team effort. Around 8,400 Wilo employees work across borders every day to create a more sustainable future. As the Wilo Group, we will also continue in 2023 to pursue the path we have embarked upon – and thus make our contribution to a better world.

Yours faithfully

Georg Weber  
Member of the Executive Board and CTO of the Wilo Group



# WE STAY CONNECTED

The world is going through turbulent times. From Russia's invasion of Ukraine to climate change, we find ourselves confronted by numerous crises. We can add to these worldwide tendencies towards isolationism and protectionism. At Wilo, we know that we can overcome global challenges only by working together. That is why we, as a multinational group of companies, have set ourselves the goal of staying connected. With our customers locally. With our partners in many countries around the world. And with our employees everywhere. Because it is our firm conviction that, together, we can make a difference. For a better world.



# SUSTAINABILITY STRATEGY

## Overview of Wilo's sustainability goals for up to 2025

Wilo has developed an explicit sustainability strategy on the basis of its Ambition 2025 corporate strategy and the identification of key issues. The central tenet of this strategy is to provide more people with clean water while simultaneously reducing the ecological footprint. A total of 18 goals have been formulated within four action areas.



### WATER

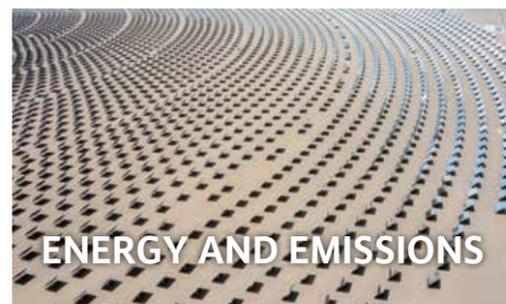
We are facilitating better access to clean water for **100 million people**.

Increased provision of innovative water solutions: Annual growth rate **7.5 percent**.

Expansion of smart water systems portfolio: Annual growth rate **35 percent**.

Expansion of water programmes.

Reduction in fresh water consumption at Wilo's sites: **20 percent**.



### ENERGY AND EMISSIONS

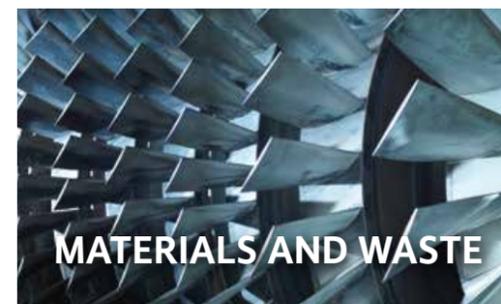
We are reducing CO<sub>2</sub> emissions by **50 million t**.

Energy savings through high-efficiency pumps: **1.8 TWh** per year.

Increase in Energy Solutions projects: **10,000** projects per year.

Expansion of Smart Products portfolio: Annual growth rate **15 percent**.

Reduction in CO<sub>2</sub> emissions at Wilo's sites: **Climate-neutral production**.



### MATERIALS AND WASTE

We are reducing the consumption of raw materials by **250 t**.

Increase in the number of reused components: **30,000** items per year.

Reduction in material consumption: **12 t** of copper per year.

Increased use of reusable packaging: **100 percent**.

Increase in recycling rate at Wilo's sites: **90 percent**.



### EMPLOYEES AND SOCIETY

We **act responsibly** towards employees and society.

Promotion of local capacity development: **20** new training centres.

Ensuring social compliance: **90 percent** training coverage.

Ensuring a sustainable supply chain: **100 percent** risk coverage.

Effective development programmes: **70 percent** of managers developed internally.

Strengthening the culture of diversity: **20 percent** of management positions filled by women.

Ensuring a safe working environment: **0** accidents.

# SUSTAINABILITY STRATEGY

## Description of our goals and action areas

### WATER

**Our strategic goal is to supply 100 million people with clean water by 2025. We will achieve this by implementing the following operating sustainability goals:**

- We will increase the growth rate our innovative **water infrastructure** solutions by 7.5 percent per year. They help to supply more people with clean water.
- We will strive to grow our **smart water systems** by at least 35 percent per year, because we are convinced that connectivity, operational reliability and maximum efficiency are the key factors needed for saving more resources in the future.
- We are intensifying our commitment to **water programmes** as a sustainable water supply is only possible in cooperation with international partners.
- We will reduce **fresh water consumption** (by 20 percent to 2025) at our production sites, in particular through technologies for more efficient use, water purification and increased rainwater usage.

### ENERGY AND EMISSIONS

**Our strategic goal is to reduce CO<sub>2</sub> emissions by 50 million tonnes by 2025. We will achieve this by implementing the following operating sustainability goals:**

- We will achieve energy savings of at least 1.8 TWh per year thanks to our **high-efficiency pumps**. This will be achieved firstly due to ever greater demand for highly efficient products outside of Europe and secondly through increasingly efficient technologies. By 2025, this will result in a cumulative CO<sub>2</sub> reduction of over 50 million tonnes.
- We will increase the number of our **Energy Solutions** projects to at least 10,000 per year, as inefficient pumps will thus be systematically replaced by more efficient ones, providing a clear advantage for customers and the environment.
- We will expand our portfolio of **Smart Products**. Our goal is to achieve annual growth in net sales of at least 15 percent.
- We will strive to achieve **climate-neutral production** at our own sites by 2025 through efficiency measures, ecological energy procurement and investments in climate protection projects.

### MATERIAL AND WASTE

**Our strategic goal is to consume 250 tonnes less material resources by 2025. We will achieve this by implementing the following operating sustainability goals:**

- We will increase the **number of reused components** in our products to at least 30,000 per year. Keeping materials in circulation is the best way to conserve resources, so Wilo is investing intensively in the expansion of the corresponding processes.
- We will increase the **materials efficiency** of our products by at least 12 tonnes per year. At the moment, we are primarily looking at copper, cast and aluminium casting, which make up most of the weight of our products. New technologies will drastically reduce material requirements.
- We are reducing **packaging materials**. As a first step, we are focusing on increasing the use of reusable packaging in the inbound segment, where we are aiming for a share of 100 percent by 2025.
- We will increase the **recycling rate** at Wilo's sites. By separating materials, increasing the sourcing of recyclable materials and adopting reuse systems, we are planning to achieve a rate of at least 90 percent by 2025.

### EMPLOYEES AND SOCIETY

**We are committed to acting responsibly towards employees and society. We will achieve this by implementing the following operating sustainability goals:**

- We will promote **local capacity development** to empower people, organisations and societies to sustainably shape their own development. Our goal is to set up at least 20 capacity development programmes worldwide by 2025.
- We will ensure global **compliance** with all applicable laws and regulations. A key requirement for this is the regular training of all employees; we are striving for training coverage of at least 90 percent.
- We are committed to a **sustainable supply chain**. Our goal is to create transparency of the entire supplier portfolio and to ensure that 100 percent of suppliers comply with the basic principles of human rights.
- We will invest in the **development** and advancement of our employees. We see the internal recruitment of our managers as one measure of success. We are aiming for a rate of at least 70 percent.
- The appreciation and promotion of individuality and **diversity** will be given special attention. One indicator for real equality is the share of women in management positions, which we want to increase to 20 percent by 2025.
- We will promote workplace **health and safety** and have embraced "Vision 0" at all Wilo sites with the goal of achieving zero accidents and zero workrelated illnesses.

In this action area, Wilo will make a significant contribution to SDGs 6, 9 and 11.



→ Section starting on p. 18

In this action area, Wilo will make a significant contribution to SDGs 9, 11 and 13.



→ Section starting on p. 26

In this action area, Wilo will make a significant contribution to SDG 12.



→ Section starting on p. 42

In this action area, Wilo will make a significant contribution to SDGs 8 and 17.



→ Section starting on p. 54



Oliver Hermes, President & CEO of the Wilo Group

“At Wilo, we always also look at crises as an opportunity to change the world in which we live and to make life easier for people.”

OLIVER HERMES

# CORPORATE POLITICAL RESPONSIBILITY

## How crises can be handled successfully

By Oliver Hermes

The 21st century has become the setting for multiple crises. Everywhere in the world, communities are experiencing the consequences of natural disasters and man-made crises, whether from climate change or industrial, social and ecological effects. These challenges are characterised by a completely new complexity that is putting the planet, people, society and the economy in acute danger.

### A resilient world?

In a globally networked and ecologically damaged world, crisis mode is becoming the new normal. How can individuals, organisations and societies arm themselves for this

era? What will strengthen the ability to survive? What will bring about systemic cohesion? Crises can only be handled successfully by working together – by a progressive “We” that reinforces solidarity, trust and diversity. For compa-

nies, this can produce innovative and far-reaching possibilities for social co-decision and organisation design that define social engagement as sociopolitical participation. As the Wilo Group, we do this in the context of our corporate political responsibility. As a group of companies that operate around the world, we keep an eye on geopolitical developments and their consequences for the planet, people, society and the economy and are intensifying cooperation with our stakeholder groups.

### Companies, get involved!

In these turbulent times, in which we are increasingly dependent on critical, complex infrastructure and supply chains, people are turning their attention more than ever to business. The Edelman Trust Barometer 2023 confirms that companies are considered by society to be particularly competent and ethically responsible in their actions. According to the study, it is increasingly being demanded of them that they take a position on issues such as climate protection. If politics and business worked together in a spirit of mutual partnership instead of separately from each other, the benefit for society would be up to four times greater.

At Wilo, we always also look at crises as an opportunity to change the world in which we live and to make life easier for people. As a multinational technology company, we already take a public stand on issues such as climate protection, digitalisation and multilateralism. We highlight the importance of actions to ensure energy and food security, illustrate the need for energy and resource efficiency, raise awareness about the correct management of the precious resource that is water and emphasise the relevance of hydrogen as an energy source of the future – issues that are directly related to our core business.



### Building bridges

The overriding principle of a crisis-resilient society consists in promoting understanding for one another. Exchanging different perspectives, opinions and experiences provides the foundation for solidarity and community. Only together can we build the necessary bridges that will ensure worldwide prosperity and social cohesion. As a climate protection company that is active around the world, it is of great relevance for the Wilo Group both during crises and in terms of crisis prevention to exchange views in knowledge networks so that we can tackle global challenges together and proactively reinforce the dialogue »



**Start of a new era**

Jean-Pascal Tricoire (President & CEO of Schneider Electric), Oliver Hermes (President & CEO of the Wilo Group), Georg Weber (CTO of the Wilo Group) and Christophe de Maistre (DACH Zone President of Schneider Electric) join hands to inaugurate the H<sub>2</sub>POWERPLANT.

with our stakeholder groups by creating our own spaces for encounters. In 2022, these spaces included the international industry conference and the SDG Action Days.

**International industry conference**

The international industry conference welcomed 200 high-ranking guests from the fields of politics, business and science to the Wilopark in Dortmund. The participants joined the Wilo Executive Board to discuss possible solutions for tackling the growing international tensions and decoupling tendencies as well as for dealing with the current energy crisis. The partners in the discussions stressed how important the diversification of European energy procurement and a strategy based on partnership are for the procurement of critical raw materials. A further high point was provided by the inauguration of the H<sub>2</sub>POWERPLANT hydrogen facility.

“Only together can we build the necessary bridges that will ensure worldwide prosperity and social cohesion.”

OLIVER HERMES



**SDG Action Days**

As a partner in the Global Goals Week of the United Nations, Wilo announced its international SDG Action Days with the aim of reaffirming the need for sustainable action. Seven Wilo Group locations presented the local contributions they have made to achieving the United Nations’ Sustainable Development Goals (SDGs for short). In addition, they invited global partners, networks drawn from civil society, business and science, and more than 500 participants to discuss transformative solutions and actions for achieving the goals of Agenda 2030.

Many people feel powerless in the face of the climate crisis. That is why it is important to us to give positive signals and support platforms that help move the needle on sustainability and climate protection across corporate and national borders.



**Partner of the German Sustainability Award**

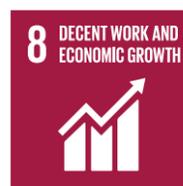
As a former winner, Wilo served as the partner of the Deutscher Nachhaltigkeitspreis (DNP – German Sustainability Award), Europe’s leading award for ecological and social engagement, in 2022. For the 15th time, the prize recognised pioneering contributions to the transformation to a sustainable future, provided important actors in politics, business, research and civil society with a strong impetus to change, connected them across borders and once again stimulated partnerships.

# OUR CONTRIBUTION TO THE SUSTAINABLE DEVELOPMENT GOALS

The United Nations adopted the Sustainable Development Goals (SDGs) in 2015. The action plan describes the path to more prosperity and quality of life – while consuming fewer resources. Wilo aspires to help ensure a sustainable future. We are therefore also taking responsibility for the achievement of the Sustainable Development Goals. In 2018, the Executive Board of the Wilo Group signed the UN Global Compact, underscoring our commitment. As a result of its business activities, Wilo has a particular influence on the achievement of Goals 6, 8, 9, 11, 12, 13 and 17.



**SDG 6** – Clean Water And Sanitation: Our aim is to supply more people with clean water. Sustainability is firmly enshrined in Wilo's core business. In this way, we are making a substantial contribution to Goal 6, which involves expanding activities and programmes in the area of water and sanitation between now and 2030.



**SDG 8** – Decent Work And Economic Growth: As a global employer, Wilo contributes to employment and economic growth in a large number of countries. Decent working conditions are just as self-evident as supporting and advancing employees worldwide.



**SDG 9** – Industry, Innovation And Infrastructure: We see ourselves as an innovation leader and digital pioneer in the industry. Goal 9 involves establishing robust infrastructures and promoting sustainable industrialisation and innovation. Wilo is contributing to this goal through the use of its environmentally friendly, highly efficient technologies and its innovations in the area of digitalisation.



**SDG 11** – Sustainable Cities And Communities: Urbanisation is one of the key developments of the 21st century. More than half of the world's population lives in cities, and this figure is expected to rise to nearly 70 percent by 2050. At the same time, urbanisation is presenting serious challenges. Cities have an enormous ecological footprint. Wilo is using smart technologies to meet this challenge.



**SDG 12** – Responsible Consumption And Production: The world's population is currently consuming more resources than its ecosystems can provide. So that social and economic development can take place within the limits of what ecosystems can handle, the way in which our society produces and consumes goods must undergo a fundamental change. Wilo works resource-efficiently and supports initiatives to promote the circular economy. Wilo wants to continuously reduce its use of primary raw materials by expanding its infrastructure for the returning and recycling of old products.



**SDG 13** – Climate Action: Climate change is a central challenge for sustainable development. The warming of the Earth's atmosphere is triggering changes in the global climate system, which will make themselves felt in all areas of life. Wilo has always strived to optimise the energy consumption of its pumps. New technologies have consistently allowed it to be a market pioneer in terms efficiency. Through the use of highly efficient pumps, Wilo is helping pumps to use less energy and thus emit less CO<sub>2</sub> during their running time.



**SDG 17** – Partnerships For The Goals: The only way to achieve the sustainability goals is by working together. Companies, governments and other organisations will have to cooperate in order to increase the leverage of their respective contributions. For Wilo, partnerships are an essential function of business success. The expertise gained from working in networks is also used to collaborate on sustainability issues.



# WATER

**20** Water Infrastructure

**21** Smart Water Systems

**22** Water Programmes

**23** Water in Production and Processes

**24** Reference: Rice Paddies in Sumatra

# WATER INFRASTRUCTURE

## Supplying more people with clean water

The uninterrupted supply of clean water for drinking, for agriculture and for industry has always been one of the greatest challenges facing humanity. The growing world population, urbanisation and climate change are making this task even more challenging.

With its smart pumps and systems, Wilo is helping to reliably cover the basic requirements for water infrastructure. Our goal is to offer innovative solutions to the challenges of the future by generating an average annual growth rate of 7.5 percent and thereby improving access to water for more people and counteracting the effects of climate change. Last year, we considerably outperformed this target with a growth rate of 12 percent.



**785 million**

people around the world lack access to basic supplies of drinking water.

The country on the Nile imports more wheat than any other nation around the world. The Egyptian government wants to reduce this dependency on imports. To this end, it wants to develop a million hectares of desert for agricultural use as part of the Toshka project. The water necessary for this will reach its destination via the newly constructed Sheikh Zayed Canal and several pumping stations. "The Egyptian government is doing everything in its power to make the country independent of wheat imports in order to secure its food supply for the long term," continued Oliver Hermes. Only structured planning and the highly efficient use of resources will enable Egypt to enjoy permanent food security. Wilo

is playing its part here by providing more than 300 split case pumps and the relevant expertise.

### Caring for Water. With Passion.

At IFAT, the world's leading trade fair for water, sewage, waste and raw materials management, which was held in Munich from 30 May to 3 June 2022, Wilo presented solutions and innovations related to the water cycle. The innovations presented at the fair included the Wilo-Rexa SOLID-Q, Wilo's intelligent system solution for smart sewage pumping stations, the Wilo-Actun ZETOS, an especially efficient submersible pump for industrial and other water supplies from boreholes and reservoirs, and the submersible mixer Wilo-EMU TRE for reliable biological waste water treatment. These solutions bring us another step closer to achieving our goals of supplying more people with clean water and of meeting the increasing requirements for efficient and reliable water infrastructure.

For us, water infrastructure includes all products that are used along the water cycle: from raw water intake and treatment to water supply and on to waste water disposal and treatment. Sustainable water management does not just focus on the production and supply of drinking water. The disposal and treatment of sewage is also key to managing the valuable resource of water efficiently and to avoiding increased pollution. In addition, climate change is increasing the importance of drainage and flood control.

"With its intelligent pumps, systems and solutions, as the Wilo Group we are making a contribution that the basic requirements of water infrastructure are comprehensively and reliably covered. The Toshka project in Egypt is an excellent example of this," says Oliver Hermes.

Key sustainability indicator	2020	2021	2022
Annual growth rate (%)	-5	15	12

# SMART WATER SYSTEMS

## For intelligent water management

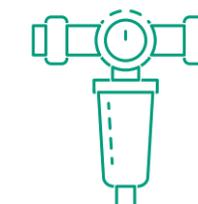
When we talk about smart water systems, we mean digital pump systems for the water supply that feature extensive control electronics and a high level of connectivity. This enables an intelligent connection by users and individual components of the water cycle, and is the key technology efficiency enhancements in the future.

Our goal is to launch smart solutions on the market, at an average annual growth rate of 35 percent smart solutions, that can meet the rising requirements for sustainable water supplies and climate protection. Last year, we achieved growth of 17 percent in the field of smart water systems. The reason why we fell short of our target can essentially be attributed to in the expansion of the product portfolio: a number of new products and series are still being tested. We plan to launch them on the market in 2023.

### Wilo-SiFresh – hygienic, safe, sustainable

An example of this is Wilo-SiFresh, a system solution for circulating cold water. The new system guarantees compliance with the strict drinking water standards. If a circulation line is added to a potable water installation, the circulator integrated in Wilo-SiFresh can keep the water in permanent circulation, monitor the temperature and thus prevent stagnation. If one of the monitored parameters gets close to a critical limit value, Wilo-SiFresh automatically reacts by flushing, reducing the water temperature and guaranteeing the prescribed water exchange. The hygiene regulations for cold drinking water are monitored and complied with in a smarter way, while water consumption is additionally reduced to a minimum.

Thanks to this concept, the new system solution won the Wilo Group's annual innovation award. "What we particularly like about Wilo-SiFresh is the excellent strategic fit in the areas of water hygiene and sustainability. This innovation allows us to open up new market opportunities for Wilo," Oliver Hermes said, explaining the decision.



**35%**

annual growth rate in the area of smart water solutions is the goal.

Key sustainability indicator	2020	2021	2022
Annual growth rate (%)	50	34	17

# WATER PROGRAMMES

## Working together for water

Working with international partners, we focus on making a contribution to a reliable water cycle. We firmly believe that a sustainable improvement in living conditions is only possible if people have safe access to clean water and sanitary facilities. Our goal is therefore to significantly increase joint activities in global water partnerships.

We go far beyond simple product application in these programmes. Rather, they are far more about establishing an integrated approach: we train and involve local groups and integrate them in existing structures and sustainable management and, by doing so, we play a part in ensuring employment in the regions in question. A water programme comprises all these elements and thus contributes to sustainable development. New options are opening up here as a result of strategic partnerships. Water builds bridges!



**For the first time**

the World Water Forum was held in sub-Saharan Africa in 2022.

### World Water Forum in Dakar

The World Water Forum is the world's largest event dealing with the subject of water. Started in 1997, it is organised every three years by the World Water Council in partnership with a host country. In 2022, the forum was held in sub-Saharan Africa for the first time. From 21 to 26 March 2022, participants addressed challenges in the area of water and sanitation in Africa and around the world under the rallying cry "Water Security for Peace and Development". "The event made it clear that access to water cannot be allowed to become an issue of conflict and every effort must be made to protect this essential resource," explains Oliver Hermes.

Representatives of the Wilo Group, as a member of the German Water Partnership e.V. (GWP), formed part of a

delegation that attended the conference. The joint German stand was organised by the GWP, the Bundesverband mittelständische Wirtschaft (BVMW – German Confederation of Small and Medium-Sized Enterprises) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ – German Society for International Cooperation) on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ).

Going beyond the World Water Forum in Dakar, we also worked side by side with our partners in 2022 to promote sustainable water manage-

ment. For example, the Wilo Group took part in the Ambassadors in Dialogue delegation of the Ostasiatischer Verein e.V. (OAV – German Asia-Pacific Business Organisation). On 9 and 10 June, ambassadors and high-ranking diplomats from around 20 Asia-Pacific countries travelled to North Rhine-Westphalia for the first time. The focus of the dialogue this year was an exchange of views on innovations and the sustainable transformation of industry in North Rhine-Westphalia.

We additionally took part in the 4th International Water Conference in Mongolia in 2022. First held in 2018, the conference in Murun also continued the lively exchange of knowledge on environmental issues, water supply and waste water disposal as well as sustainable tourism this year.

# WATER IN PRODUCTION AND PROCESSES

## A precious resource – used responsibly

To improve water supplies worldwide, it is important to manage the resource of fresh water economically. Wilo therefore also promotes the responsible use of water at its own sites. Our goal is to consume 20 percent less water by 2025 compared to the benchmark year.

Four of Wilo's production sites are located in regions with high water stress: Kolhapur and Pune (India) as well as Dubai (UAE) and Istanbul (Turkey). Special attention is paid to the economical consumption of water at these sites. At all Wilo sites, most of the fresh water the company requires is procured from public providers. Ground water and rainwater supplement irrigation from external systems in particular. Requirements for monitoring and ensuring compliance with statutory regulations and for preventing contamination and water discharge are implemented on the basis of ISO 14001, which is mandatory for all operational sites. The group-wide Environmental Policy ensures that the water targets are communicated and implemented. Annual internal and external audits are carried out to check compliance with the requirements and identify possible deviations. The implementation of relevant measures is monitored on a central basis and reported on to the Executive Board in the management review.



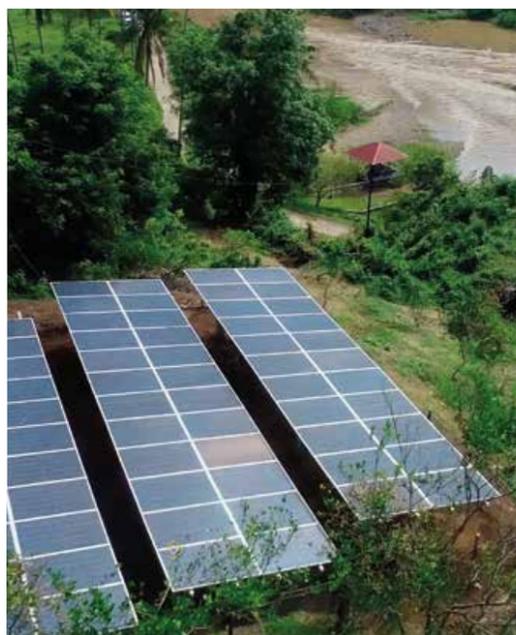
**20%**

less water consumption by 2025 is the target.

"Fresh water consumption at Wilo's locations fell slightly in the past year in comparison with the previous year. 105,014 cubic metres were consumed. In the previous year, the equivalent figure was 109,333 cubic meters. Per capita consumption was reduced from 18.3 to 17.3 cubic metres," says Georg Weber. Numerous individual measures, including expanding the utilisation of rainwater, using water-saving taps and reducing the water pressure, produced this result. The Dortmund site was able to achieve significant savings by optimis-

ing its air conditioning technology. Thanks to the implementation of needs-based management of the reverse osmosis for humidifying the air as well as the improved control of the recooling, up to 60 percent less fresh water is now required.

Key sustainability indicator	2020	2021	2022
Consumption (m <sup>3</sup> )	100,443	109,333	<b>105,014</b>
Consumption per employee (m <sup>3</sup> /employee)	16.9	18.3	<b>17.3</b>



# WATER, RICE, LIFE

Sumatra

Reference

**Clean and safe**  
Rice yields have roughly tripled thanks to the solar-powered Wilo system.

Long dry periods have meant that the rice farmers in the village of Talawi on Sumatra (Indonesia) have been able to harvest their crops just once a year. Since solar-powered Wilo pumps started transporting water from the nearby Lunto River to the rice paddies, the farmers have harvested their paddies two or three times more often. The project has thus made a significant contribution to the region's food security.

The Lunto River flows like a lifeline through the village of Talawi, which is part of the city of Sawahlunto in West Sumatra. The majority of its roughly 20,000 inhabitants work in agriculture. Their work does not just support their families – it is key for the food supply in the region. Several farmers cultivate the 20-hectare plot of land high above the riverbed. They divide the area in order to plant rice, the most important food staple in Southeast Asia.

The farmers use a lot of water to cultivate this cereal grain. Which is no problem during the wet season: rain floods the paddy fields and supplies the rice plants with water. During the dry season, however, the seedlings can die if the farmers do not provide additional irrigation for their paddies. As a result, they were previously able to harvest their paddies just once a year at most. In order to ensure or even increase the yields, new

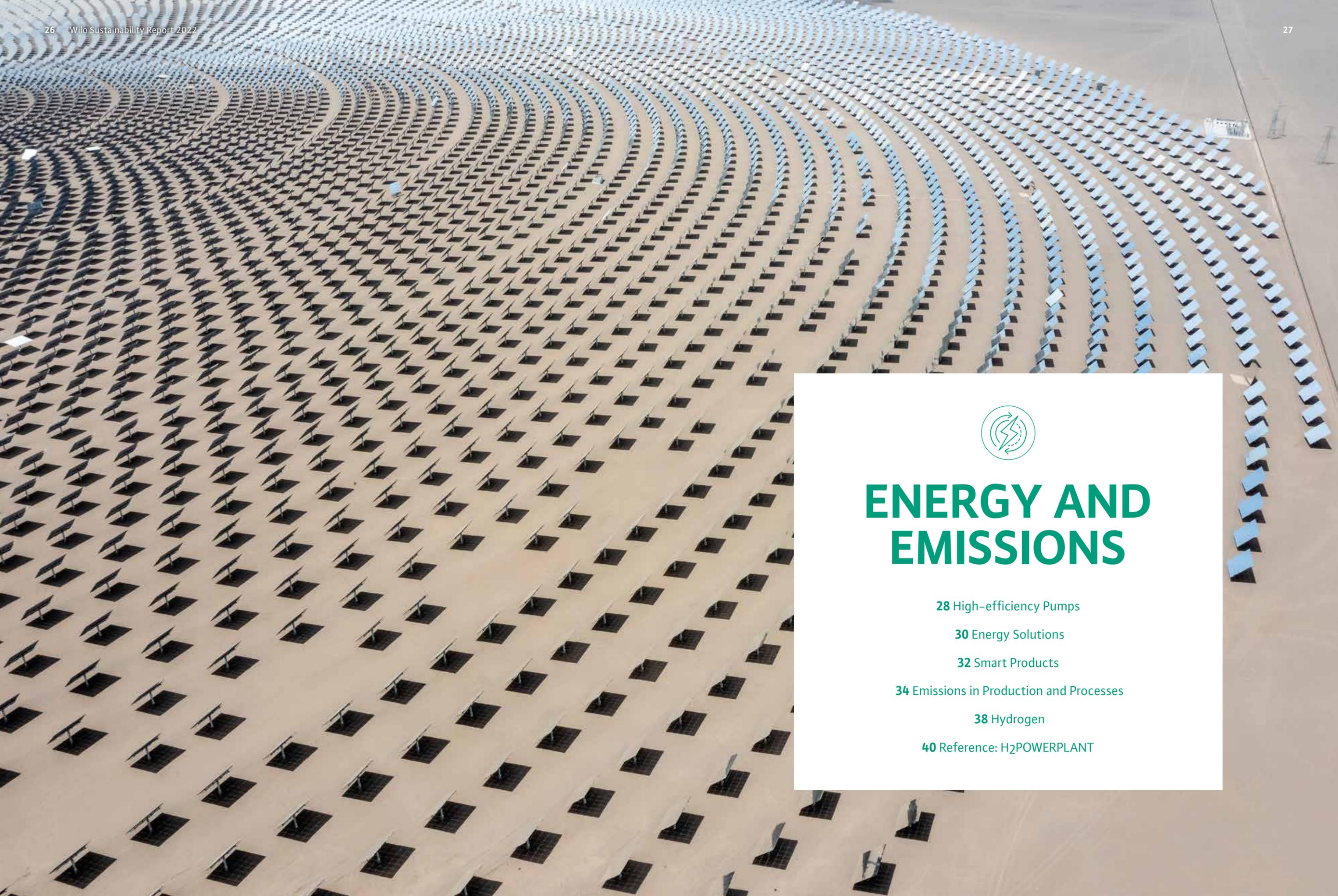


**Wilo-Sub TWI 6**  
Multistage 6-inch submersible pump in tie strap version for vertical or horizontal installation.

infrastructure had to be built to convey the river water up the hill to the rice paddies.

Said and done: a new pumping station was completed in Talawi in 2019. A Wilo-Sub TWI 6 takes the river water from a borehole and pumps it through a kilometre-long water pipe. Up to 210 cubic metres of water now reaches the rice paddies every day. The multistage submersible pump is powered by solar energy. The rice farmers of Talawi thus make a virtue of necessity: there are more than enough hours of sunshine to operate the pumping station especially during the dry season, which brings little rain.

The operation of the pump using renewable energy is not only more environmentally friendly, it is also more cost-efficient. The solar installation does not incur any running costs for electricity – unlike petrol or diesel motors, which would reduce the revenue from the rice harvests. That the investment in the new pumping station has been worth it is shown by the crop yields. Since the pumping station was installed, the farmers of Talawi harvest their paddies two or even three times a year. Instead of 80 to 100 tonnes, they are today harvesting 300 to 350 tonnes of rice per year. So the new solar pumping station has played a key role in relieving the pressure on the critical food supply on site – sustainably and safely. /



# ENERGY AND EMISSIONS

28 High-efficiency Pumps

30 Energy Solutions

32 Smart Products

34 Emissions in Production and Processes

38 Hydrogen

40 Reference: H<sub>2</sub>POWERPLANT

# HIGH-EFFICIENCY PUMPS

## Technology with great climate protection potential

A considerable share of global energy consumption is caused by electric pumps. We are aware of the enormous potential of efficient technology and want to advance its use in the interests of climate protection. Our aim is to save 1.8 terawatt-hours of electricity a year through the use of high-efficiency pumps.

High-efficiency pumps are electronically controlled and adapt to the system's actual requirements. A special drive, the permanent magnet motor, forms the technological basis of the energy-saving potential of Wilo's high-efficiency pumps. A pump of this kind consumes up to 80 percent less electricity than a comparable uncontrolled pump. This highly efficient technology enables our customers from all areas of building services, water management and industry applications to save energy and thus achieve their climate goals.

essentially be attributed to rising demand for sustainable, environmentally friendly, efficient products. Since the most recent geopolitical events, moreover, the savings on energy costs as a result of the switch to a high-efficiency pump is a key reason for the increase in demand. Up to 92,000\* kilowatt-hours or around EUR 40,000 can be saved in 15 years with the Wilo-Stratos MAXO, for example. Quick payback periods make the investment in switching pumps very attractive.



**1.8 TWh**

of electricity: the savings goal per year from the use of highly efficient pumps.

In 2022, we even surpassed the goal of 1.8 terawatt-hours and achieved global energy savings of 2.2 terawatt-hours with our high-efficiency pumps. This figure is the electricity saved by using high-efficiency pumps compared to the corresponding uncontrolled previous models. This allows us to take "avoided emissions" into account. According to the Greenhouse Gas Protocol (GHG), these are emissions that do not even occur because a more efficient product has replaced a predecessor model. The positive result can

Demand for high-efficiency pumps is increasing rapidly not only in the building sector, but also in the OEM field, where it is growing especially among heat pump manufacturers. The geopolitical situation is playing a role here as well. Investments in new technologies such as the environmentally friendly heat pump are increasing so as to gain more independence from oil and gas imports. The latest OEM product is the Wilo-Para MAXO. The hydraulics and the motor together achieve an energy efficiency index (EEI) of less than 0.2 – which even tops the EU regulations for energy-related products.

## Holistic life cycle analysis

Further evidence of the relevance of sustainable products can be seen in the growing customer demand for audited documentary proof of the environmental impacts of the purchased Wilo products. We have long been aware that the operation of a pump in its usage phase has the biggest influence on its environmental footprint. However, further emissions arise throughout the entire life cycle of a product, which we identify and publicly declare.

We calculate the overall environmental impacts of products by means of life cycle analyses. We started with the Wilo-Stratos MAXO series in 2021. The result of the analysis showed that, over its entire life cycle, the pump creates 1,443 kilograms of CO<sub>2</sub>, 1,350 kilograms of which can be attributed to the usage phase. To have our results validated externally, we published an audited Environmental Product Declaration (EPD) for the first time. The second product group, the Wilo-Para MAXO OEM product, followed in 2022. The result is similar to that from the previous analysis. Over a year, the usage phase accounts for two thirds of the total emissions. Scaled up over the pump's full service life, this makes up more than 98 percent of the emissions that arise when the pump is in operation. The efficiency of the pumps in operation is thus given top priority in the product design.

Distribution of the emissions for a product carbon footprint of a pump (cradle to grave)



- Usage phase
- Raw materials
- Manufacture
- Waste
- Other phases



Environmental Product Declaration

Key sustainability indicator	2020	2021	2022
Energy savings (in TWh) thanks to high-efficiency products	1.89	2.1	<b>2.2</b>

\* "Blue Angel" load profile (6,000 hours/year), electricity price: EUR 0.30, assumed annual electricity price increase 5%, review period 15 years, Wilo-Stratos MAXO 30/0.5-10 compared with TOP-S 30/10 1

# ENERGY SOLUTIONS

## Reliable, economic, sustainable

There are two key factors that are prompting more and more of our customers to take serious measures to significantly improve their energy footprint: on the one hand, ambitious climate targets they have set themselves and, on the other, what are in some cases, drastic rises in energy costs. Wilo-Energy Solutions has a key role to play here. The initiative encourages the proactive replacement of still functioning, but uncontrolled pumps with Wilo high-efficiency pumps. We inform operators of public, commercial and industrial buildings, plants and properties of all the benefits of switching to a high efficiency product early on.

Enormous savings potential can be tapped by exchanging old, uncontrolled pumps with modern, highly-efficient equivalents. Our goal is to carry out at least 10,000 Energy Solutions projects a year and thus contribute to energy and carbon savings at our customers. In 2022, we completed 20,673 Energy Solutions projects, an increase of 93 percent over 2021. This shows that holistic consultancy on proactive pump replacement is in greater demand than ever before.

An increase in demand has been recorded in particular in the United Arab Emirates (UAE). The Emirates are preparing for the post-oil era; in this context, the focus is increasingly switching to renewable energy sources and technologies that are fit for the future. The UAE has therefore implemented a number of reforms and regulations concerning energy-efficient

building and modernisation. A regulation issued by the Dubai Supreme Council of Energy in 2015 makes an energy audit mandatory for all public buildings covering an area of more than 1,000 square metres. If this audit identifies potential savings of more than 20 percent in electricity and water consumption and the amortisation period of energy investments is less than ten years, remediation measures will have to be undertaken. In the past few years, pump replacement programmes from Wilo-Energy Solutions have increasingly been used in this context.

**20,673**  
is the number of Energy Solutions projects Wilo implemented in 2022.

For example, Wilo Middle East was awarded the contract for a project in which 54 old pumps in several leading commercial zones throughout Dubai were replaced. They were exchanged for energy-saving pumps of the Wilo-Atmos GIGA-N model, which enable enormous

energy, carbon and electricity savings thanks to their high overall efficiency and simple maintenance. Wilo has also made a contribution to energy savings in one of the largest healthcare facilities in the Saudi Arabian capital of Riyadh. A total of 58 inefficient pumps were replaced by the Wilo-Atmos GIGA series with accompanying frequency-controlled regulators in combination with a service package comprising delivery, commissioning, testing and annual maintenance. Because the government of Saudi Arabia is promoting greater sustainability and energy efficiency, Wilo was able to place two more Energy Solutions projects, which are scheduled to be implemented by 2023.

### Start the ecolution

In the past year, Wilo developed and published a communication campaign that draws attention to the potential that can be gained from switching pumps. With the "Start the ecolution" claim, it highlighted Wilo's energy efficiency pump solutions around the world. Target-group specific content for various customer groups – fitters, consultants, facility managers, building services and water management operators as well as private homeowners – was posted on social media. The focus of the campaign aimed at presenting the energy savings potential of seven selected Wilo pumps and systems in comparison with outdated technology. The communication illustrates that Wilo solutions are the right answer to the energy shortage challenge.

"When it makes sense to replace a pump and the expected savings depends on a variety of factors. The Wilo-Energy

Solutions team steps in when it comes to providing consultancy and to calculating potential savings. A detailed assessment of the life cycle costs and an in-depth analysis in the form of an energy audit allow the Wilo employees to present the advantages of replacing a pump quickly and clearly. Wilo attaches particular importance here to direct customer contact and personal consultancy, even though the trend is increasingly towards digital and flexible offers," explains Oliver Hermes. We satisfy this wish with the Wilo-Select online pump consultant. In just four steps, this tool identifies a product recommendation on the basis of a robust analysis of the life cycle costs. Wilo-Select also shows the potential energy and carbon savings.



Wilo-Select 4: the online pump consultant.

While Wilo-Energy Solutions has the objective of actively promoting the switch to Wilo high-efficiency pumps, Wilo also offers a further service option after the product has been successfully installed. WiloCare allows the efficient operation of the pump to be controlled and optimised in application. The offer thus goes beyond the conventional maintenance contract. In addition to preventing malfunctions, WiloCare guarantees a monthly assessment of the condition of the products in operation. So customers receive up-to-date information on energy consumption and possible optimisation measures. This allows optimum operation for greater reliability and lower energy consumption.

Key sustainability indicator	2020	2021	2022
Energy Solutions projects completed	7,509	10,696	<b>20,673</b>

# SMART PRODUCTS

## Smartification – more than a trend

Digitalisation is enabling new, previously unknown levels of efficiency enhancements. Key functions in climate protection are thus assigned to smart systems and solutions. Wilo has recognised how important digital technologies and automation are for intelligent, efficient and sustainable management of pumps in operation. This is why Wilo is investing in the development of smart products and aiming for an annual growth rate of at least 15 percent here.

“We firmly believe that smart products are the most energy-efficient,” says Oliver Hermes. This means that there is a clear correlation between digital transformation, energy efficiency and climate protection, and each of them makes up a key component of our sustainability strategy. We define smart pumps as a category of pumps that goes beyond our high-efficiency pumps or pumps with pump intelligence. The combination of cutting-edge sensor technology and innovative control functions, bi-directional connectivity, software updates and excellent user-friendliness is what makes a pump a smart pump.

Thanks to our continual research and development, we can now offer a broad portfolio of smart products and systems. The growth rate in this sector reached 93 percent in 2022. This figure is clear evidence that smartification is not a trend, but is now a standard that customers are asking for ever more frequently.

**93%**

net sales growth achieved by Wilo in smart products and systems in 2022.

One of the reasons why we outperformed the targeted sales growth compared with the previous year is because the Wilo-Stratos MAXO established itself on the market as a smart pump. Another is that the launch of sales of the three smart pumps Wilo-Stratos GIGA2.0, Wilo-Yonos GIGA2.0 and Wilo-Stratos PICO/-Z had an impact. The new generation of the Wilo-Stratos PICO/-Z offers

maximum energy efficiency through the combination of EC motor technology, Dynamic Adapt plus and precision setting options. A universal interface additionally offers an optional Bluetooth retrofitting option for digital applications using the Wilo-Smart Connect module BT.

### Wilo-Smart Connect module BT

The Wilo-Smart Connect module BT serves to add a Bluetooth interface to Wilo products. This applies to all products equipped with a Wilo connectivity interface. The Wilo-Smart Connect module BT enables mobile

devices such as smartphones and tablets to be connected. Using the Wilo Smart Connect function in the Wilo-Assistant app, the pump can be operated and adjusted, while data such as energy consumption can be displayed in real time.

The Smart Balance tool in the Wilo-Assistant app makes it easier than ever to carry out hydronic balancing. After the installed heating surfaces have been entered, the app calculates how to optimise the volume flows and the feed temperature. The results provide the basis for calculating the preset values of the most common thermostatic valves. Using the display of the volume flow, the optimal setpoint of the pump can be identified. Hydronic balancing can reduce energy costs by up to 20 percent.

### Wilo at Coppenrath & Wiese

One example of the use of smart Wilo products can be found at the Coppenrath & Wiese plant in Mettingen. In order to reduce its electricity costs, Germany’s market leader in frozen bakery products decided to replace a majority of the outdated heating and hot water pumps at its main site with new Wilo pumps. “We reviewed all the pumps available and decided to choose the ones that pay for themselves the fastest,” explains Wolfgang Menger, Energy Management Officer at Coppenrath & Wiese.

A total of 37 high-efficiency pumps were installed, including the smart Wilo-Stratos MAXO. Thanks to a state subsidy, the return on investment was already realised after a little over three years. Uncomplicated execution, significantly lower electricity costs and, ultimately, an improved climate footprint – Coppenrath & Wiese is extremely happy with the pump replacement.

Key sustainability indicator	2020	2021	2022
Average annual growth rate (%)	14.1	5.1	93*

\* Sales launch of Stratos GIGA2.0, Stratos PICO/-Z, Yonos GIGA2.0

# EMISSIONS IN PRODUCTION AND PROCESSES

## On track for group-wide climate neutrality

Wilo is a climate protection company. As the winner of the German Sustainability Award in the “Climate” category and as one of 50 Sustainability and Climate Leaders worldwide, we see it as our obligation to make an active contribution to achieving the global climate goals. Our aim is to achieve carbon-neutral operations at our 15 production sites around the world by 2025 and to cut emissions group-wide by at least 60 percent from the benchmark year of 2018.

“In 2020, the Wilo Group devised and communicated a climate strategy that is now being implemented phase by phase. First of all this strategy analyses Scope 1 and Scope 2 emissions in accordance with the Greenhouse Gas Protocol. These essentially include emissions caused by the consumption of primary energy and the sourcing of electricity. The Wilo climate strategy is based on four pillars: enhancing energy efficiency, increasing in-house electricity generation, purchasing green electricity and offsetting any remaining emissions,” comments Georg Weber.

In order to implement the strategy, we have established a cross-functional committee that consists of representatives from energy, site and sustainability management as well as the controlling department and that reports to the Executive Board on a regular basis. The committee monitors the progress of implementation and defines measures for achieving the targets. It additionally investigates the potential for possible energy savings at the sites and coordinates the exchange of best practices. Over EUR 4 million have been provided as a central budget by the Wilo Executive Board in order to ensure that the potential is tapped and the measures are effectively implemented.

Last year, Scope 1 and Scope 2 emissions were 36 percent lower in total than the figures for the benchmark year of 2018. Key drivers for this included purchasing green electricity at our locations in Europe and China as well as the significant reduction in the consumption of heating energy. Warm weather and the extensive savings measures at the German sites played the primary role in that reduction.

We made our plants in Aubigny (France) and Bari (Italy) climate-neutral last year. The carbon footprint of all European plants is thus balanced. All locations purchase electricity from renewable energy sources; we offset the emissions from heating energy by using projects that are certified to the gold standard. TÜV Rheinland checked and confirmed that the data is complete and correct. Wilo has thus earned the “climate-neutral company” mark of conformity for the relevant locations and made an important step forward in the implementation of its climate strategy.

### Scope 1 and Scope 2 emissions

	2020	2021	2022
Scope 1 (t/a)	6,153	6,953	<b>4,950</b>
Scope 2 (t/a)	9,229	6,233	<b>6,041</b>
<b>Total</b>	<b>15,380</b>	<b>13,186</b>	<b>10,991</b>
Reduction compared to benchmark year of 2018 (%)	-10.4	-23.2	<b>-36.0</b>

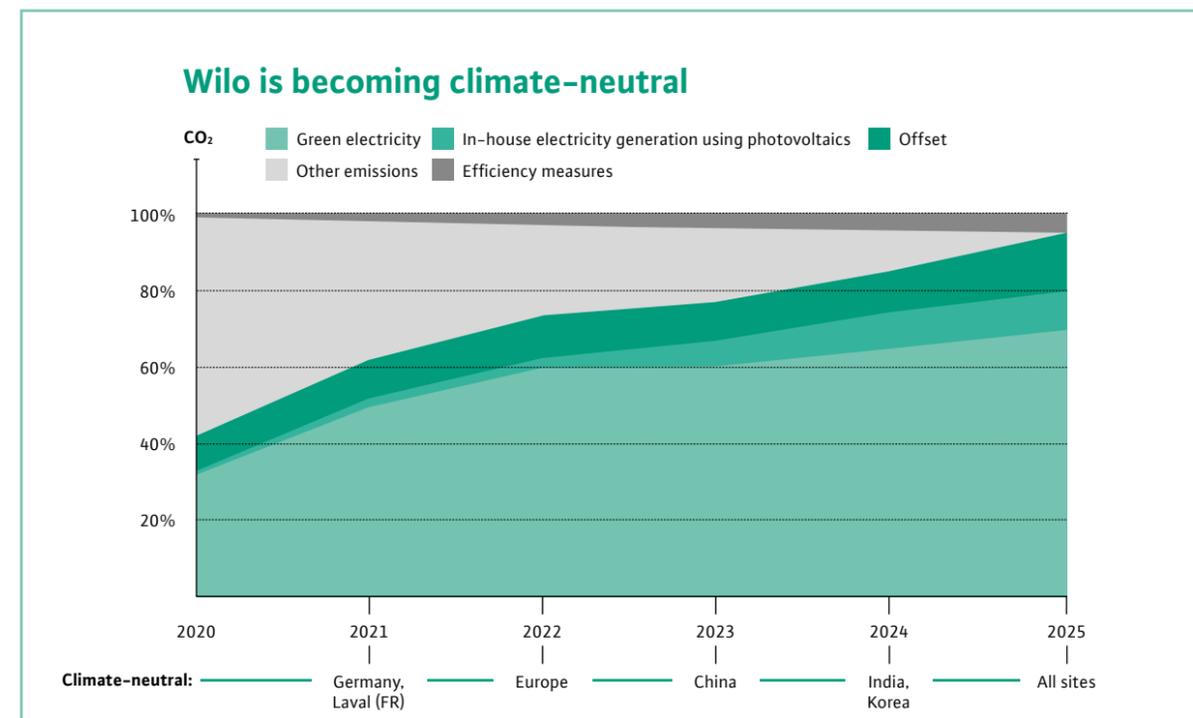
### Energy consumption: in total and broken down by electricity, oil, gas, district heating (MWh)

	2020	2021	2022
Electricity	44,026	43,641	<b>43,543</b>
Gas	20,524	24,463	<b>17,606</b>
Oil	3,059	2,098	<b>1,370</b>
District heating	2,084	2,289	<b>1,927</b>
<b>Total</b>	<b>69,693</b>	<b>72,491</b>	<b>64,446</b>
<b>Energy consumption by net sales (MWh/EUR million)</b>	<b>48.0</b>	<b>43.9</b>	<b>34.2</b>

### Energy efficiency as a key factor

Energy consumption at the Wilo production sites throughout the Group totalled 64,446 MWh, a reduction of 11 percent from the previous year. Key influencing factors included lower heating requirements as a result of weather conditions and the measures taken to save gas.

Increasing energy efficiency is an important determining factor when it comes to climate neutrality. Wilo has set itself the goal of implementing energy efficiency projects every year that produce energy savings of at least 1 percent on the previous year’s consumption. The projects initiated in the past year are showing results that go far beyond the targets that have been set: energy savings amount to 2,911 MWh, which is equivalent to around 4 percent of consumption in 2021.



At our location in Dortmund, for example, we have further optimised the building management system, producing savings of over 2,500 megawatt-hours in gas and electricity consumption. We have installed a new air compressor (savings of 70 megawatt-hours) in Laval (France), modernised the lighting systems and heating (15 megawatt-hours) in Busan (Korea) and converted the office building in Beijing (China) to LED technology (30 megawatt-hours).

### Electricity from renewable energy sources and in-house generation

“Our goal is to increase the share of electricity from renewable energy sources at our production facilities to 100 percent by 2025”, continues Georg Weber. Here we are looking at both green electricity procurement on the one hand and in-house generation on the other. In 2022, a total of 80 percent of the electricity consumed in all production sites came from renewable sources. We increased the amount of electricity generated in-house using photovoltaics by 5.2 percent year-on-year in 2022. Systems of this kind can be found at our plants in Kolhapur and Dortmund. The extensive expansion of existing capacity in Dortmund (from around 1 to 3 megawatts) as well as newly installed PV systems at the Hof, Kesurdi and Cedarburg sites will deliver an appreciable energy input from 2023 onwards.

### Scope 3 emissions

We published an initial assessment of our Scope 3 emissions in the 2021 sustainability report. We have now

### Volume of green electricity procurement and in-house electricity generation (MWh)

	2020	2021	2022
In-house electricity generation	792	1,311	1,379
Green electricity procurement	17,569	29,600	36,630

refined this assessment and collected data for all relevant categories using the expenditure-based method. This data was subsequently converted and analysed in accordance with the GHG Protocol using the Quantis Evaluator Tool, which offers the major advantage of being readily available and easy to use. But it has the disadvantage of a lack of depth in the detail it offers. The results thus work well for estimating the key drivers of emissions; possible options for action and improvement measures, on the other hand, can be derived only with difficulty or at a very high level of abstraction.

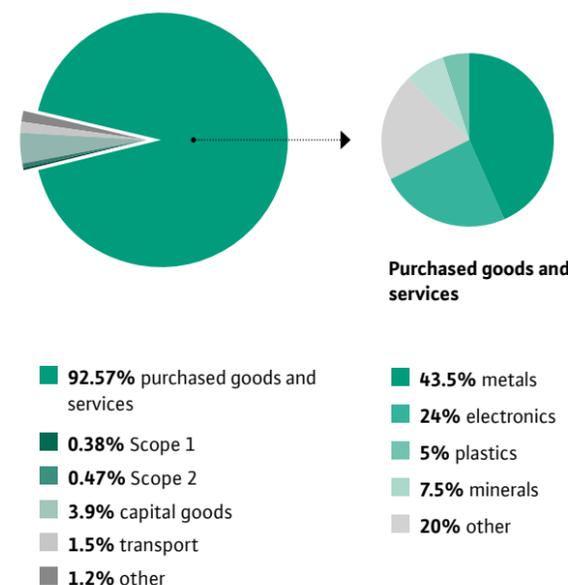
For this reason, we are currently working on a detailed calculation methodology for emission category 11, “Use of sold products”, that determines the estimate based on

### Scope 3 emissions (t CO<sub>2</sub>e)

Category	Designation	2021	2022
3.1.	Purchased goods and services	1,032,869	1,178,898
3.2.	Capital goods	41,531	49,449
3.3.	Fuel and energy-related emissions (not included in Scope 1 or Scope 2)	2,984	2,445
3.4.	Transportation and distribution (upstream)	17,761	18,976
3.5.	Waste	1,042	1,147
3.6.	Business travel	1,290	1,242
3.7.	Employee commuting	12,750	12,750
3.8.	Leased assets	876	2,353
3.11.	Use of sold products	*	*
3.12.	End-of-life treatment of sold products	1,675	1,700

\*Calculation not yet finalised by the editorial deadline

### Distribution of emissions along the entire value chain (Scope 1 to 3), cradle to gate



the highest share of emissions. Essentially this is produced from the high number of operating hours of our products as well as the long average service life of ten years. This calculation has not been completed in full because of the complexity of the data. The results will be published in the forthcoming sustainability report. In the medium term, we are aiming to create a survey methodology for all relevant categories that we can use to collect exact data concerning indirect and direct emissions along the value chain.

### Supplier engagement programmes

If we disregard the usage phase and limit the analysis to what is known as the “cradle to gate” perspective, it is notable that, at 90 percent, “purchased goods” account for the largest share of the remaining Scope 3 emissions. Purchased metal components and the electronic parts make the biggest contribution here. That is why we have taken initial steps to integrate climate targets in the contract award process. Moreover, Wilo is developing supplier engagement programmes in order to investigate and implement potential reductions at suppliers that will have a major influence on the emissions footprint.

By joining the Science Based Targets initiative (SBTi), we have undertaken to comply with the 1.5-degree climate target as well as to reduce emissions in full (net zero) by 2050. For the first time, the targets also contain a 25 percent reduction in Scope 3 emissions by 2030 and have been communicated to the initiative for validation. They require us to adjust our climate strategy, on the one hand in view of the time frame (2030/2050) and, on the other, in terms of the dimension (extension to the entire value chain). We will publish an overview of the adjusted targets as well as the current progress in achieving them in our forthcoming sustainability report in accordance with the requirements.



# HYDROGEN

## Green and safe

Green hydrogen is carbon-free and can be stored and transported. It has enormous potential as an energy source for the future. Wilo wants to play a significant role in the generation, storage, distribution and use of hydrogen.

The political world has defined climate-neutral hydrogen technologies, systems and value chains as a strategic tool for achieving the global climate goals. This is shown by the German and European hydrogen strategies, for example. A number of countries around the world are working vigorously to develop hydrogen as an energy source.

Water and renewable energy are required for the water electrolysis to produce carbon-free "green hydrogen". As an energy source, hydrogen can be used for a variety of applications, including in fuel cells to generate electricity and heat, as a raw material in industry and as a fuel for transport, for example.

Green hydrogen is an urgently needed component for connecting the various energy sectors and building a sustainable global energy system. Countries that generate a surplus of green energy can export it in the form of



**1 t**

of hydrogen covers the annual energy requirements of around eleven households.

hydrogen. This could be the key to the global energy revolution. Green hydrogen thus has the potential to become the crude oil of the future.

"Wilo's products and solutions are used in hydrogen generation, storage and transportation," says Oliver Hermes. They include reverse-running pumps for driving generators in hydro power plants, pumps for cooling circuits in wind turbines and pumps for spraying water systems for photovoltaic installations, for example. The development of hydrogen technology is producing more and more potential applications for our pumps and pump systems.

Since the H<sub>2</sub>POWERPLANT opened at the Wilopark, we have also enhanced our profile as a hydrogen system solutions provider (see p. 42). The pilot plant, which will initially serve as an emergency and back-up power supply

for production at Wilo's corporate headquarters, was constructed in cooperation with Schneider Electric.

On the occasion of the grand opening, Oliver Hermes, President and CEO of the Wilo Group, and Jean-Pascal Tricoire, President and CEO of Schneider Electric, signed a memorandum of understanding in which the two companies agreed to intensify their strategic cooperation. The long-term intention is to construct hydrogen plants at all Wilo sites worldwide.

The two cooperation partners are now planning the series production of green hydrogen systems for the decentralised energy supply of industrial and private applications. With the hydrogen plant and the related applications, Wilo and Schneider Electric are aiming to provide clean, low-carbon energy with improved efficiency for specific segments: logistics, data centres and industrial small and medium-sized enterprises.

Systems of this kind have a key role to play in the sustainable use of renewable energies and the coupling of previously independent energy sectors. The H<sub>2</sub>POWERPLANT lays the foundation for a self-sufficient, distributed, regenerative and thus climate-friendly energy supply network. Working together with Schneider Electric, we are bringing safe, green energy to housing, industry and the transport sector.

"The Wilo Group has also laid the foundations for the expansion of the hydrogen business in its corporate structures with the establishment of Wilo Projects GmbH," explains Dr Patrick Niehr, member of the Executive Board and CCO of the Wilo Group. This team is supporting the market launch of the H<sub>2</sub>POWERPLANT and in the future will assist customers with planning, executing and commissioning systems.



**10 gigawatts**

of green hydrogen is planned to be produced in accordance with the 2030 National Hydrogen Strategy.

# CLIMATE-NEUTRAL AND CRISIS-RESILIENT

Reference

H<sub>2</sub>POWERPLANT

## Green power plant

The tank of the H<sub>2</sub>POWER-PLANT at the Wilopark is 29.8 metres long. It is supplied exclusively with renewable energy.

**With the opening of the H<sub>2</sub>POWERPLANT, Wilo has not only laid the foundation for a new, self-sufficient, distributed and regenerative energy supply network. The hydrogen plant at the Wilopark in Dortmund is also making an essential contribution to sustainability: the technology is key to achieving the Paris climate targets.**

The H<sub>2</sub>POWERPLANT was developed in the spring and summer of 2022 in cooperation with the electrical engineering group Schneider Electric. It went into operation in September. Oliver Hermes, President and CEO of the Wilo Group, and Georg Weber, member of the Executive Board and CTO of the Wilo Group, celebrated its opening during the 2022 international Wilo industry conference together with Jean-Pascal Tricoire, President and CEO of Schneider Electric, and Christophe de Maistre, DACH Zone President of Schneider Electric.

Hydrogen generated from green energy such as solar or wind power is carbon-neutral. The energy source can be stored and transported. In addition, the molecule offers significant storage capacity for solar power. One tonne can already store up to 33,330 kilowatt-hours of energy. That is equivalent to the annual consumption of 11 three-person households in an apartment block.

The plant at the Wilopark can store up to 520 kilograms of hydrogen in its 29.8-metre-long tank and consists of four

key components: the photovoltaic installation on the roof of the smart factory, an electrolyser (supplied by Enapter), a hydrogen storage facility and a fuel cell (supplied by Proton Motor). The electrolyser separates the molecular compounds of the water (H<sub>2</sub>O) into hydrogen (H<sub>2</sub>) and oxygen (O<sub>2</sub>). The modular system will produce up to 10 tonnes of green hydrogen per year in this way – completely from renewable energies.

Initially the plant will serve as an emergency and back-up power supply. However, the current plans allow for it to be expanded to provide a self-sufficient energy supply covering up to two days. Wilo uses the waste heat released in the electrolysis process directly on site in the composite system or converts it into cooling, thus optimising the efficiency of the entire system. The H<sub>2</sub>POWERPLANT therefore makes a major contribution to crisis-resilient and safe, but also efficient and climate-neutral production at the Wilopark.

“The partnership between Wilo and Schneider Electric aims to smooth the transition to environmentally friendly hydrogen technology. The long-term objective of the strategic partnership is to make a play a role in the generation, storage, distribution and use of climate-neutral hydrogen. Wilo has laid the foundation for this with the establishment of its own hydrogen team,” states Dr. Patrick Niehr. /



# MATERIALS AND WASTE

**44** Reuse of Materials

**46** Materials Efficiency

**47** Sustainable Product Packaging

**49** Materials in Production and Processes

**50** Reference: Ecodesign

# REUSE OF MATERIALS

## Best practice for the circular economy

Our Prevention and Use Before Recycling and Disposal Policy is established practice at Wilo. Returned products are examined at our analysis, repair and recycling centres and broken down into their component parts. Components that are not worn out are reused in workshop repairs. All remaining materials are handed over to a certified recycling partner, who returns them to the raw materials cycle.

“Our goal is to reuse at least 30,000 products and components from unused returned products per year. By extending it to the whole of the Wilo Group and by optimising the processes, this goal was exceeded by a long way in 2022 – with a total of 86,842 reused parts and products,” comments Georg Weber. The international expansion of recycling activities to other Wilo locations project has proved a particular success: more than 40,000 parts and products have been reported by locations outside Germany. This shows that the pro-



**86,842**

components and products from product returns were reused in 2022.

cesses in operation for years in Germany can be successfully scaled up. The further international expansion of these processes remains a key focus of our sustainability activities.

### Intensive public relations work

As early as 2017, Wilo began working intensively at its Dortmund location to establish processes for recovering old equipment from the market. We see a wide variety of opportunities here: there is an economic benefit

for Wilo itself, as valuable and scarce materials such as rare earths can be returned to the manufacturing process. The environment benefits from the lower consumption of raw materials. And, ultimately, it is the manufacturers themselves who have the technical expertise necessary to ensure the efficient and legally compliant handling of used electrical products.

One consequence of this was that we were able to take the next step and complete certification as a primary treatment facility in the past year. This certification allows us to recover and sort waste electrical equipment – a necessary condition for efficiently managing the entire recycling process.

Thanks to our recycling-friendly product design, the potential recycling rate for a Wilo pump is almost 100 percent. However, the effective recycling of disassembled old pumps is possible only in cooperation with the wholesale and specialist trades, recycling companies and the manufacturing companies themselves, as logistics processes also have



over **300** collection points were set up in Germany.



Article on Wilo's recycling process

to be taken into account in addition to technical issues. In order to raise the awareness of all parties involved along the value chain of the importance of returning pumps, Wilo conducted intensive public relations work last year.

The results testify to the success of the actions: over 300 collection points were set up in Germany alone. Parallel processes were additionally established in the Netherlands and are planned in Belgium and Austria. More than 18 tonnes of old pumps were recovered at the company headquarters alone.

The Wilo approach to the circular economy has since become established as best practice in the industry, a fact that is reflected in the numerous enquiries we have received from experts and media representatives. For example, Wilo was a good practice partner at the European Circular Economy Hotspot on 13 May 2022, where it provided insights into its own recycling workflows.

Key sustainability indicator	2020	2021	2022
Number of reused components and products	37,961	53,500	<b>86,842</b>

# MATERIALS EFFICIENCY

## Less is more

One of our key sustainability goals is to reduce the use of raw materials in the manufacturing process and, in particular, not to use materials that are harmful to the environment. An indicator that we focus on especially here is copper savings. Thanks to advances in the technology, the use of copper per pump has been steadily reduced over the years. Our goal is annual savings of 12 tonnes compared to the respective previous models. In parallel with this, we are also looking at reducing the use of other materials such as iron and aluminium.

We reduced the use of copper by 22.7 tonnes in the past year thanks to a number of product innovations and series extensions. We were also able to reduce the consumption of electrical sheet (lamination) by 174 metric tonnes. For example, the Blue Ocean series is successfully replacing all dry-running pumps using asynchronous technology with new products featuring high-efficiency motors. Another example is the partial replacement of the M071 motor size with the M056 size up to a performance of 2.2 kW. This motor delivers the same performance with a significantly smaller volume, lower weight and thus fewer materials used.

One environmentally critical material that we also consider is rare earths, such as those found in magnets. They are highly significant in high-efficiency technology and are almost impossible to replace or can be replaced only at great expense. The reuse and recycling of rare earths is therefore a major determining factor in a sustainable materials cycle. The process of extracting magnets from production scrap and reinstalling them is already

**22.7 t**

Reduction in use of copper thanks to innovations in 2022.



**30,000**

Number of magnets kept in circulation in 2022.

established. It enabled us to keep more than 30,000 magnets in circulation in 2022 (2021: 22,500).

At the same time, we are working on recovering magnets from old devices, processing them and reintroducing them into the production process. Following a successful test in 2021, Wilo was able to implement this for the first 1,700 magnets last year. The potential here is enormous, as the magnets remain in circulation, fewer raw materials are needed and the independence from the relevant raw material suppliers is increased.

Key sustainability indicator	2020	2021	2022
Copper savings (t)	15.7	19	22.7

# SUSTAINABLE PRODUCT PACKAGING

## Products transported securely and sustainably

The increasing volume of packaging waste is also a growing problem for the environment. Optimising packaging solutions with the aim of minimising material deployment as far as possible is a key component of a circular economy. Our long-term goal is to steadily increase the share of reusable packaging and to further reduce the use of raw materials and environmentally critical materials.

The ecological footprint of pumps is largely defined by their energy consumption and the materials used in them. The packaging accounts only for a marginal share. A life cycle analysis of the Wilo-Stratos MAXO high-efficiency pump revealed that just 0.7 kilograms of the 1.5 tonnes of CO<sub>2</sub> emissions over the entire life cycle (assuming a 10-year usage phase) is attributed to the packaging.

The high number of products sold overall adds up to an appreciable environmental impact. In order to help reduce packaging waste, we always analyse possible substitution, reusability and recyclability when selecting packaging variants.

### Reusable packaging in intralogistics

In 2022, the share of reusable packaging used for semi-finished products in intralogistics was 100 percent. This figure was already reached in 2020. We were able to maintain it in 2021 and 2022 because we take standardised



**38%**

Share of inbound items in reusable systems.

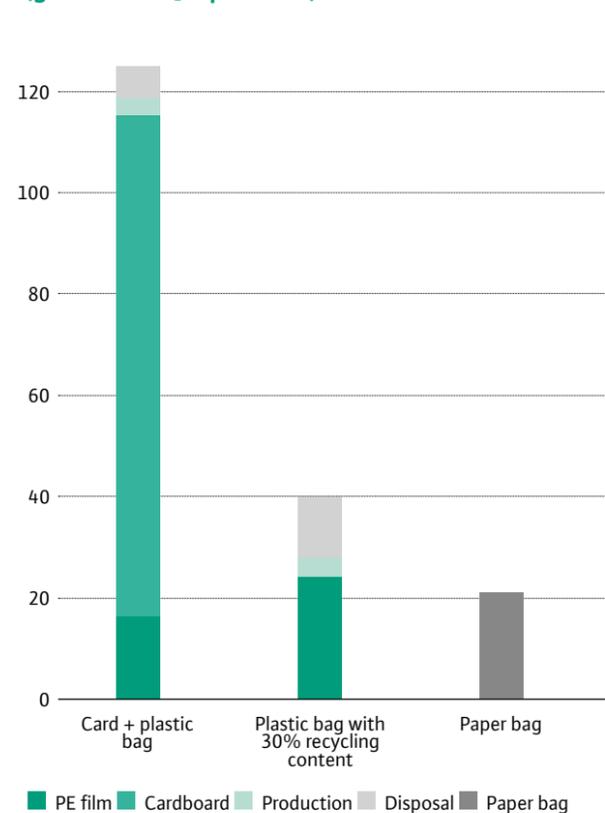
reusable packaging into consideration at an early stage in the planning of new material flows. The containers facilitate an efficient flow of materials in production. At the same time, we can totally avoid packaging waste in semi-finished products.

We also keep an eye on standard reusable packaging for articles from external suppliers. There is potential here to save packaging waste and avoid costly, complex repackaging

processes. Wilo increased the share of inbound items in reusable systems to 38 percent in 2022 (2021: 36 percent). Reusable packaging is not an option for around 40 percent of these items, as they are delivered from countries outside the EU or because a technical or organisational solution is not possible. Because reusable packaging is now already taken into account as an issue in sourcing enquiries to potential suppliers, we are striving to gradually increase the share of goods delivered in reusable packaging to 50 percent.

Key sustainability indicator	2020	2021	2022
Reusable packaging (%)	100	100	100

**CO<sub>2</sub> emissions of Wilo-Stratos MAXO packaging materials (grams of CO<sub>2</sub> equivalent)**

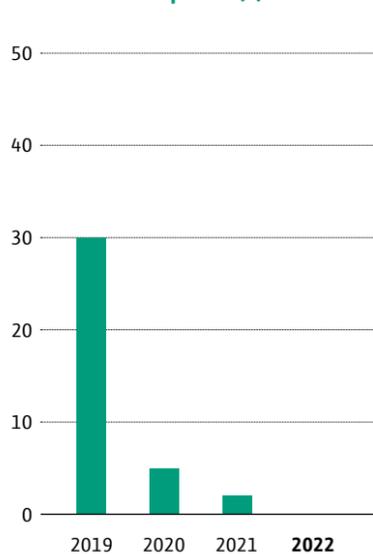


**Packaging optimisation in outbound logistics**

In outbound logistics, we are focusing on replacing environmentally harmful materials with greener alternatives. For example, we already began eliminating two-component foams from the product padding two years ago. Foil is now used instead.

We are also engaged in another project aiming to provide the documents accompanying the products in a paper bag and not in cardboard or plastic. The ecological footprint would thus be significantly smaller. We would be able to save up to 15 tonnes of CO<sub>2</sub> for the Wilo-Stratos MAXO series alone. The solution is in the test phase and will be implemented if successful.

**Foam consumption (t)**



# MATERIALS IN PRODUCTION AND PROCESSES

## The group-wide circular economy

Our primary goal is to avoid waste or to find a recognised alternative use. We are striving for a Group-wide recycling rate of more than 90 percent by 2025.

By recycling we mean all processes that serve to reuse or recycle materials and thus keep them in circulation. We do not count thermal recovery as part of this.

In contrast, it does include all waste types incurred at our sites: from paper and plastic through to metal filings. The key indicators that we use for our sustainability strategy are the recycling quota and the total waste volume.

Waste management is an established element of the local environmental programmes at all Wilo’s production sites and additionally one of the requirements for ISO 14001 certification, which is mandatory for the sites. Key measures for achieving our goals include the use of recyclable materials and the systematic separation of all materials obtained.

The total waste volume was around 8,708 tonnes last year and thus 125 tonnes higher than the previous year’s figure. This can be attributed primarily to the increase in production volume. The recycling rate was 90 percent and thus 10 percent higher than in the previous year. The volume of hazardous waste was reduced from 439 to 351 tonnes.

Starting in 2020, we have conducted analyses of the group-wide waste volumes and types. The aim here is to obtain more precise information on recycling potential and to derive specific projects for the individual sites from this. Cardboard and wood packaging is the focus here. We have

launched numerous initiatives in this area to switch to reusable containers (see section on “Sustainable packaging”, p. 49).

Waste types (t)	2021	2022
Metal	2,800.92	<b>2,882.83</b>
Electronic waste	48.67	<b>89.89</b>
Cardboard/paper	1,573.93	<b>1,623.38</b>
Plastic	138.01	<b>197.08</b>
Wood	2,144.17	<b>2,221.88</b>
Chemical waste	718.41	<b>902.89</b>
Mixed waste	572.96	<b>663.24</b>
Other waste	585.95	<b>126.81</b>
<b>Total</b>	<b>8,583</b>	<b>8,708.00</b>

Recycling rate	2020	2021	2022
Total waste volume (t)	7,719	8,583	<b>8,708</b>
Recycling rate (%)	85	80	<b>89</b>
Disposed of (t)	749	1,272	<b>573</b>
Recycled (t)	6,568	6,872	<b>7,807</b>
Hazardous waste (t)	402	439	<b>351</b>



# TRANSPARENCY FOR THE ENVIRONMENT

Reference

Ecodesign

**How large is the ecological footprint of pumps and systems? This can be shown by life cycle analyses. Wilo has already calculated the environmental impacts of several highlight products. We are planning to do this for all new product developments in the long term. For example, Wilo's ecodesign strategy avoids CO<sub>2</sub> emissions before they arise – also through the choice of the right material and the recyclability of products.**

Wilo-Stratos MAXO marked the start of this practice here. Wilo delivers numerous versions of this highly efficient smart pump from Dortmund to the whole world. From the production of the mechanics and electronics to final assembly: each step on the path to the finished product releases CO<sub>2</sub> emissions. Even the raw materials that Wilo processes for the Wilo-Stratos MAXO in the factory at the company's headquarters have caused CO<sub>2</sub> emissions in their earlier life.

But it is not just the manufacture of a pump that means emissions, it is also its operation. The Wilo-Stratos MAXO is used for example to pump heating and cooling water in large buildings. It needs electricity to do that. If this electricity is not from a renewable source, then the operation

of the pump also causes CO<sub>2</sub> emissions. This phase of the pump's life is similarly taken into account in the life cycle analysis.

Based on complex calculations, an analysis of this kind clarifies how high the environmental impacts of a product really are – from start to finish, from raw material to recycling. Wilo calculated a life cycle analysis for the Wilo-Para MAXO in 2022, two other analyses are currently in progress. Furthermore, we commissioned an external review of the life cycle analysis of the Wilo-Stratos MAXO that we calculated in 2021. An independent institution examined the correct application of the Product Category Rules (PCR) and published a validated Environmental Product Declaration.

The biggest advantage of life cycle analyses is obvious: they create transparency. This is becoming important to more and more customers, as the environmental impacts of building services components such as pumps have an influence on the sustainability footprint of the whole building. And the manufacturer also uses these calculations. Based on the results, they can optimise the product and its manufacture so as to reduce its CO<sub>2</sub> emissions. »



Wilo does this, too. Based on the life cycle analyses, we examine where there is hidden potential for improvements – perhaps in the procurement of raw materials, product packaging or the control modes of the pumps. The numbers for the Wilo-Stratos MAXO show that it is primarily the operation of the pump that drives up the carbon footprint. More than 90 percent of total emissions occur during the product’s usage phase. But the materials chosen for the pump and how recyclable they are also have an influence on the footprint and therefore offer room for improvement.



**From raw material to recycling**

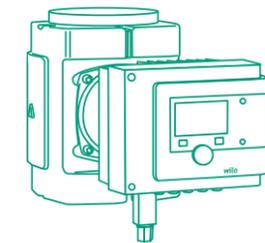
Emissions are released during the entire life cycle of a product – even in the manufacture of the electronics.



**Smart pumps**

Wilo delivers the Wilo-Stratos MAXO from Dortmund to all over the world.

The overview of existing products is just the start here. Wilo intends to subject all new product developments to a life cycle analysis in the future. The basis for this is the “ecodesign strategy”: the manufacturer calculates the CO<sub>2</sub> emissions that new products and systems cause during their life cycle as early as the development process, which it then fine-tunes. The stated goal is to ensure that the carbon footprint of each new product is significantly smaller than that of its predecessor. In this way, Wilo avoids CO<sub>2</sub> emissions even before they arise and makes sustainable products even more sustainable. /



**90%**

of the total emissions of a pump arise during its operation.



# EMPLOYEES AND SOCIETY

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# GLOBAL RESPONSIBILITY

## Globally connected

Our employees make a crucial contribution to Wilo’s business success and to the company’s sustainable development. The past few years have seen the challenges that companies have to face intensify sharply.

“We are living in a time that is marked by growing international tensions, division, protectionism and efforts to achieve self-sufficiency – and now even war. In the business world, it is the actors who are involved in global value chains that are encountering the greatest challenges. We already started preparing for the different forms of decoupling and the geo-economic turning point at an early stage and are countering these with forward-looking entrepreneurship – especially against the background of our corporate and social responsibility towards our roughly 8,400 employees worldwide,” says Oliver Hermes.



### Values

Shared, binding values are the foundation of Wilo’s HR policy.

The WiConnect Design Table Workshops brought together representatives of the regions, the local organisations, the OEM strategic business unit and the global functions to draft an approach for their international cooperation. One result of these workshops was the WiCollaborate Principles, which serve as a compass for how the international cooperation at Wilo will be shaped together in the future.

### Offsetting the effects of inflation

The Wilo Group is committed to implementing worldwide standards when it comes to remuneration. The starting point here is provided by clearly documented job profiles that are formulated uniformly throughout the Group and assessed on the basis of defined requirement criteria. The remuneration system comprises fixed and partially variable salary components and additional benefits. For example, the Wilo Group assists its employees in their pension provision and offers pension benefits in line with the specific circumstances and regulations of individual countries. In order to mitigate the effects of inflation on its

### The WiConnect project

The objective of the WiConnect project has been to raise international cooperation at Wilo between regions, functions and business units to a new level and thus to develop a one-group mentality. It is only through the good cooperation between all areas of the organisation that we will be able to serve the requirements of the market with high-quality solutions.

employees, the Wilo Group paid inflation bonuses enjoying preferential tax treatment – where this was possible locally – to our employees in 2022.

### Target agreements and bonus systems

As an addition to the various existing bonus systems, Objectives and Key Results (OKRs) were introduced in 2022 as a new approach to planning targets for the entire organisation. OKRs offer a more flexible and transparent concept for planning targets. They are designed to highlight more transparently for the individual employees what contribution they can make to the company’s strategic objectives. Moreover, the OKR approach is based on a joint, participative form of setting objectives: these are no longer defined only by top-down decisions by the management, but also involve bottom-up choices made by all team members.

### Work-life balance

The Wilo Group complies with the applicable laws and collective agreements on working hours, breaks and public holidays. Normal working hours per week are defined by regional law and limited to a maximum of 48. Overtime is permitted only in conjunction with the applicable provisions of the employment contract.

The options afforded by flexible working time models are becoming increasingly relevant. They allow staff to balance their careers, personal lifestyles and private requirements. These models also include the options of remote work, flexible working hours and special leave. Many employees surpassed themselves during the corona pandemic and found an excellent work-life balance. To alleviate their stress, Wilo has offered all employees in Germany the option to take a four-week mini-sabbatical in addition to their annual leave since the middle of 2022. A total of 51 employees have already taken advantage of this offer, including both employees working in production and members of the top management.



## Engagement

Employee communication and engagement are central elements in our HR culture.

Intensive employee communications and engagement play a central role in Wilo’s HR culture. Interactive formats for developing new internal processes and refining existing ones allow fresh and different perspectives to be integrated in decision-making while also leading to more satisfaction and motivation among employees. Naturally, every employee also has the right to join a union. For more information on employee communication, please refer to the section on “Stakeholder Dialogue”. In 2022, with the Employee Net Promoter Score (eNPS) a quarterly global survey to measure employee commitment was

introduced. Employee commitment is calculated by asking the question whether employees would recommend Wilo as an employer to friends or family. In the three surveys that have already been conducted, reasons for recommending Wilo as an employer include the supportive working environment as well as the diverse and exciting fields of activity.

### Top Employer Germany 2022

“In a competitive labour market, we want to reinforce Wilo’s appeal as an employer brand in order to attract new talent while also retaining the loyalty of the company’s own employees. Our attractiveness for employees was also confirmed to us once again in 2022 by the results of the Top Employer Institute, which awarded Wilo the title, Top Employer Germany 2022,” states Dr. Patrick Niehr.



Key sustainability indicator	2020	2021	2022
Number of employees	7,836	8,200	8,457

# EMPLOYEE DEVELOPMENT

## Learning and growing

The landscape in which the company operates is changing faster than ever before because of the geopolitical situation. We want to encourage and empower our employees to try out new tasks, despite all the events of the past months and years, so that they can help shape the future with initiative, passion and courage. One of the ways in which we measure success here is the extent to which we are able to promote internal employees to fill management vacancies. Our goal is to fill at least 70 percent of all management positions internally.

“Thanks to good talent management and a wide range of training and professional development measures, we were able to fill 80 percent of our vacancies in middle and upper management with talented employees from within the company last year. This demonstrates that Wilo recognised the changing corporate landscape and market requirements early on and introduced the right continuing professional development activities,” assesses Oliver Hermes.

A new, future-oriented skills model and the Leadership Accelerator Programme for Wilo’s top executives are just two of the many measures implemented in the past year to promote personal and professional development as well as global cooperation at Wilo.

### Career and talent promotion

A career at Wilo means that employees can continue to develop both professionally and personally in a global environment. Wilo relies heavily on personal motivation as a career and learning factor so that we can provide targeted support for individual journeys. This well-established

implicit attitude to learning is explicitly developed in the context of how we define our learning culture, thus enabling us to quickly integrate new employees in that culture.

We use a wide variety of measures to proactively prepare our employees for possible career developments. In addition to classic coaching and mentoring programmes and the global Leadership Accelerator Programme, Wilo has initiated a large number of local continuing professional development programmes. In India, for example, a broad-based training programme with 18 different key subjects has been rolled out that promotes the continuing professional and personal development of employees from all business divisions and includes a wide-ranging offer for team building. The initiative has been received with great enthusiasm: more than 2,000 training hours with 426 participants have been performed in total.

Both internal and external factors, such as digitalisation or agile working, are changing the world of work. The goal we set ourselves in developing our new skills model consisted

in being able to respond to the challenges of our time and to create a global and generally comprehensive skills framework geared towards development and relating to conduct and values. The past two years have seen a Wilo competence model applicable worldwide developed and rolled out in what we call Collaborative Innovation Circles (CICs) together with employees and managers. The new skills framework consists of six generic core competencies and six individual competencies. The core competencies are derived from Wilo’s values – they represent the way in which we want to work together at Wilo. The individual competencies are necessary to be able to perform a specific activity and can be selected as required and further developed accordingly.

The Leadership Accelerator programme is designed as a modular learning journey and is targeted at members of Wilo’s top management. The aim is to link strategic initiatives with the work of daily management. The programme consists of seven modules that convey strategically relevant issues in seven virtual interactive learning formats. A total of 116 managers from all around the world have taken part in the sessions so far. In the world of work marked by challenges, we see our managers as navigators helping to ensure the success of our company.

At Wilo, we have always worked closely together across departments and national borders. The unbundling of business activities currently underway harbours the danger of isolation. We use a large number of measures to work against this trend. International staff deployments – i.e. work on site, in another country or a different culture – are becoming increasingly important as a way to strengthen global collaboration. There are three different models for working abroad at Wilo: long-term assignments, project assignments and development assignments. Seven employees are currently abroad within the framework of one of these programmes. Others will follow in 2023.

The new Wilo world of learning came online in Germany in August 2022. Under the motto “Always Learning. Always Growing”, WiLearn enables employees to develop on their own initiative, on a self-directed learning basis and con-

tinually in line with their own work and interests. The platform currently provides more than 60 offers, which are based on the Wilo skills model and are available in a variety of learning formats – from e-learning, through podcasts and video triggers to classic classroom training. More than half of the learning content is free. In addition, WiLearn actively promotes the culture of learning with and from each other. Employees can comment on offers and recommend them to each other, suggest new offers or share their own content.



80%

of management vacancies were filled by employees from within the company in 2022.

### Digital learning formats

In the past year, we provided 500 licences for a global e-learning platform with individual learning paths for employees from all across the Wilo world. This pilot project is a test run that aims to show how far employees are ready to use an offer of this kind. More than 70 percent of the users actively pursued their learning journey on the platform. The focus here was on enabling employees to acquire digital skills. The contents have been rated

very positively, as is the platform itself. In addition to the global offer, employees from the MENA region have used another e-learning platform, on which the users spent an average of seven hours learning time during the test period and which has also received very positive assessments.

Wilo’s Technical Academy bears the chief responsibility for technical training. It focuses mainly on technical training (products, systems, applications). The idea is that each employee is able to get the training that suits their individual requirements. Employees can use these offers anywhere in the world, at any time and at any location.

Key sustainability indicator	2020	2021	2022
Internally developed managers	60	71	80

# DIVERSITY

## Success based on diversity

Employee diversity is the engine of our success. The new ideas that come from different perspectives make Wilo a global pioneer. The promotion of diversity involves career-specific variables such as the technical or training backgrounds or length of service on the one hand and on the other demographic variables such as age, ethnic background, gender or nationality.

“The Wilo Group’s goal is to reflect the diversity of its business landscape through its employees in order to provide the optimal response to its customer wishes,” says Dr. Patrick Niehr. We look to appreciate our employees and their individual capabilities while helping them to tap their potential to the full. Accordingly, it is important to us to ensure that hiring, performance assessment, remuneration and promotions are fair and based on objective criteria. One of the indicators we measure ourselves against is the share of women in management positions. We are aiming for a share of 20 percent.



progress in achieving our target, we offer various programmes to support women in their career development.

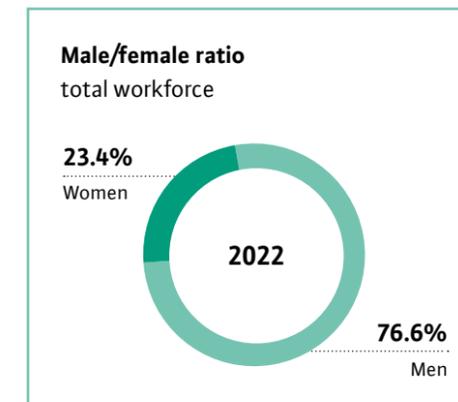
This primarily involves the systematic selection and promotion of women through group-wide development measures. Furthermore, we are making our company more attractive with a number of options such as individual working time models, remote working and needs-based training. We are

thus promoting work-life balance, which has a positive effect on career development for women. One sign that people are happy to take up the opportunity of individual working time models is the growing number of part-time employees.

The Wilo Group celebrated International Women’s Day with a large number of communication actions. Under the motto “Breaking the bias”, we launched a video in which

numerous colleagues make powerful international arguments for interaction that is free from prejudice. In addition, Wilo employee Christine Amira organised a panel talk on the subject, with the support of the Wilo Group, in March in Nairobi, Kenya. Influential speakers from the STEM sector (science, technology, engineering, mathematics) gave inspiring talks that encouraged the audience to make their case and continue their professional development regardless of their gender. Prominent guests included Lawrence Githinji (CEO of KONE East Africa), Rita Kavashe (Managing Director of Isuzu East Africa) and members of the Women in Water & Sanitation Association (WIWAS Kenya). In total, more than 100 women took part in the event. Christine Amira already won third place in Wilo’s Sustainability Challenge back in 2021 with her initiative “Women Today”, which encouraged women to continue to train in technical professions.

LinkedIn contribution to International Women’s Day 2022



In Turkey, in the summer of 2022 Wilo colleagues came together for the first Women Power Workshop. The event was the first of a quarterly series which focuses on the differences between the genders and how to deal with them and on success stories about overcoming obstacles in working life.

We celebrated diversity at Wilo during Diversity Day last year. For a limited period, all employees received full worldwide access to a learning journey to promote an integrative, open and diverse corporate culture free of prejudice.

### Cultural diversity on the table

Eating is an essential element of our life, cooking a part of our culture. Eating not only serves to take in food, it also brings people together, creates a sense of identification and makes us happy. With this in mind, Wilo MENA invites its employees to come together once a month to share special home-made meals that represent their unique cultures. Everyone brings in a different dish that stands for their ethnic origin and that they share with their colleagues during the meal.

### No to violence against women

Wilo also supported the “Zonta says NO to Violence against Women” campaign last year. We set aside two theme days for a number of actions to raise the awareness of our employees about the subject. In addition, the Wilo-Foundation donated EUR 1,000 to the “NO means NO” project of the Frauenberatungsstelle Dortmund (Women’s Counselling Centre Dortmund). “Our company does not tolerate any violence against women. That is the clear and unequivocal message of this annual campaign,” says Dr Patrick Niehr, Chief Change Officer and member of the Executive Board of the Wilo Group. “Wilo stands for non-violent and respectful coexistence. That is why we are also committed ambassadors for ‘ZONTA says NO’ this year.” Wolfgang Mertineit, member of the Board of Trustees of the Wilo-Foundation, adds: “The campaign aims to encourage the people affected to make use of the Frauenberatungsstelle Dortmund. The Wilo-Foundation is very glad to support this important, easily accessible offer.”

Key sustainability indicator	2020	2021	2022
Women in management positions (%)	18	18	19

### Women in management positions

We had 19 percent women in management positions last year. This is slightly higher than the figure in previous years and proves that we have successfully maintained a good level by industry standards. In order to make further

# OCCUPATIONAL HEALTH AND SAFETY

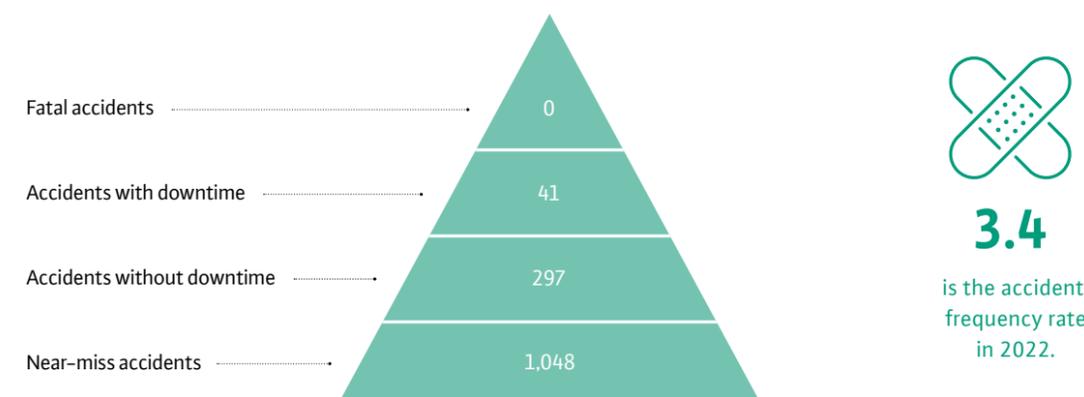
## Safety around the world

As part of its “Vision Zero” strategy, Wilo has set itself the goal of preventing all accidents and work-related illnesses. We came another large step closer to this goal in the 2022 reporting year, with the accident frequency rate falling from 5.3 to 3.4. The number of accidents totalled 41 (previous year: 63), of which 28 were suffered by the company’s workforce and 13 by third-party workers. For the most part, the nature of the accidents resulted in minor injuries, which is also reflected in the low accident severity score of 0.09 (days lost/hours worked).

### Identifying potential for improvements

“Wilo introduced a group-wide management system in 2016 that is implemented at all production sites with more than 20 operating personnel. In this way, we ensure that standards and processes are put into practice throughout the Group,” states Georg Weber. This occupational health and safety system is certified in accordance with ISO 45001. The coverage rate amounts to more than 90 percent of locations and 93 percent of employees. Regular internal audits are conducted to monitor compliance and identify potential for improvement. The results are incorporated into central, quarterly reporting. 36 deviations and 70 potential areas for improvement were reported in 2022. The implementation level is 96 percent.

Regular safety training courses are an important requirement for preventing accidents. They are therefore mandatory for all Wilo employees worldwide. Their scope and frequency are dependent on the respective area of work. In administration, training on key risks and new developments in occupational health and safety system is carried out at least once per year. The average amount of training is three to four hours. As the safety risks in production and service are much higher, training in these areas is more intensive and also provided more frequently as and when necessary. Reasons for ad hoc training essentially include process changes and new products, machinery and systems. The average number of training hours here is between ten and twelve hours per year per employee. On top of this, occupational health and safety improvement routines are performed, including safety inspections, gemba talks and 6S audits for example.



In accordance with the group-wide ISO 45001 certification, committees have been set up in all plants to involve employees in relevant safety concerns. Regular safety days or weeks are additionally held in which issues critical for safety are examined in more intensive detail.

which was aired in all our plants, showing colleagues tossing the Wilo hard hat around the world to each other to symbolise how we work together to ensure health and safety at the workplace.

### Acting together

Wilo has been active in the Vision Zero campaign of the International Social Security Association (ISSA) since 2019. A visible sign of Wilo’s international commitment in this area is also provided by the company’s participation in the World Day for Safety and Health at Work. This is held on 28 April every year and was organised last year on the theme of “Acting together to build a positive safety and health culture”. In line with this, we filmed a short video,



### Number of work accidents per 1 million hours worked

Key sustainability indicator	2020	2021	2022
LTIR	5.5	5.3	<b>3.4</b>

### Number of days lost per 1,000 hours worked

Key sustainability indicator	2020	2021	2022
Accident severity score	0.14	0.15	<b>0.09</b>

# CAPACITY DEVELOPMENT AND LOCAL EMPLOYMENT

## Developing and shaping

Capacity development is a process of change by which people, organisations and societies mobilise, adapt and expand their capabilities to sustainably shape their own development.

More and more, global challenges such as climate change, energy and food security and the management of increasingly scarce resources such as water are defining the world we live in today. Knowledge, tools and equipment are needed to adapt to these changing conditions. Capacity development generates access to these resources and therefore plays a key role in dealing with global challenges.

But capacity development is about more than developing and acquiring practical skills. The expectation is that programme participants will enhance their chances on the labour market and will be able to use their skills actively and on their own initiative in the long term to help shape development and change processes.

The Wilo Group is concentrating on establishing 20 new training centres by 2025. We have already launched 15 training centres so far in Ghana (2), Senegal (1), the

Ivory Coast (1), Namibia (2) Argentina (2), Mongolia (3), Kazakhstan (1) and Uzbekistan (3).

### German–Mongolian exchange

A look at Ulaanbaatar in Mongolia shows what our commitment here looks like in practice. Just three million people live in Mongolia, but the country is five times as large as Germany in terms of area. Yet the urgent questions that climate change raises have long been of existential importance for people and nature even in the least densely populated country on earth.

During a visit to the local polytechnic in Ulaanbaatar as part of the develoPPP projects\*, Wilo handed over the Wilo–Stratos MAXO double pump to this vocational training college in the capital city. The pump aims not only to optimise the energy efficiency of the existing heating system, but also to be used for training purposes for the



students and as an example of best practice for customers in the region. In addition to donating the product, Wilo also provided a training wall (Wilo Brain Box), including training material, for the training workshops. Another vocational training college, the polytechnic in Darkhan, has also enjoyed a donation of a product (Wilo–Stratos GIGA–D) and a Wilo Brain Box. Here, too, the existing heating system is being renovated to improve energy efficiency and the training workshop is being equipped with a learning wall.

Moreover, Wilo has coordinated closely with the responsible ministries on site to sustainably embed the education and training modules. The local education ministry has



**15**  
of 20 planned training centres worldwide have already been established.

already confirmed that it will include the learning contents in the official curriculum. The Mongolian Ministry of Construction and Urban Development is additionally planning to incorporate the Ecodesign Guidelines and ErP directives as binding values within the ministry.

The exchanges between Wilo and the two vocational training colleges will also continue in the future. In addition to the virtual exchanges between trainees from Mongolia and Germany, there are plans, scheduled for 2023, for Wilo trainees from Germany to spend three weeks in Mongolia getting to know the world of learning and work there.

\* The develoPPP project of the Germany Federal Ministry for Economic Cooperation and Development (BMZ) supports private sector projects in areas where business opportunities and development policy potential coincide. The aim of the support and cooperation is to produce a specific improvement, for example in training, or an improvement in environmental and social standards in the supply chain.

# WILO-FOUNDATION

## Committed to sustainability

WILO SE is involved in a range of social projects together with its main shareholder, the Wilo-Foundation. In addition to ensuring continuity within the company, the family-run foundation provides financial assistance for projects in the fields of science, education and social welfare, culture and sport and is thus actively committed to the common good.

“Activities focus on relevant issues of the future such as climate and environmental protection, water as a resource as well as technology and digitalisation. Because it is estimated that 2.1 billion people worldwide lack sufficient access to safe drinking water and over 4.3 billion people worldwide have only inadequate sanitation facilities, the Wilo-Foundation explicitly supports projects in countries that are significantly affected,” states Oliver Hermes, President of Trustees of the Wilo-Foundation. Geographically, the Wilo-Foundation mainly supports projects in countries where the Wilo Group has business locations. “The support for education is in keeping with the forward-looking belief in empowering young people as a way to promote equal opportunities and sustainability. The focus is on future skills, STEM topics and (social) entrepreneurship. Promoting culture helps build bridges for fostering international understanding and is stimulated in particular by regional responsibility”, explains Evi Hoch, member of the Wilo-Foundation Executive Board.

### F20 Climate Study

The Foundations Platform F20 international environmental and climate protection network, which the Wilo-Foundation joined as a member in 2021, has called on the heads of state and government of the G20 countries for a clear target for ramping up renewable energy by 2030. Based on wind and solar power, 70 percent of electricity can be generated from renewable energy sources. But how can this fundamental change be successfully realised? In the light of the climate and energy crisis that is coming dramatically to a head, the energy policy measures

currently in place are not sufficient to achieve the agreed climate targets and to further drive energy efficiency and the generation of renewable energy, according to the core statement of the study “Limiting Global Warming to 1.5 °C: Renewable Target Mapping for the G20” by the University of Technology Sydney. The results of this study, which was commissioned by the Foundations Platform F20, were published during the G20 summit in Indonesia in the autumn of 2022 on a multimedia website that was facilitated through the financial support of the Wilo-Foundation.

### Europe Science Guide

The Science Guide is part of the “Science in Europe” project based at the Chair of Science Journalism at the Technical University of Dortmund. The redesigned website [www.science-guide.eu](http://www.science-guide.eu) hosts reports by students of the Institute of Journalism from Dortmund, Dijon and Strasbourg on unique science locations and projects in Europe. The project receives financial assistance from the Wilo-Foundation, which has supported the German-French seminars in science journalism for ten years. In July 2022, students from Dortmund, Strasbourg and Dijon travelled as a group to the EuroScience Open Forum (ESOF) in Leiden (Netherlands), from where they reported on this European science conference.

### Start-ups against hunger

Around 5,000 people live in the Kenyan village of Kinakoni, 300 kilometres or so from Nairobi. The whole of the Kitui Country region is marked by a significant shortage of water and many children show symptoms of malnutrition. Most

families live on less than EUR 10 a month. Launched in 2021 and running to 2024, a model project based on an initiative of the stern – Hilfe für Menschen e.V. foundation and the local primary project partner Welthungerhilfe Kenya is in progress in Kinakoni, in which the Wilo-Foundation is involved as a sponsor. The goal is to identify through the example of Kinakoni the structural problems that lead to hunger and malnutrition. The approach involves working together with the local villagers and regional start-ups to develop intelligent solutions to sustainably improve the sometimes life-threatening living conditions of Kinakoni’s residents.

### Wells for health centre

The big day arrived on 17 September 2022: the village of Klogo (Togo) celebrated the opening of the third deep well for its health centre. Guests included representatives of the Germany Embassy in Togo, local staff of the German Society for International Cooperation (GIZ) from Lomé and regional and municipal representatives and dignitaries. The donation from the Wilo-Foundation to Kekeli Togo e.V. and the solar-driven well pump, a donation in kind from the Wilo Group, ensure that the roughly 5,000 residents are now supplied with clean water.

### The Maker Spaces in Cedarburg

Inspiring the interest of children and youths in scientific, technical and creative subjects is the stated aim of the STEAM educational initiative of the Cedarburg Education Foundation (CEF) on behalf of the Cedarburg School District in the state of Wisconsin in the US. STEAM is an abbreviation for the fields of science, technology, engineering, arts and mathematics. Against this background, the Wilo-Foundation supported the programme for strengthening elementary, secondary and high schools from 2019 to 2022 by developing and establishing what are called Maker Spaces. These spaces provide room for age-appropriate experimenting (“physical making”). Plans are additionally in motion to continue the visionary “Cedarburg 3.0 – Digital Making” project into a second phase from 2023 to 2025 with the aid of the Wilo-Foundation. One aim of this project is to set up a technically fully equipped recording studio where students can record both video contributions as well as podcasts and radio broadcasts.

### Youth Robot Olympiad

More than 360 teams from all over the world demonstrated their technical expertise at the international final of the

World Robot Olympiad held at the Messe Dortmund exhibition centre from 17 to 19 November 2022. Almost 1,000 children and youths from a total of 73 countries were invited to Dortmund to present their solutions and compete with other teams in robot tournaments. The Wilo-Foundation has been one of the sponsors of the WRO organised by the Technik begeistert e.V. association from the very beginning. The general programme offered hands-on interactive stations and talks, including the Wilo Group’s presentation “My Robot and Me – How Will We Live in 2030?” The WRO was also facilitated by volunteer helpers, including several Wilo trainees.

### Youth choir on Korea concert tour

In the autumn school holidays in 2022, the youth choir of the Akademie für Gesang NRW (Academy for Singing NRW) from Dortmund went on tour to South Korea and took part in an exchange with the Jerazin Children’s Choir on Jeju Island thanks to a travel allowance subsidised by the Wilo-Foundation. The choir performed concerts on Jeju Island, in Yongin, at the National Assembly in Seoul, in Jinju and in Busan. Wilo Korea invited the young singers to visit the company’s factory in Busan on the occasion of the Wilo Group’s 150th anniversary. In addition, enthusiastic Wilo employees and their families attended the choral concert at the Gimhae Arts Center, at which the choir even sang songs in Korean.

### Aid for Ukrainian children

In 2022, the Wilo-Foundation provided financial support for humanitarian relief efforts of the sponsoring partners SOS-Kinderdörfer (SOS Children’s Villages) and Habitat for Humanity in Poland, Lithuania, Slovakia, Hungary and Romania for refugee children and families from Ukraine. More than 6,500 Ukrainians, including more than 2,000 children and youths, have also fled to Dortmund since the outbreak of the war in Ukraine. The Wilo-Foundation therefore made donations in 2022 for ten “refugee sponsorships” (through the non-profit climb gGmbH) and for 20 refurbished (recycled) laptops (through Das macht Schule gGmbH) for Ukrainian primary school children in Dortmund. Furthermore, the Wilo-Foundation supported concerts for peace at the Dortmund Concert Hall, which were held in cooperation with the Klavierfestival Ruhr (Ruhr Piano Festival) and the Mozart Gesellschaft Dortmund for the benefit of Save the Children, Care and the Klinikum Dortmund hospital to aid Ukrainian refugee children.

# COMPLIANCE

## An obligation, not an option

At Wilo, compliance means that every employee obeys the law and adheres to internal company policies in order to play their part in behaving ethically and responsibly and in preventing possible harm to the company, our employees or business partners. In a constantly changing world in which decoupling tendencies are increasing, more than ever we need a common frame of reference that ensures compliance with the rules and values of the Wilo Group across countries and cultural groups.

“Particular responsibility for ensuring compliance with laws and rules lies with our managers. However, compliance is actually practised in the company only when all the employees know and understand the rules,” explains Mathias Weyers, member of the Executive Board and CFO of the Wilo Group. It is therefore necessary to train employees regularly and according to target group. Wilo’s commercial employees are repeatedly trained on various topics using our e-learning formats. Our medium-term goal is for 90 percent of all employees to receive training on compliance issues. The training coverage rate was 49 percent in the past year. The reason why the rate fell below target can be found in the fact that the training courses have been rolled out only in Europe for the time being.



**90%**

is the target for the training coverage on compliance issues.

– irrespective of department, position and workplace. As a compass for our daily activities, the Code of Conduct brings together the principles and basic rules that are most important to us.

As we expand our business activities and cooperation with third parties in large-scale projects, the risk of corruption increases. Wilo pursues a zero tolerance strategy when it comes to corruption. In order to satisfy this requirement, we work continually to prevent and combat corruption. Our Anti-corruption

Policy defines the group-wide operating principles in the fight against corruption. To train our employees in how to deal with risks of corruption, regular e-training courses simulating real situations and enabling employees to react appropriately in critical situations were conducted in the past year. The right way to act in sensitive situations, such as on business trips or when gifts are offered, is defined in the Hospitality and Gifts Policy. Moreover, we maintain a hospitality and gifts register, which is linked to an approval process. Risks of corruption can also arise as a result of the

### The compass for our daily activities

The new Wilo Code of Conduct was published in 2022. The common values and principles it describes have been firmly anchored in Wilo’s corporate culture for 150 years. They are put into practice by the Wilo family every single day

cooperation with business partners. Customers especially in potentially high-risk countries are currently investigated at Wilo for possible breaches or sanctions using the Dow Jones risk assessment tool.

### Fair competitive practices

Fair competition is a fundamental requirement for innovation, growth and prosperity in a society. We are committed to open markets and fair competition and comply with the nationally and internationally applicable legal regulations. By acting in compliance with the rules, all our employees play a part in preventing risks, especially risks of unfair competition, at the Wilo Group. Wilo also conducts regular e-learning programmes on this for all administrative staff. A special focus is placed here on the employees working in sales and marketing, who receive separate training on the Wilo guidelines relating to legally compliant conduct on the market.

### Data and information security

Our customers, suppliers and employees entrust us with data and information. This can involve business and trade secrets, intellectual property and personal data. The data entrusted to us calls for special protection. We therefore institute targeted technical and organisational measures. For example, we keep personal data only for a temporary period in accordance with a prescribed deletion concept. The permissions concept supports the fact that not every employee can access all internal data. We base all our measures on the applicable data protection legislation as well as the relevant standards governing information security and the prevention of cyber risks. Data and information security has increased sharply in importance in the last several years. This is why we appointed a Chief Information Security Officer in 2022, who promotes the issues of information security and data protection. Moreover, we rolled out two e-learning courses on the subject last year.

### Umbrella compliance programme

Our compliance programme consists of the elements of prevention, detection and response and provides a general framework that covers all compliance management measures.

- **Prevention:** this is mainly addressed by the training and e-learning described above. The Compliance Office is also regularly consulted on questions or problems. Regular global compliance surveys let us know where there is potential for improvement within our preventive activities (e.g. training contents or information requirements). In addition to the usual communication channels, employees have the option of using the Compliance Office’s AskMe tool to ask about how to behave correctly in specific circumstances. 40 enquiries were submitted using the tool in the past year.
- **Detection:** various points of contact can be used to detect potential compliance breaches, including both personal reporting channels, for example through the local compliance representative or direct supervisors, and anonymous reporting of tips through our SpeakUp whistleblower system. The SpeakUp tool is available for both company employees and external parties. The detection activities additionally include the compliance risk analysis, which we use to identify and assess risks of corruption and competition. And it goes without saying that compliance issues are always covered by our internal audits. A total of 31 potential compliance breaches were reported using the tool in the past year.
- **Reaction:** in addition to the SpeakUp tool, there is a case management process for following up on suspicious activities in a standardised, verifiably documented and objective manner and, if a response is required, for sanctioning them appropriately. Reporting duties and responsibilities are assigned to certain functions transparently and on a case-by-case basis. Case management also analyses the lessons learned, so that we can ensure the continuous improvement of the compliance management system and the related activities.

Key sustainability indicator	2020	2021	2022
Training coverage (%)	80	84	49

# SUSTAINABLE SUPPLY CHAINS

## Due diligence and responsibility – internal and external

Wilo established processes for implementing sustainability in the supply chain many years ago. Our goal is to create transparency across the entire supplier network and to ensure that 100 percent of our suppliers comply with the basic principles of human rights.

A key component of this is the Wilo Supplier Code of Conduct (SCoC), which contains all the core elements of human rights due diligence. It is an integral requirement in the supplier qualification process. It is how our suppliers undertake to comply with the ethical standards required of them. The fulfilment rate of our production material suppliers was 95 percent last year.



Rules of conduct for Wilo suppliers

Based on the quantitative and qualitative analyses, nine potential high-risk suppliers were identified and selected for a follow-up human rights audit in 2022.

Wilo additionally supplements this annual risk assessment with daily screening of the supply chain for tier 1 and tier 2, which is conducted by an external service provider. Results that relate to the human rights due diligence are

forwarded to the purchaser responsible for the supplier to draw up an action plan. We reported and followed up on 15 events in the sphere of our direct and indirect suppliers in 2022.

### Defining measures

On the basis of the 2022 risk analysis, Wilo planned to conduct nine human rights audits, six in China and three in India. The primary goal is to ensure compliance with the basic principles of human rights and, if necessary, to highlight measures for improvement. Corona meant we were able to conduct only three of the audits in China. The remaining three were postponed to 2023. An external partner is engaged to perform the audits on the basis of the Sedex Members Ethical Trade Audit (SMETA) methodology, which guarantees that the audit results can be compared and that a professional, independent assessment is conducted.

The results were very good in most cases. Extensive deviations were discovered, but none that were serious. The majority of them concerned occupational health and safety and/or fire safety. The results were converted into an action plan and provided to the purchasers in charge for follow-up. After the actions were implemented and their

We also continued to focus our efforts on further to implementing the core elements of human rights due diligence in 2022. We therefore further extended the risk assessment and additionally defined audits and procedures for the identified high-risk suppliers.

### Two-stage risk assessment

Our primary goal is to create transparency concerning the level of compliance with the basic principles of human rights in our supply chain. Suppliers who account for a total of 90 percent of our purchasing volumes are taken into account in our risk analysis.

The risk assessment is divided into two stages: to start with, we conduct a quantitative analysis based on internationally available risk indices and the available supplier information, such as ISO certifications or self-disclosures. In the second stage, we conduct a qualitative analysis of the potential high-risk suppliers that have been identified in this way. Responsible purchasing and quality managers discuss the results and impressions gained from audits and supplier visits with each other. Documents corroborating suspicious activities but also compliant processes are kept on record in the risk tool. We subsequently define which suppliers need to be looked at in more detail in a human rights audit.

effectiveness was reviewed, we can classify the nine audited suppliers in the medium risk class.

Moreover, we organised a supplier day at our site in Korea last year, in which the basic principles of human rights due diligence and the SMETA procedure were explained. A total of 13 suppliers from various product groups took part and subsequently conducted a self-assessment. These assessments were carried out based on the four pillars of the SMETA procedure and were supported with professional expertise. The result showed a good level of coverage of the basic principles and of the Wilo compliance requirements. Weaknesses were found in the documentation and standardisation (e.g. ISO certificates) especially at the smaller suppliers. Based on the positive feedback received from the participants, further events are planned for 2023.

The results of the risk assessment and the status of activities are reported on internally at regular intervals. External reporting is provided annually in conjunction with the sustainability report.

### Internal and external complaints mechanism

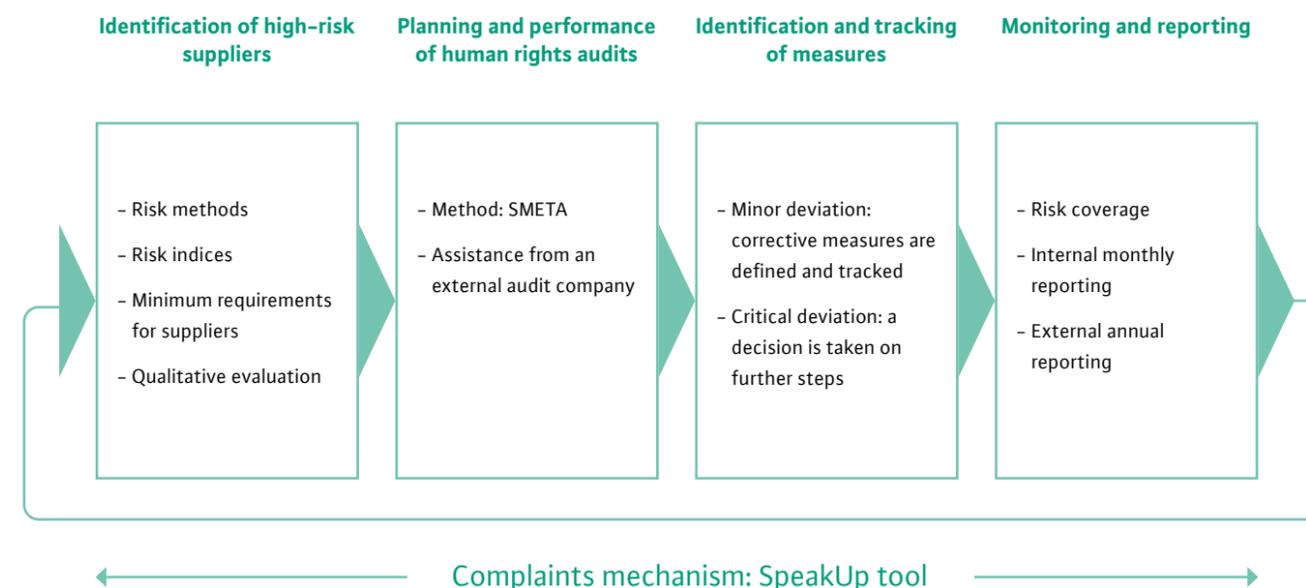
On the basis of the group-wide Code of Conduct, an official complaints mechanism is available to all internal and external stakeholders. Wilo attaches great importance to transparent and correct business processes. To us, taking responsibility also means encouraging others to report potential breaches of laws, rules, policies and our Code of Conduct. Reports can be submitted – even anonymously – using the SpeakUp system. This is an externally operated, protected communications platform that allows users to leave confidential messages for Wilo by phone or online in their local language.

The Compliance Office receives and assesses the reports. Measures are then initiated and responsible persons are appointed. The Compliance Office ensures that these cases are documented and reports to the Compliance Committee, the Executive Board and the Audit Committee every quarter.



Compliance at Wilo

## Human rights due diligence process



Reference

# SIGHTS FIRMLY SET ON THE GOALS

SDG Action Days

Welcome to the Wilo SDG Action Days 2022!



The event will start soon.



## Seven goals, seven events, seven sites

In September 2022, Wilo corporate locations invited customers, partners and employees to a series of interactive online events.

**Wilo has long been committed to the United Nations Sustainable Development Goals (SDGs). In September, the company announced its SDG Action Days to draw attention to the need for sustainable action – and the whole Wilo world got involved.**

Seven goals, seven events, seven sites: on each day from 19 to 27 September 2022, one Wilo corporate location invited customers, partners and employees to an interactive online event, each of which set out to discuss one of the SDGs relevant to Wilo. The series of events thus followed the call of the United Nations Foundation to hold campaigns in Global Goals Week to draw attention to the global challenges we face this century.

The event days saw the company's branches introduce themselves and present their commitment in the context of the SDGs. External sustainability experts enjoyed the opportunity to speak in keynote addresses and panel discussions. Together with partners from the worlds of politics, business and civil society, the hosts discussed ideas on how global crises can be tackled together.

For example, day six saw Wilo Latin America look at the goal "Clean Water and Sanitation" on this SDG Action Day under the title "Water supplies under increasing threat". Svenja Ahlburg, Group Director Latin America, kicked the day off by introducing the Wilo branch in Latin America. Following a welcome message from Mathias Weyers, member of the Executive Board and CFO of the Wilo Group, the guests discussed the issue of "Access to clean water in rural areas of Latin America".

It is a highly relevant issue: contaminated drinking water and a lack of sewage disposal facilities are the causes of 80 percent of all illnesses in developing countries. A total of 2.1 billion people worldwide still lack access to clean

drinking water. More than half of the world's population has to get by without latrines or any form of sewage disposal. Safe water and sanitation is a human right.

The Wilo host locations did not just invite guests to exchange views, they also got involved in climate protection initiatives on site during the SDG Action Days – translating words into deeds. Latin America was no exception here: employees, customers and friends of Wilo took part in the voluntary programme "Water for Lives" organised by the non-profit organisation Habitat for Humanity, which campaigns for better living conditions for disadvantaged people. They set about building potable water tanks on site in Latin America. In five days, the last four of a total of 17 water tanks were completed that will now provide 68 people in the north-west of Brazil with clean and safe drinking water.

The SDG Action Days were accompanied by a Wilo Group donation. A total of EUR 70,000 benefited charitable causes at the participating Wilo locations – EUR 10,000 per site. The Wilo team in Latin America donated the sum to the non-profit organisation Agua Segura, which develops WASH projects (water, sanitation and hygiene) to implement in local communities.

The United Nations adopted 17 Sustainable Development Goals in 2015. The Executive Board of the Wilo Group signed the UN Global Compact back in 2018, thus reasserting our commitment to achieving the goals. In line with the company's business activities, seven of the goals are particularly relevant for Wilo: goals 6, 8, 9, 11, 12, 13 and 17. /



# SUSTAINABLE MANAGEMENT

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# SUSTAINABILITY ORGANISATION

## Organising to achieve objectives

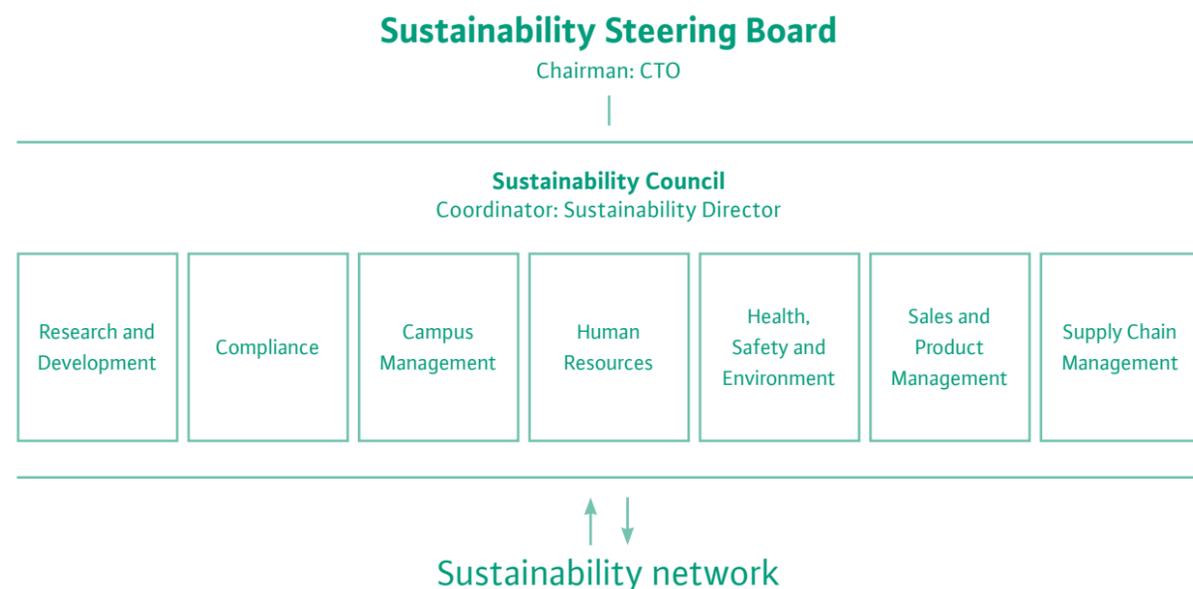
Wilo sees sustainability management as a cross-divisional function. Promoting integration, communication and dialogue between the specialist departments is the top priority. To facilitate efficient cooperation, Wilo has defined clear structures and responsibilities.

The sustainability organisation was defined in conjunction with strategy development in 2018 and has been established since then. The leading management function for sustainability activities in the company is performed by Chief Technology Officer (CTO) Georg Weber. Responsibility for the sustainable development of the company is thus represented at the highest level. This is where the strategic direction for sustainability management is defined and implemented. In addition to key financial figures, the development of the sustainability strategy is an integral element of the Executive Board's objectives.

Targets for further developing the sustainability strategy are formulated at the highest level in the course of a group-wide goal-setting process and integrated in the business divisions. Based on these targets, the senior

management in turn derives objectives for the respective functional areas as well as core projects and actions (key results) for achieving the targets (OKR methodology). The progress that has been made and any adjustments that may be necessary are reviewed and reported on every quarter.

The Sustainability Management department has the task of coordinating the activities in the company and ensuring that the defined targets are implemented. The department comes under the responsibility of the CTO and reports regularly on the progress made on the defined activities. Additionally it monitors the degree to which existing and future stakeholder requirements are met and initiates necessary action steps at an early stage.



The Sustainability Council is responsible for developing the content of the sustainability strategy and ensuring its implementation within the organisation. The council is staffed on an interdisciplinary basis by members who cover all Wilo's specialist departments that are associated with the main sustainability challenges that have been identified. The council members serve as sustainability officers within their respective departments here. The council is

coordinated by the Sustainability Director. The sustainability network is not a specific body, but describes all the employees at Wilo's more than 60 locations who play a role in achieving the sustainability goals through their daily activities. Their suggestions are passed on by their managers and are thus taken into account in ongoing strategic developments.

# CLIMATE RISKS

## Identifying and systematically minimising risks

The Wilo Group has a modern, integrated and globally available risk management system that enables climate risks and opportunities to be assessed. It ensures that business risks are identified at an early stage and that effective countermeasures are initiated.

Risk management at the Wilo Group is structured as a distributed organisation. The second-level managers act as risk management officers. They are responsible for identifying and submitting reports on risks throughout the group. The risk management officers work in close collaboration with the Group Risk Manager and are assisted by Controlling. Check lists and risk classification ensure that risk assessments are conducted uniformly and that procedures can be compared throughout the entire Wilo Group. Software that meets the requirements is used as a communication and information platform.

Overall responsibility for risk management is borne by the Executive Board, which also defines the risk strategy for the Wilo Group. We implement the risk strategy throughout the Group in the form of uniform policies and processes.

### Climate change as a part of the corporate strategy

"We have defined the opportunities and risks associated with climate change for our company in our 'Ambition 2025' business strategy. As one of five key megatrends, climate change has a material impact on all five Wilo market segments in all regions in which we operate," explains Oliver Hermes.

The key, medium-term physical risks of climate change lie for us in the increase in severe weather events and the associated impacts on the supply chain. Storm damage, floods and droughts can affect the entire supply chain and bring massive economic as well as human consequences with them. Wilo counters these risks using professional monitoring and management systems. We prevent the risk of supply shortages primarily by ensuring the availability of second-source suppliers. We additionally reduce the economic consequences of these business risks by taking out suitable insurance.

But climate change also offers a number of opportunities for the Wilo Group: with smart pumps and systems, Wilo can comprehensively and reliably help to cover the basic requirements for water infrastructure. We additionally use them to counter the negative repercussions of climate change, for example through flood control.

The requirements of energy and resource efficiency are also on the rise especially in major conurbations. Innovative city infrastructure based on smart systems and digital solutions is emerging all over the world. The heightening of minimum standards enshrined in law will stimulate demand for

forward-looking, resource-saving products and system solutions. The Wilo Group aspires to be an innovation leader and digital pioneer for the future and to play its part in reducing the load on the environment caused by CO<sub>2</sub> through lower energy consumption.

We have set out principles for handling risks in our Risk Management Policy. It additionally governs the risk reporting requirements, the risk assessment procedures and binding reporting thresholds. The policy also defines the duties and powers of all the parties involved in the risk management process.

The risk atlas defines uniformly applicable categories for how the risk identification has to be structured. We continuously review the risk atlas to ensure it is complete and update it accordingly if necessary. By doing so, we guarantee that all relevant risk areas are covered at all times. The respective risk management officers ensure that risks are identified and controlled in the business units they are responsible for. In this way, the risks for the individual sales regions and central functions are specifically identified and reported on. The Group risk manager coordinates this decentralised risk management process and reports to the WILO SE Executive Board every quarter and also on an ad hoc basis as necessary.

#### Standardised methodology for identifying risks

Wilo assesses the identified risks based on a uniform methodology prescribed by the Risk Management Policy. The specific probability of occurrence (in the next twelve months), gross and net risk are calculated for each identified risk. Net risks include suitable risk-prevention or mitigation procedures. These procedures aim to reduce the potential damage and/or the probability of occurrence. In addition, we lay down binding reporting thresholds in the Risk Management Policy. This means that the risk management officers must report every risk where the net potential damage exceeds a defined value regardless of its probability of occurrence.

The risk management system reflects the risks reported by the different business areas in aggregate at Group level. The Executive Board receives quarterly reports on the results of the risk analyses and, if necessary in individual cases, ad hoc and immediate reports as well. In addition, the Supervisory Board and the Audit Committee it appoints are comprehensively and constantly informed of the status and development of the risk management system.

Wilo's climate strategy has the goal of carbon-neutral production and a minimum reduction in greenhouse gas emissions of 60 percent as against the 2018 benchmark year by 2025. We revised this strategy and integrated targets for Scope 3 emissions when we signed up to the Science Based Targets initiative (SBTi) in May 2021. We have already sent the strategy and targets to the SBTi for validation and will publish the results in the 2023 sustainability report.

The key performance indicators and results for the 2022 year under review can be found in the section entitled "Emissions in Production and Processes".

## STAKEHOLDER DIALOGUE

### Sustainability through communication

Continuous dialogue is indispensable and therefore a central element of Wilo's sustainability management. We firmly believe that, without stakeholder partnerships, we will be unable to tackle the enormous challenges that accompany sustainable development.

The stakeholder dialogue is conducted through various specialist departments and channels. We pursue a particularly intensive dialogue with our customers. In addition to routine day-to-day communication along the sales channels, we enter into the dialogue with them through the cooperation in associations and by organising meetings and congresses and participating in joint projects.

As a partner in the Global Goals Week of the United Nations, Wilo announced the Wilo SDG Action Days in 2022. Seven selected business locations hosted online events on seven days in order to exchange information and views on the commitment to one Sustainable Development Goal (SDG) each. Colleagues from France presented an afforestation project, in the MEGA region staff collected plastic waste from beaches, while in Latin America Wilo employees worked with customers and a charitable organisation to build cisterns in a remote region. Participants in the events included local partners, global network representatives and the whole of the Wilo-World. Together, they discussed ideas and transformative solutions for sustainably tackling global challenges.

In 2022, Wilo served as the partner of the German Sustainability Award (DNP) – Europe's leading award for ecological and social engagement. For the 15th time, the prize recognised pioneering contributions to the transformation to a sustainable future, focusing here on the goals of the United Nations 2030 Agenda. The initiative has set itself the objective of bringing together all important actors from the fields of politics, science, research and civil society and inspiring them to network and enter into partnerships across borders.

#### Strong cooperation and partnerships

"As a multinational company, we are an active member of various national and international associations and organisations. The goal of the majority of this cooperation is the responsible, sustainable management of the precious resource of water and the environment. We are particularly proud to have been a part of the '50 Sustainability & Climate Leaders' initiative supported by the United Nations and Bloomberg. The aim of the initiative is to show companies how to stand out with a special commitment to climate," says Oliver Hermes.

Another highlight of 2022 was the expansion of the partnership with Borussia Dortmund football club (BVB). As a sustainability partner, Wilo is now supporting the sports club in reducing its ecological footprint, among other things. Together with BVB, we want to implement projects worldwide to promote the sustainable management of energy and resources. Both Wilo and BVB follow the SDGs as they pursue their business activities.

#### In dialogue with our employees

Open communication and trusting cooperation have always been the basis of our success. One key component of employee communication is constructive cooperation with the employee representatives. Wilo places great value on partnership-based interaction that is beneficial for both parties. All the relevant company guidelines are developed and implemented in close cooperation, which leads to significantly higher acceptance and faster implementation. Digital communications channels such as our intranet (TeamOne) offer the opportunity to inform employees about all topics to do with the company in a prompt and comprehensive manner.

In 2022, moreover, we introduced the Employee Net Promoter Score (eNPS) as a quarterly global survey to measure employee commitment. It is calculated by asking the question whether employees would recommend Wilo as an employer to friends or family. In the three surveys that have already been conducted, colleagues highlighted the cooperation, also at the international level, and the good work atmosphere. They also mentioned a supportive working environment as well as the diverse and exciting fields of activity as reasons for recommending Wilo as an employer.

In addition to the eNPS survey, we also set up a new, system-supported feedback function in our HR system in 2022. This offers employees the opportunity to obtain informal, situational feedback directly from their colleagues or supervisors. The function is intended to strengthen the feedback culture at Wilo and to make giving and receiving feedback a natural and integral part of the day-to-day work.

# MATERIALITY ANALYSIS

## Setting goals, staying dynamic

In developing the sustainability strategy, we identified material issues using the following sources:

- UN Sustainable Development Goals
- Topic-specific GRI standards
- Wilo megatrends
- Industry-specific challenges
- Regulatory provisions
- Results of the stakeholder dialogue

The sustainability department analysed and prioritised the list of topics with the help of the specialist departments. The picture that emerged was subsequently discussed with the Steering Committee and the key sustainability issues were defined. They form the basis for the sustainability strategy, which was published in 2018.

Adjustments to the contents of the strategy are based on the ongoing dialogue with our stakeholders. By actively taking part in networks and industry initiatives and by sharing information with other companies, we can identify new developments, trends and requirements early on. Intensive discussion with our specialist departments is also a valuable source for anticipating new issues.

One example of this is the European Green Deal and the associated regulatory initiatives for reducing emissions. Wilo is already well positioned today to satisfy the future requirements for the activities to be implemented and for reporting. As a climate protection company, we will continue to make a major contribution towards achieving climate protection goals with our sustainable solutions.

For us the materiality analysis is a dynamic process that forms an integral component of our day-to-day work. It is only in this way that we can ensure effective sustainability activities. We therefore started to apply the double materiality methodology last year. We will discuss the results with the relevant stakeholders over the course of this year. They will be published in the forthcoming sustainability report and will form the basis for restructuring reporting in accordance with the Corporate Sustainability Reporting Directive (CSRD).

## Materiality Analysis



# EXTERNAL EVALUATIONS

## Award-winning success

### Platinum rating from EcoVadis

We underwent the EcoVadis sustainability rating for the fourth time in 2022. We improved our score from 68 to 79 points and thus earned platinum status. Wilo thus belongs to the one percent of the (approximately 90,000) companies assessed globally by EcoVadis that have gained platinum rating.

### German Sustainability Award for Design 2022

One particular distinction in the past year was making it through to the final group for the German Sustainability Award for Design with our Wilo-Rexa SOLID-Q smart sewage pump.

### Wilo France receives award for comprehensive sustainability strategy

“Prix Yvelines Environnement” – this French environmental award underlines our strong commitment to climate protection. On 27 September 2022, Wilo France won the environmental award for the global strategy project for sustainable development aimed at identifying and reducing CO<sub>2</sub> emissions as well as for its innovations in the area of climate transition.

# APPENDIX

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## ABOUT THIS REPORT

### Format

This report is published online. The content is available to download as a full document in PDF format.

### Reporting standard: GRI

This report is based on the internationally recognised standards of the Global Reporting Initiative (GRI) and has been prepared in alignment with the applicable GRI standard. The GRI content index refers to the additional content in the sustainability report or in other published sources. Wilo transparently reports all data and information that is relevant and material from a company perspective.

### UN Global Compact

As a signatory of the UN Global Compact, we are obliged to report on our progress in implementing the ten principles. This sustainability report also includes the required annual “Communication on Progress” (CoP).

### Sustainable Development Goals

The report also refers to the United Nations Sustainable Development Goals. The goals on which Wilo focuses and the company activities undertaken to achieve them are discussed in the respective section on the sustainability strategy.

### Reporting cycle

Wilo’s sustainability report is published every year in fully revised form. The key indicators are updated every year.

### Report content

This Wilo sustainability report provides information on the strategic orientation and management of sustainability within the company. The target readers of this publication

include customers, employees, suppliers, media representatives and other interested stakeholders. We conducted a materiality analysis in order to define and evaluate the material sustainability topics for our business activities. The report provides information on the material activities and impacts along the entire value chain, with a particular focus on the topics water, energy and emissions, materials and waste and employees and society. Targets and measures have been formulated in conjunction with the sustainability strategy. These are presented transparently and verifiably in the report.

The reporting period covers the whole of Wilo’s 2022 financial year (1 January to 31 December 2022).

The editorial deadline for the report was 14 April 2023. Some figures have been rounded.

### Terms used

We typically describe our workforce as “employees” and use gender-neutral terms to improve readability.

### Contact

Your opinion is important to us. E-mail us with your questions and suggestions at: [responsibility@wilo.com](mailto:responsibility@wilo.com)

# ADDITIONAL KEY FIGURES

	Unit	2020	2021	2022	Note
<b>Business metrics</b>					
Net sales	EUR million	1,451.5	1,651.9	<b>1,885.7</b>	
Net sales growth	%	1.8*/-1.8	15.1*/13.8	<b>14.2</b>	*Adjusted for currency effects
EBITDA	EUR million	141.2	181.1	<b>196.7</b>	
Consolidated net income	EUR million	24.9	49.0	<b>61.1</b>	
Capital expenditure	EUR million	120.9	172.3	<b>155.3</b>	
R&D costs	EUR million	68.6	71.0	<b>70.6</b>	
Equity	EUR million	764.8	836.8	<b>930.9</b>	
Equity ratio	%	45.6	45.1	<b>42.7</b>	
<b>Water</b>					
Average annual water infrastructure growth rate	%	-5	15	<b>12</b>	
Average annual smart water systems growth rate	%	50	35	<b>17</b>	First launched in 2017
Water consumption	m <sup>3</sup>	94,274	108,740	<b>105,014</b>	
Water consumption per employee	m <sup>3</sup> /employee	15.9	18.3	<b>17.3</b>	
<b>Energy and Emissions</b>					
Energy savings through high-efficiency products	TWh	1.9	2.1	<b>2.2</b>	
Energy Solutions projects completed	Number	7,509	10,696	<b>15,745</b>	
Average annual smart products growth rate	%	141	5.1	<b>93**</b>	**Sales launch of Stratos GIGA2.0, Stratos PICO/-Z, Yonos GIGA2.0
Total carbon emissions (Scope 1 and 2)	t	15,380 <sup>1</sup>	13,186	<b>10,991</b>	
Scope 1 emissions	t	6,153	6,953	<b>4,950</b>	
Scope 2 emissions	t	9,227	6,233	<b>6,041</b>	
Carbon emissions/net sales	kg/ EUR thousand	10.63	7.98	<b>5.83</b>	
Total energy consumption	MWh	69,693	72,491	<b>64,446</b>	
Electricity	MWh	44,026	43,641	<b>43,543</b>	
Gas	MWh	20,524	24,463	<b>17,606</b>	
Oil	MWh	3,059	2,098	<b>1,370</b>	
District heating	MWh	2,084	2,289	<b>1,927</b>	
In-house electricity generation	MWh	792	1,311	<b>1,379</b>	
<b>Business travel</b>					
Wilo fleet	t CO <sub>2</sub>	1,745	1,984	<b>1,692</b>	Germany
By air	t CO <sub>2</sub>	350	166	<b>624.84</b>	Germany
Rental cars	t CO <sub>2</sub>	36	72	<b>140.04</b>	Germany
Railway travel	t CO <sub>2</sub>	<1	<1	<b>0</b>	Germany

<sup>1</sup> Figure was adjusted retrospectively

	Unit	2020	2021	2022	Note
<b>Material</b>					
Number of reused components	Number	37,961	53,500	<b>86,842</b>	Germany
Copper savings	t	15.7	19	<b>23</b>	
Reusable packaging (inbound)	%	100	100	<b>100</b>	
Waste recycled	t	6,568 <sup>1</sup>	6,872 <sup>1</sup>	<b>7,807</b>	
Recycling rate	%	85	80 <sup>1</sup>	<b>89</b>	
Hazardous waste	t	402	437	<b>351</b>	
Total waste	t	7,719 <sup>1</sup>	8,583 <sup>1</sup>	<b>8,708<sup>1</sup></b>	
Share disposed of	t	749 <sup>1</sup>	1,272 <sup>1</sup>	<b>573<sup>1</sup></b>	
<b>Employees and Society</b>					
Establishment of training centres	Number	9	14	<b>15</b>	
Internally developed managers	%	60	71	<b>80</b>	
Women in management positions	%	18	18	<b>18.5</b>	
LTIR (accident rate)		5.5	5.3	<b>3.4</b>	
Employees trained on compliance issues	%	80	84	<b>96</b>	
Total employees	Number	7,836	8,365	<b>8,643</b>	As at 31 December 2022
Share of women	%	24	23	<b>23.4</b>	
Share of men	%	76	77	<b>76.6</b>	
<b>By contract type:</b>					
Fixed-term	Number	1,032	1,001	<b>1,124</b>	
Of which women	Number	295	240	<b>244</b>	
Of which men	Number	737	761	<b>880</b>	
Permanent	Number	6,804	7,364	<b>7,519</b>	
Of which women	Number	1,586	1,709	<b>1,775</b>	
Of which men	Number	5,218	5,654	<b>5,745</b>	
<b>By employment type:</b>					
Part-time	Number	255	275	<b>545</b>	
Of which women	Number	189	203	<b>286</b>	
Of which men	Number	66	72	<b>258</b>	
Full-time	Number	7,581	8,090	<b>8,102</b>	
Of which women	Number	1,692	1,745	<b>1,734</b>	
Of which men	Number	5,889	6,344	<b>6,368</b>	
Trainees	Number	137	150	<b>222</b>	Globally
Share of temporary staff	%	6	4	<b>3.8</b>	Germany
<b>Employees by region:</b>					
Emerging markets	Number	2,706	2,874	<b>3,051</b>	
Mature markets	Number	5,130	5,491	<b>5,194</b>	
North America	Number	-	-	<b>398*</b>	*Opened in 2022
Fluctuation rate	%	4	4.04	<b>3.9</b>	
Share of employees with severe disabilities	%	4	4.25	<b>5.14</b>	Germany
Absenteeism due to illness	%	7	7.1	<b>8.3</b>	Germany
Employees covered by collective bargaining	%	82	78.4	<b>78.4</b>	Germany
Training hours	Hours	33,500	**	<b>804***</b>	** Learning platform under restructuring, therefore no accurate figure available; *** Only Leadership Accelerator Training

<sup>1</sup> Figure was adjusted retrospectively

# CERTIFICATION OVERVIEW

Location		9001	14001	45001	50001
44263 Dortmund–Wilopark, Germany	WILO SE	x	x	x	x
44263 Dortmund–Felicitasstrasse, Germany	WILO SE	x	x	x	x
44357 Dortmund–Breisenbach	WILO SE	–	–	–	x
95030 Hof, Germany	WILO SE, Hof plant	x	x	x	x
09224 Chemnitz, Germany	Wilo IndustrieSysteme	x	–	–	–
53005 Laval Cedex, France	Wilo France SAS	x	x	x	–
53950 Louverné, France	Wilo France SAS	x	x	x	–
78400 Chatou, France	Wilo France SAS	x	x	–	–
36073 Cornedo Vicentino, Italy	STEMMA S.R.L.	x	–	–	–
70123 Bari, Italy	Wilo Italia SRL	x	–	–	–
18700 Aubigny–sur–Nère, France	Wilo INTEC SAS	x	x	–	–
91105 Trenčín, Slovakia	Wilo INTEC SAS organizačná zložka Slovakia	x	–	–	–
Jebel Ali Free Zone – South, PO Box 26720 Dubai, United Arab Emirates	Wilo Middle East FZE	x	–	–	–
Beijing 101300, P. R. China	Wilo China Ltd.	x	x	x	–
Qinhuangdao City, Hebei Province, P. R. China 066004	Wilo ELEC CO. LTD.	x	x	x	–
Busan 618–260, South Korea	Wilo Pumps Limited	x	x	x	–
43300 Seri Kembangan, Selangor, Malaysia	Wilo Malaysia Sdn. Bhd.	x	–	–	–
Pune – 411 019, India	Wilo Mather and Platt Pumps Private Limited	x	x	x	–
Kolhapur – 416 234, India	Wilo Mather and Platt Pumps Private Limited	x	x	x	–
34956 Istanbul, Turkey	Wilo Pompa Sistemleri A.Ş.	x	x	x	–
Noginsk, Russian Federation	Wilo RUS LLC	x	–	–	–
2351 Wiener Neudorf, Austria	Wilo Pumpen Österreich GmbH	x	–	–	–
352 45 Växjö, Sweden	Wilo Nordic AB	x	–	–	–
1083 Ganshoren, Belgium	Wilo nv	x	–	–	–
05–506 Lesznowola, Poland	Wilo Polska Sp. z o.o.	x	–	–	–
H–2045, Törökbálint, Hungary	Wilo Magyarország Kft.	x	–	–	–

# GRI OVERVIEW

GRI standard	Section	Page	Note
<b>GRI 2: General disclosures</b>			
<b>1. The organisation and its reporting practices</b>			
2–1	Organisational details	– Publishing information	92
2–2	Entities included in the organisation's sustainability report	– Wilo profile	Inside front cover
2–3	Reporting period, frequency and contact point	– About this Report	85
2–4	Restatements of information		No changes were made in the presentation of the 2022 report. Some data has been updated and is marked accordingly.
2–5	External assurance		The report is not currently subject to an external review.
<b>2. Activities and workers</b>			
2–6	Activities, value chain and other business relationships	– Wilo profile	Inside front cover
2–7	Employees	– Additional key figures – Employees and Society	86 57
2–8	Workers who are not employees	– Additional key figures – Employees and Society	86 57
<b>3. Governance</b>			
2–9	Governance structure and composition	– Wilo Annual Report 2022	
2–10	Nomination and selection of the highest governance body	– Wilo Annual Report 2022	The members of the Supervisory Board are qualified persons from the company who bring with them the experience and the required background knowledge for this task. Please see the annual report for further information on the composition of the Supervisory Board.
2–11	Chair of the highest governance body		The chair of the Supervisory Board is Mr Lars Roßner, who has served in this position since 2022
2–12	Role of the highest governance body	– Wilo Annual Report 2022	
2–13	Delegation of responsibility	– Wilo Annual Report 2022	
2–14	Role of the highest governance body in sustainability reporting	– Wilo Annual Report 2022	
2–15	Conflicts of interest	– Wilo Annual Report 2022	
2–16	Communication of critical concerns	– Wilo Annual Report 2022	
2–17	Collective knowledge of the highest governance body	– Wilo Annual Report 2022	
2–18	Evaluation of the performance of the highest governance body	– Wilo Annual Report 2022	
2–19	Remuneration policies		There is no plan to publish the remuneration policies of the company's management.
2–20	Process to determine remuneration	– Wilo Annual Report 2022	
2–21	Annual total compensation ratio		No data is available for the total compensation ratio

GRI standard	Section	Page	Note
<b>4. Annual total compensation ratio</b>			
2-22	Statement on sustainable development strategy	– Sustainable Management	77
2-23	Policy commitments	– Sustainable Management	77
2-24	Embedding policy commitments	– Sustainable Management	77
2-25	Processes to remediate negative impacts	– Compliance	70
2-26	Mechanisms for seeking advice and raising concerns	– Compliance	70
2-27	Compliance with laws and regulations	– Compliance	70 There were no incidents at all of this type in the 2022 financial year.
2-28	Membership in associations		<a href="https://wilo.com/de/Unternehmen/Profil/Kooperationen/">https://wilo.com/de/Unternehmen/Profil/Kooperationen/</a>
<b>5. Stakeholder engagement</b>			
2-29	Approach to stakeholder engagement	– Stakeholder Dialogue	81
2-30	Collective bargaining agreements	– Additional Key Figures	86 Data is available only for Germany. The value is: 78.4%.
<b>GRI 3: Material topics</b>			
3-1	Process to determine material topics	– Materiality Analysis	82
3-2	List of material topics	– Materiality Analysis	82
3-3	Management of material topics	– Materiality Analysis	82
<b>Topic Standards</b>			
<b>GRI 200 Economic standards</b>			
201	Economic Performance	– Climate Risks	79
203	Indirect Economic Impacts	– Capacity Development and Local Employment	66
204	Procurement Practices	– Sustainable Supply Chains	72
205	Anti-corruption	– Compliance	70
206	Anti-competitive Behaviour	– Wilo Annual Report 2022	
<b>GRI 300 Ecological standards</b>			
301	Materials	– Materials and Waste	44 It is not yet possible to break down the total weight into renewable and non-renewable materials for the Group as a whole at the moment. We are looking to continually expand the use of renewable materials and to integrate their use in our calculation methods in the future.
302	Energy	– Energy and Emissions	28
303	Water and Effluents	– Water	18 The responsible use of water in terms of its extraction and consumption and the downstream repercussions of this are always a top priority in environmental management. Examples of activities can be found in the section on "Water in Production and Processes".
305	Emissions	– Energy and Emissions	28
306	Waste	– Materials and Waste	44 Waste is disposed of in accordance with country-specific requirements. The determination of the waste disposal method is based primarily on the information provided by the waste disposal contractors. Measurement, invoicing and estimated data is used depending on the location's capabilities.
308	Supplier environmental assessment	– Sustainable Supply Chains	72

GRI standard	Section	Page	Note
<b>GRI 400 Social Standards</b>			
401	Employment	– Additional Key Figures – Global Responsibility	86 58
402	Labour/Management Relations		Notice periods always at least satisfy or exceed the statutory regulations. We comply with the national or local notice periods that apply to us.
403	Occupational Health and Safety	– Occupational Health and Safety	64
404	Training and Education	– Employee Development	60
405	Diversity and Equal Opportunity	– Diversity	62
406	Non-discrimination	– Diversity	62
407	Freedom of Association and Collective Bargaining	– Employees and Society	56 Freedom of association and collective bargaining for all are guaranteed by the Wilo Code of Conduct.
408	Child Labour	– Sustainable Supply Chains	72
409	Forced or Compulsory Labour	– Capacity Development and Local Employment	66
413	Local Communities	– Capacity Development and Local Employment	66
414	Supplier Social Assessment	– Sustainable Supply Chains	72
415	Public Policy		In all our political activities, we do not make direct or indirect cash or non-cash contributions.

## PUBLISHING INFORMATION

### **Publisher**

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Kommunikation, Hamburg

### **Photos**

GettyImages  
iStockphoto  
WILO SE



Wilo uses FSC®-certified paper to produce its printed products and thereby supports sustainable forestry. This report was printed climate-neutrally.

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# WILO SE (GROUP)

Dortmund - Germany | Manufacture of general-purpose machinery  
 EVID: CL157602

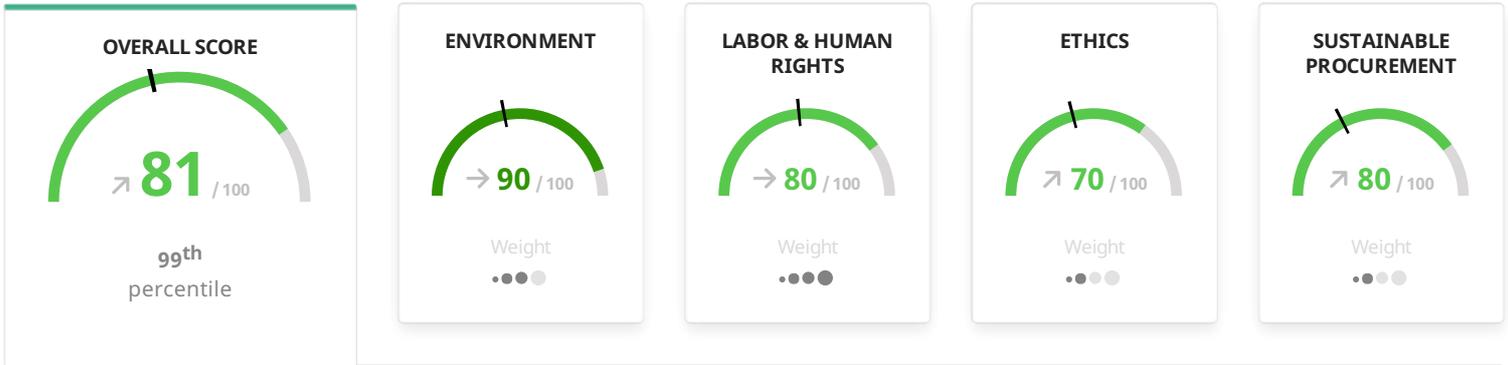


Publication date: 18 Oct 2023

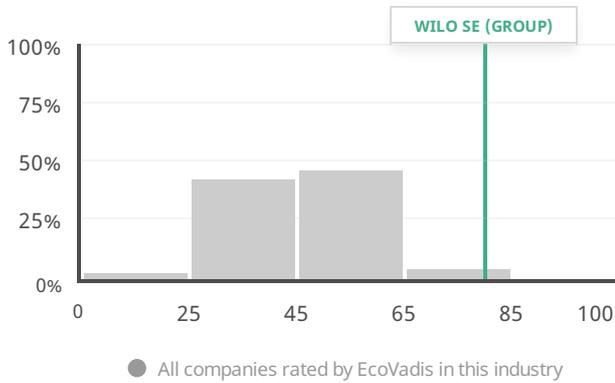
Valid until: 18 Oct 2024

Sustainability performance

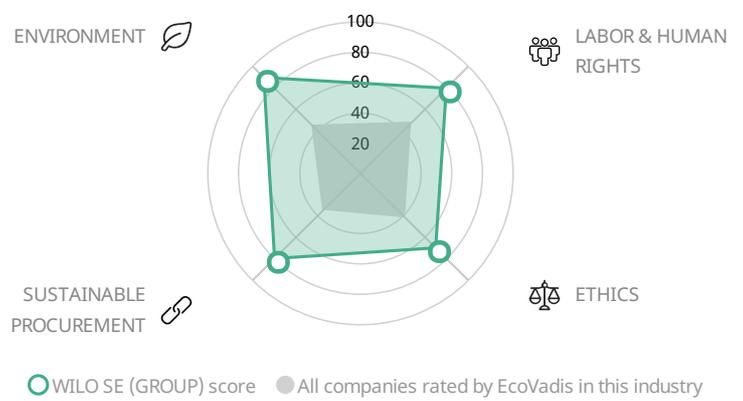
- Insufficient
- Partial
- Good
- Advanced
- Outstanding
- Average score



Overall score distribution



Theme score comparison



# Strengths and Improvement Areas



## Environment

Weight ●●●●

### Strengths

#### Policies

Strengths

Endorsement of the United Nations Global Compact (UNGC)

Environmental policy on air pollution

Quantitative objectives set on product use

Quantitative objectives set on materials, chemicals & waste

Quantitative objectives set on water

Quantitative objectives set on energy consumption & GHGs

Environmental policy on product end-of-life

Environmental policy on product use

Environmental policy on materials, chemicals & waste

Environmental policy on water

Environmental policy on energy consumption & GHGs

Endorsement of the Science Based Targets initiative - Committed

Exceptional policy on major environmental issues

#### Actions

Strengths

Use of recovered input materials

Specialized treatment and safe disposal of hazardous substances

Environmental emergency measures in place

Reduction of material consumption through process optimization

Internal sorting & disposal of waste according to waste streams

Actions or training to raise employee awareness on waste reduction & sorting

Reduction of internal wastes through material reuse, recovery or repurpose

Regular noise measuring campaign (site boundary noise measurements undertaken)

Actions to prevent emissions of atmospheric pollutants and other environmental nuisances (e.g. noise, odor, vibration, road and light)

Adoption of cooling systems with reduced or recycled water consumption

Wastewater quality assessment
Training of employees on energy conservation/climate actions
Purchase and/or generation of renewable energy
Purchase of verified carbon offset credits
Improvement of energy efficiency through technology or equipment upgrades
Technologies or practices to recycle or reuse water
Provision of specific information to customers regarding product end-of-life
Products designed for easy dismantling and easy recyclability
Integration of eco-design features in product design
ISO 50001 certified
The company has obtained an ecolabel/eco-certification
Implementation of a rainwater harvesting system
ISO 14001 certified
Use of waste heat recovery system(s) or combined heat and power unit(s)
Periodical analysis on the volumes of major air pollutants or ambient air quality monitoring (testing levels of PM, NOx, SO2, VOC or heavy metals)
Formal life-cycle analysis performed on key products
Training employees to safely handle and manage hazardous substances
Actions for labeling, storing, handling and transporting hazardous substances
Packaging designed for easy dismantling and easy recyclability
Work processes or technologies implemented to mitigate emissions of dust and/or particulate matter
Company takeback programs
ISO 14001 certified on more than 81% of operational sites
<b>Results</b>
Strengths
Total gross Scope 2 reporting value confirmed in supporting documentation
Total gross Scope 1 reporting value confirmed in supporting documentation
Reporting on total gross Scope 2 GHG emissions (market or location based)
Reporting on total gross Scope 1 GHG emissions
Total gross Scope 3 downstream GHG emissions value confirmed in supporting documentation

Reporting on total gross Scope 3 downstream GHG emissions
Reporting is formally aligned with a reporting standard on environmental issues
Declares some sites/operations located in or near biodiversity-sensitive areas, but the activities do not negatively affect those areas (not verified)
Reporting on total weight of waste recovered
Total gross Scope 3 GHG emissions reporting value confirmed in supporting documentation
Reporting on total amount of renewable energy consumed
Reporting on total water consumption
Reporting on total weight of non-hazardous waste
Reporting on total weight of hazardous waste
Reporting on total gross Scope 3 GHG emissions
Materiality analysis in sustainability reporting
Company communicates progress towards the Sustainable Development Goals (SDGs)
Company reports to CDP
Reporting on total energy consumption
Comprehensive reporting on environmental issues

**Improvement Areas**

Results	
Priority	Improvement Areas
Medium	The 360° Watch has identified at least one significant controversy, fine or penalty regarding environmental issues in the last five years (see news with red downward arrow in the 360° Watch section).
Medium	The 360° Watch has identified at least one significant adverse report regarding air pollution
Medium	Report does not comply with all the mandatory requirements to be in accordance with GRI Universal Standards, GRI Core option or GRI Comprehensive option
Low	No external assurance of sustainability reporting
Low	No information related to reporting on total weight of pollutants emitted to water

 **Labor & Human Rights** Weight ●●●●

**Strengths**

Policies
Strengths
Endorsement of the United Nations Global Compact (UNGC)

Endorsement of the Women's Empowerment Principles (WEPs)

Quantitative objectives set on diversity, equity & inclusion

Quantitative objectives set on career management & training

Quantitative objectives set on employee health & safety

Labor & human rights policy on diversity, equity & inclusion

Labor & human rights policy on child labor, forced labor & human trafficking

Labor & human rights policy on career management & training

Labor & human rights policy on social dialogue

Labor & human rights policy on working conditions

Labor & human rights policy on employee health & safety

Health and safety policy also covers subcontractors working on the company premises

Exceptional policies on major labor and human rights issues

## Actions

### Strengths

Actions to control hazardous substance exposure

Equipment safety inspections or audits

Actions to address stress and psychological wellbeing in the workplace

Employee health and safety emergency action plan

Age verification of candidates before hiring

Other actions to promote diversity, equity & inclusion

Women development, mentorship, and/or sponsorship programs in place

Actions to promote the inclusion of minority/vulnerable groups in the workplace

ISO 45001 certified on more than 81% of operational sites

ISO 45001 certified

Communication to all employees of remuneration process (e.g. salary grid, procedure for salary advancement)

Employee satisfaction survey

Collective agreement on working conditions

Collective agreement on employees' health & safety

Flexible organization of work (eg. remote work, flexi-time)

Awareness training on child labor, forced labor and human trafficking

Impact assessments identifying potential child labor, forced labor and/or human trafficking

Actions to promote wage equality in the workplace

Awareness training regarding diversity, discrimination, and/or harassment

Health and safety training for subcontractors working on premises

Employee representatives or employee representative body (e.g. works council)

Employee health & safety risk assessment

Transparent recruitment process communicated clearly and formally to all candidates

Regular assessment (at least once a year) of individual performance

Two-way communication system in place to facilitate employee voice regarding working conditions

Regular employee health check-up

Actions to prevent noise exposure

Official measures promoting career mobility

Provision of skills development training

Setting of individual career plan for all employees

Training of employees on health and safety risks and best working practices

## Results

### Strengths

Reporting on the percentage of women at top management level

Reporting on the percentage of women employed in relation to the whole organization

Reporting on average training hours per employee

Materiality analysis in sustainability reporting

Company communicates progress towards the Sustainable Development Goals (SDGs)

Reporting on accident severity rate

Reporting on accident frequency rate

Standard reporting on labor and human rights issues

## Improvement Areas

## Policies

Priority Improvement Areas

Low

No quantitative target set on living wage

Low

The scope of application of the living wage target is unclear

## Actions

Priority Improvement Areas

Low

Declares measures on living wage, but no supporting documentation available

## Results

Priority Improvement Areas

Medium

Report does not comply with all the mandatory requirements to be in accordance with GRI Universal Standards, GRI Core option or GRI Comprehensive option

Low

No external assurance of sustainability reporting

Low

Declares reporting on living wage, but no supporting documentation available



## Ethics

Weight ●●●●

### Strengths

#### Policies

Strengths

Endorsement of the United Nations Global Compact (UNGC)

Policy on fraud

Policy on money laundering

Policy on conflict of interest

Disciplinary sanctions to deal with policy violations

Policy on information security

Policies on corruption

Policy on anticompetitive practices

Dedicated responsibility for ethics issues

Comprehensive policies on ethics issues

#### Actions

Strengths

Other actions to ensure information security

Whistleblower procedure for stakeholders to report information security concerns

Whistleblower procedure for stakeholders to report anti-competitive practices

Whistleblower procedure for stakeholders to report corruption and bribery

Information security due diligence program on third parties in place

Incident response procedure (IRP) to manage breaches of confidential information

Implementation of a records retention schedule

Information security risk assessments performed

Audits of control procedures to prevent information security breaches

Awareness training to prevent information security breaches

Provision of competitor interaction guidelines to key employees

Anti-competitive practices risk assessments performed

Corruption risk assessments performed

Measures to protect third party data from unauthorized access or disclosure

Measures for gaining stakeholder consent regarding the processing, sharing and retention of confidential information

Audits of control procedures to prevent corruption

Awareness training performed to prevent corruption

Anti-corruption due diligence program on third parties in place

Specific approval procedure for sensitive transactions (e.g. gifts, travel)

Audits of control procedures to prevent anticompetitive practices

Awareness training performed to prevent anticompetitive practices

## Results

### Strengths

Materiality analysis in sustainability reporting

Company communicates progress towards the Sustainable Development Goals (SDGs)

Standard reporting on ethics issues

## Improvement Areas

### Actions

Priority

Improvement Areas

Medium

Supporting documentation demonstrates a medium level of coverage of ethics actions throughout the company operations

## Results

Priority Improvement Areas

Medium

Report does not comply with all the mandatory requirements to be in accordance with GRI Universal Standards, GRI Core option or GRI Comprehensive option

Low

No external assurance of sustainability reporting



## Sustainable Procurement

Weight ●●●●

### Strengths

#### Policies

Strengths

Endorsement of the United Nations Global Compact (UNGC)

Quantitative objectives set on sustainable procurement policy

Endorsement of specific international or industry sector initiatives, set of principles, charters, frameworks on conflict minerals issues [European Raw materials Alliance]

Policy on conflict minerals issues

Comprehensive sustainable procurement policies on both social and environmental factors

#### Actions

Strengths

50-100% of suppliers for which conflict minerals information is available (e.g. CMRT)

Supporting documentation demonstrates a high level of coverage of sustainable procurement actions throughout the company supplier base/operations

Supplier sustainability code of conduct in place

Formal assessment of suppliers' progress with regards to REACH requirements

Sustainable procurement objectives integrated into buyer performance reviews

Capacity building of suppliers on environmental or social issues (e.g. corrective actions, training)

On-site audits of suppliers on environmental or social issues

Regular supplier assessment (e.g. questionnaire) on environmental or social practices

Training of buyers on social and environmental issues within the supply chain

Integration of social or environmental clauses into supplier contracts

Sustainability risk analysis (i.e. prior to supplier assessments or audits)

#### Results

Strengths

Total gross Scope 3 upstream GHG emissions value confirmed in supporting documentation

Reporting on total gross Scope 3 upstream GHG emissions

Materiality analysis in sustainability reporting

Company communicates progress towards the Sustainable Development Goals (SDGs)

Publication of Conflict Minerals Reporting Template (e.g. CMRT, other type of template)

Standard reporting on sustainable procurement issues

### Improvement Areas

#### Actions

Priority Improvement Areas

Low

Declares measures implemented to mitigate conflict minerals issues but no supporting documentation available

#### Results

Priority Improvement Areas

Medium

Report does not comply with all the mandatory requirements to be in accordance with GRI Universal Standards, GRI Core option or GRI Comprehensive option

Low

No external assurance of sustainability reporting

## 360° Watch Findings

1 May 2023 | <https://greatplacetowork.m...>



### Wilo Group certified as a Great Place to Work

From April 2023 to April 2024, Wilo Group has been certified as a Great Place to Work.

9 Feb 2023 | <https://www.tv.de/warnstr...>



### Warning strike by IG Metall: 250 employees of Wilo EMU Anlagenbau GmbH demonstrate in Hof [DE]

IG Metall called on the employees of Wilo EMU Anlagenbau GmbH in Hof to go on strike. On Thursday (February 9th), around 250 employees demonstrated in the city on the Saale. They demand 8.5 percent more wages and a 35-hour week. The next round of negotiations is scheduled for Friday (February 10). So far there have been two meetings.

2 Feb 2023 | <https://www.umweltwirtscha...>



### Wilo again certified as an excellent employer [DE]

The independent "Top Employers Institute" has certified Wilo SE as "Top Employer Germany 2023". The internationally recognized institute uses a multi-stage process to review performance and progress in the areas of work environment, employer branding and further education and training opportunities.

1 Jan 2023 | <https://egapro.travail.gou...>



### L'index égalité professionnelle pour Wiloc Intec et Wilo France pour 2023

Wiloc Intec a reçu un résultat de 84 et Wiloc France a reçu un résultat de 92 de l'index égalité professionnelle entre les femmes et les hommes pour 2023.

3 Oct 2022 | <https://www.tga-praxis.de/...>



### Wilo opens H2Powerplant [DE]

The hydrogen power plant, which is intended to store the electricity generated from the photovoltaic system on the roof of the Smart Factory in the long term in the form of green hydrogen, was created in recent months in cooperation with the electrical engineering group Schneider Electric

1 Jun 2022 | <https://www.droits-salarie...>



### Accords d'entreprise chez WILO FRANCE

Les négociations entre la direction de WILO FRANCE et les instances représentatives du personnel ont abouti sur les accords et avenants suivants. Les résultats des négociations avec les partenaires sociaux chez WILO FRANCE précisent les droits, avantages et obligations de l'employeur et des salariés.

18 May 2022 | <https://www.doctrine.fr/d/...>



### Cour d'appel de Versailles, 17e chambre, 18 mai 2022, n° 19/03002

Wilo Salmson France was ordered to pay former employee EUR 2000 in damages for breach of the security obligation and EUR 2800 for the irrecoverable costs incurred in the appeal.

28 Mar 2022 | <https://www.osha.gov/ords/...>



### OSHA Penalty for Serious H&S Standard Violation(s)

On 28/03/2022, Wilo Usa, Llc's facility in Collierville, TN, was fined a \$8,050 penalty for 3 Serious violation(s) of U.S. OSHA health and safety standards.

22 Jan 2022 | <https://www.francebleu.fr/...>



### Incendie à l'usine Wilo/Salmson à Laval : les dix employés évacués sont indemnes

Un incendie a eu lieu à l'usine Wilo / Salmson à Laval, boulevard de l'Industrie, ce samedi matin. Dix employés ont été évacués du bâtiment, ils sont tous indemnes. Le feu a été éteint par les employés avant l'arrivée des secours.

1 Jan 2022 | <https://som.yale.edu/story...>



### Over 1,000 Companies Have Curtailed Operations in Russia—But Some Remain

Over 1,000 companies have publicly announced they are voluntarily curtailing operations in Russia to some degree beyond the bare minimum legally required by international sanctions — but some companies have continued to operate in Russia undeterred. Wilo has stopped shipments to and from Russia; no comment about production in Russia and received a grade D.

1 Jan 2022 | <https://sciencebasedtarget...>



### Science Based Targets- Companies Taking Action

The SBTi's target dashboard shows companies and financial institutions that have set science-based targets, or have committed to developing targets. Updated every Thursday, the dashboard includes high-level information about Wilo Group targets or commitments. The company's target summary is Near term: Committed. Near-term targets outline how organizations will reduce their emissions, usually over the next 5-10 years. These targets galvanize the action required for significant emissions reductions to be achieved by 2030. Near-term targets are also a requirement for companies wishing to set net-zero targets.

11 Sep 2021 | <https://perspectives.se.co...>



### Wilo and Schneider Electric Partner to Advance Climate Strategy

Wilo, one of the world's leading manufacturers of pumps and pump systems, and recipient of the renowned German Sustainability Award for climate transformation, and Schneider Electric, the global leader in the digital transformation of energy management and automation that was recognized as the world's most sustainable corporation in 2021 by the Corporate Knights Global 100 Index, today announced that the companies have partnered to advance Wilo's climate strategy in anticipation of achieving net-zero emissions by 2050.

27 Jun 2021 | [http://www.frankenpost.de/...](http://www.frankenpost.de/)



### 200 Wilo employees strike [DE]

The employees of the pump manufacturer Wilo in Hof formed three human chains in front of the plant on Friday. They are demanding more money and safe working conditions.

11 Jun 2021 | <https://www.insblue.com.cn...>



### In 2021, Wilo (China) was cited in the Insblue Database Environmental Supervision Records [CN]

On 07/05/2021, the company has been fined RMB 20,000 by the Beijing Shunyi District Ecological Environment Bureau because it is suspected that the automatic monitoring system equipment is not operating normally, violating Air Pollution Prevention and Control Law.

26 Apr 2021 | [http://www.volksstimme.de/...](http://www.volksstimme.de/)



### Wilo workers are fighting for their jobs in Oschersleben [DE]

The Wilo plant in Oschersleben is to be closed by the end of March 2022. This means that around 120 jobs are on the verge. The workers expressed their indignation with whistles, ratchets and banners. Symbolic crosses stood on a green area. Words of warning were sprayed on the asphalt of the driveway.

22 Apr 2021 | <http://www.ouest-france.fr...>



### Wilo France, en partie basée en Mayenne, parmi les 500 meilleurs employeurs de France

Wilo France, spécialisé dans le génie du bâtiment, le traitement des eaux et l'industrie, vient d'être classé dans le Top 500 des meilleurs employeurs de France, selon le baromètre du magazine Capital.

31 Jul 2020 | <https://www.insblue.com.cn...>



### In 2020, WILO (China) was cited in the Insblue Database Rectification Records [CN]

The InsBlue database is a big data service platform based in China. It provides enterprises' information on insights of risks and opportunities and promotes green choice. 1) The company has been cited on Insblue for the failure to set up pollutant discharge ports as required. The company has been requested to standardize setting of sewage outlets and monitoring holes within the time limit from 2020-07-28 to 2020-10-27 by the Beijing Shunyi district Environmental Bureau. 2) The company has been cited on Insblue for the incompleting monitoring factors in exhaust gas monitoring report. The company has been requested to monitor the exhaust gas pollutants generated by the project in accordance with the requirements of industry technical specifications, and provide a complete exhaust gas monitoring report for the monitoring project within the time limit from 2020-07-28 to 2020-10-27 by the Beijing Shunyi district Environmental Bureau.

30 Jan 2020 | <http://www.capital.gr/epix...>



### Awarding of "Energy Scouts" certificates in Athens [GR]

The "Energy Scouts" presented their work for saving energy in the companies in which they work, in the context of an event organized on January 22. Completed works were presented by employees of the several companies, including WILO, regarding the potential of reducing energy costs, streamlining resource use and reducing the CO2 footprint, thus contributing to climate protection.

25 Sep 2018 | <https://www.ruhr24.de/dort...>



### Accident at Wilo: Twelve employees injured after defective heating

The Wilo company on Phoenix West suffered an accident on Tuesday morning (September 25): Exhaust gases escaped into a production hall due to a defect in a heating system. Twelve employees were brought to hospital with suspected smoke poisoning.

31 Jul 2023 |



No records found for this company on Compliance Database

Environment Labor & Human Rights Ethics Sustainable Procurement

## Specific comments

- No records found in third party risk and compliance database.
- Since the last assessment, the overall score has increased thanks to the publication of additional sustainability reporting.
- The company demonstrates an advanced sustainability management system that covers all four themes under review.

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