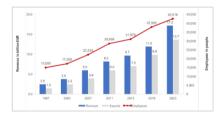
Environmental technology in numbers

Data of the Austrian environmental technology economy 2023



Development of the Austrian environmental technology industry 1997 - 2023

Bundesministerium
Klimaschutz, Umwelt,
Energie, Mobilität,
Innovation und Technologie

 Bundesministerium Arbeit und Wirtschaft



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Highlights of Austria's environmental technology economy

The environmental technology economy (industrial and service companies) also impresses in 2023 with very compelling growth figures:

In total, 3,326 Austrian companies with around 57,800 employees generate annual sales of EUR 21.42 billion. Across the entire domestic economy, sales of EUR 41.51 billion were generated in 2023. The average annual sales growth in the period from 2019 to 2023 is 8.9%, well above the average annual growth of Austrian GDP. Export sales in the environmental technology economy also increased in 2023, reaching EUR 15.11 billion (2019: EUR 10.94 billion). The pacemaker for the outstanding performance of this sector is the environmental technology industry, whose sales in 2023 amounted to EUR 17.17 billion. From 1993 to 2023, the turnover of the environmental technology industry has increased by more than 11 times, employment figures have increased almost four times in the same period and export activities have increased more than nine times since 1997.

Further informations (incl. dashboard): <u>www.ecotechnology.at</u> and <u>https://www.ecotechnology.at/umwelttechnologie-nach-branchen/um-</u> <u>welttechnologie-in-zahlen/</u> Basic data of the environmental technology economy

	Number of companies	Sales (bn €)	Number of employees	Share of export sales
2023	3 326	21.42	57 832	70.5%
2019	2 732	15.24	51 470	71.8%
Total growth	21.7%	40.6%	12.4%	-
Average annual growth	5.0%	8.9%	3.0%	-

Key data of the environmental technology economy

S: IWI survey of the Austrian environmental technology economy 2024, IWI projections.

The Austrian environmental technology economy, consisting of industrial companies (companies that manufacture environmental technology goods and technologies) and service companies offering environmental technology services, comprises a total of 3,326 companies that generated a total of around EUR 21.42 billion in sales revenue in 2023 and employed 57,832 people. Compared to the previous study with the reference year 2019, the environmental technology economy saw sales growth of 40.6% or an average annual growth of 8.9%. Employment development shows a slightly lower increase than sales at 12.4% or an average of 3.0% per year. In total, the environmental technology economy recorded EUR 15.11 billion in export sales, which corresponds to an export quota of 70.5%.

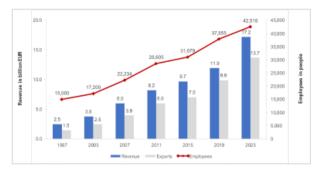
	Number of companies	Sales (bn €)	Number of employees	Share of export sales
2023	1 198	17.17	42 518	79.7%
2019	1 080	11.94	37 855	82.8%
Total growth	10.9%	43.8%	12.3%	-
Average annual growth	2.6%	9.5%	2.9%	-

Key data of the environmental technology industry*

* Manufacturing companies (producers of environmental goods and technologies) which can also additionally provide environmental technology services.

S: IWI survey of the Austrian environmental technology economy 2024, IWI projections.

The 1,198 environmental technology industry companies (10.9% more than in 2019) generate environmental technology sales of EUR 17.17 billion. Many environmental technology companies are not only active in the environmental technology sector. Environmental technology sales account for around 21% of total sales. Compared to 2019, sales increased by 43.8% or an annual growth of 9.5%. 42,518 people are employed in the environmental technology industry. This corresponds to growth of 12.3% compared to the reference year 2019 and average annual growth of 2.9% per year. Employment growth is 12.3% or 2.9% per year. The export quota of the environmental technology industry is 79.7%.



Development of the environmental technology industry

S: IWI surveys of the Austrian environmental technology economy 2016/2017 until 2024 (IWI projections), before WIFO-studies of the Austrian environmental technology industry.

The environmental technology industry has shown unbroken growth since the end of the 1990s in terms of sales, employment figures and exports. Since 1997, the environmental technology industry's sales have increased almost 7-fold by 2023. Employment figures have increased 2.8-fold in the same period. In addition, export activities have increased more than 9-fold since 1997.

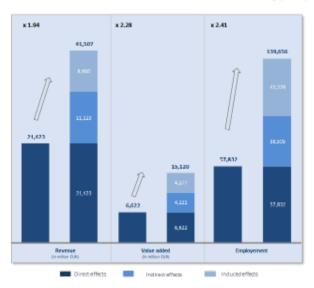
	Number of companies	Sales (bn €)	Number of employees	Share of export sales
2023	2 128	4.25	15 315	33.7%
2019	1 652	3.30	13 614	31.8%
Total growth	28.8%	28.9%	12.5%	-
Average annual growth	6.5%	6.6%	3.0%	-

Key data of the environmental technology service companies

S: IWI survey of the Austrian environmental technology economy 2024, IWI projections.

The 2,128 environmental technology service companies generate a turnover of EUR 4.25 billion with their environmental technology services (18% of all services offered). They employ 15,315 people. The turnover growth of the environmental technology service companies is 28.9% compared to 2019, or an average of 6.6% per year. The increase in employees is 12.5%, or an average of 3.0% per year.

Economic importance

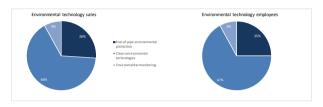


Macroeconomic effects of the environmental techn. economy (2023)

S: IWI (2024) based on the Input-Output-tables 2020 (Statistik Austria).

The environmental technology economy itself generates sales revenues of EUR 21.42 billion, thereby generating indirect sales of EUR 11.12 billion in the domestic economy via intermediate input effects and induced sales of EUR 8.96 billion via consumption and investment effects (corresponding to a multiplier of 1.94). The multiplier effects are somewhat higher for value added and employment.

Areas of activity

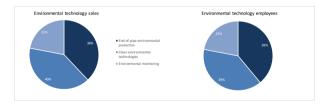


Areas of activity of the environmental technology industry (share)

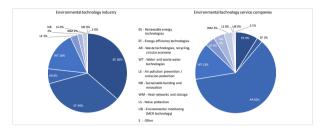
S: IWI survey of the Austrian environmental technology economy 2024, round. diff. possible.

In the environmental technology industry, the largest share of sales (66%) is generated with clean environmental technologies (67% of employees). The distribution of environmental activity areas is more balanced in the service companies. Clean environmental technologies account for 40% of sales here, while aftercare environmental protection accounts for 38% (39% of employees in each case).

Areas of activity of the environmental technology service companies (share)



S: IWI survey of the Austrian environmental technology economy 2024, round. diff. possible.

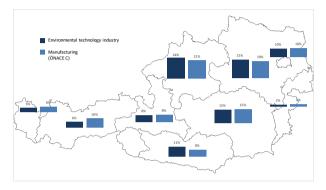


Environmental technology sales by technology areas (share)

S: IWI survey of the Austrian environmental technology economy 2024, round. diff. possible.

In the environmental technology industry, two focus areas are clearly the most common, with sales shares of around one third or more: 'renewable energy technologies' (36%) and 'energy efficiency technologies' (34%). The third largest share is 'water and wastewater technologies' at 16%. The share of 'waste technologies, recycling and circular economy' is already significantly smaller at 6%. The other focus areas only have comparatively small shares. In the environmental technology service sector, 'waste technologies, recycling and circular economy' (61%) dominates by a wide margin, with a share of almost two thirds. 'Water and wastewater technologies' (15%) follows in second place, followed by 'renewable energy technologies' (9%), both already by a wide margin. Smaller shares are held by 'air pollution control/emission protection', 'sustainable construction and renovation' and 'heat networks and heat storage'.

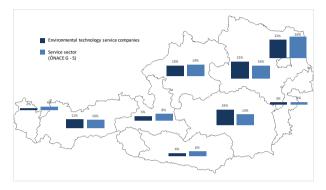
Regional distribution of the environmental technology industry compared with the manufacturing sector



S: IWI survey of the Austrian environmental technology economy 2024, Statistik Austria 2021.

The regional distribution of environmental technology industry companies is very similar to that of the entire manufacturing sector in Austria. Most of them are located in the industrially dominated federal states of Upper Austria (24%), Lower Austria (21%) and Styria (15%). Slightly larger shares of the environmental technology industry than in the manufacturing sector as a whole can be seen in Upper and Lower Austria and in Carinthia, and a slightly smaller share in Tyrol.

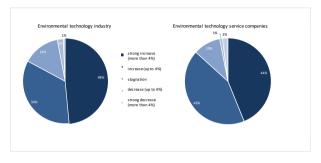
Regional distribution of the environmental technology service companies compared with the service sector



S: IWI survey of the Austrian environmental technology economy 2024, Statistik Austria 2021.

In most federal states, the share of environmental technology service companies is similar to that of the service sector (ÖNACE classes G to S). Most of them are based in Vienna (22%), Lower Austria (21%), Styria (19%) and Upper Austria (13%). Larger shares of environmental technology than in the overall service sector can be seen in Lower Austria and Styria, and somewhat smaller shares in Vienna, Salzburg, Carinthia and Vorarlberg. Market expectations

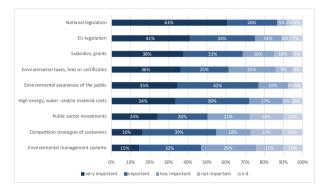
Development of the environmental technology market in Austria in the next three years (share of assessments)



S: IWI survey of the Austrian environmental technology economy 2024, round. diff. possible.

The environmental technology economy is very optimistic about the continued growth of the environmental technology market. Almost half of the environmental technology industry (49%) and service companies (44%) expect strong growth (of more than 4%) in the next three years. Together with the group that expects less strong growth (up to 4%), 83% of industrial and 87% of service companies expect growth. Only a very few companies expect the market to shrink.

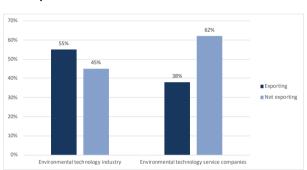
Factors influencing the demand for environmental technologies (share of respective assessments of industry companies)



S: IWI survey of the Austrian environmental technology economy 2024, round. diff. possible.

Legal requirements are seen by environmental technology companies as the most important factor influencing the demand for environmental technologies. Laws at national level are the most important (87% important or very important) ahead of those at European level. The environmental awareness of the public (77%), high energy, water and/or material costs (73%), government subsidies and funding (69%) and environmental taxes or certificates (61%) are considered important or very important by the environmental technology industry.

Internationalization and exports

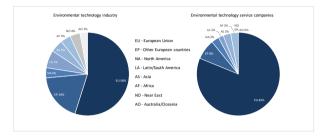


Share of exporting companies in the environmental technology economy

S: IWI survey of the Austrian environmental technology economy 2024, round. diff. possible.

The Austrian environmental technology industry is very export-oriented. This is particularly true of industry. Here, the majority (55%) are represented on foreign markets. This proportion is lower among service companies (38%). In industry, the share of foreign environmental technology turnover in the total turnover of export-oriented companies is also very high at 80%, significantly higher than in the service sector at 30%.

Distribution of foreign sales in Austria's environmental technology economy by regions



S: IWI survey of the Austrian environmental technology economy 2024, round. diff. possible.

The EU is of paramount importance as an export region for the Austrian environmental technology economy, both for service companies (82%) and for the environmental technology industry (56%). The remaining European countries are an important export region at 19%, much more important than for service companies (8%). Overall, the spatial distribution of exports in the industry is broader. Latin/South America, Asia and the Middle East also have a certain importance here, which these export regions do not have for service companies. The ten most common export countries for the environmental technology industry are Germany (named by 59% of exporting companies), Italy (22%), Switzerland (18%), Slovenia (11%), the USA (10%), the Czech Republic and Croatia (8% each), Romania (7%) and Hungary and Slovakia (6% each).

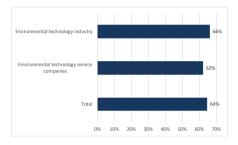
Use of export subsidies (share of exporting companies)

Exporting companies	Funded
Environmental technology industry	31%
Environmental technology service companies	6%

S: IWI survey of the Austrian environmental technology economy 2024.

In the environmental technology industry, slightly less than a third (31%) of companies make use of export subsidies. In the environmental technology services sector, this proportion is much lower (6%). For the entire environmental technology economy, the proportion of companies making use of export subsidies is 23%. Research and innovation

Introduction of at least one innovation between 2021 and 2023 (share)



S: IWI survey of the Austrian environmental technology economy 2024, multi. resp. possible.

64% of the environmental technology economy is innovative in some form. The innovation rate in the environmental technology industry is slightly higher at 66% than in service companies (62%).

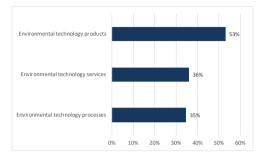
R&D-intensity in the environmental technology economy

	Overall	Environmental technology
Industry	6.6%	7.2%
Service companies	5.5%	6.3%

S: IWI survey of the Austrian environmental technology economy 2024.

Expenditure on research and development measured as a percentage of sales is slightly higher in the environmental technology industry (7.2%) than in the service sector (6.3%). It is generally slightly higher in the environmental technology area than in companies overall.

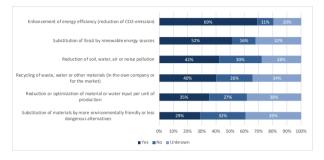
Types of innovation in the environmental technology industry (share of innovative companies)



S: IWI survey of the Austrian environmental technology economy 2024, multi. resp. possible.

Most innovations concern the products (technologies) offered by the environmental technology industry (53%). Just over a third are innovations in the associated services (36%) and in the processes and procedures used (35%).

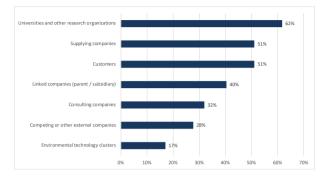
Effects of innovations of the environmental technology industry on the environment (share of assessments of innovative companies)



S: IWI survey of the Austrian environmental technology economy 2024, round. diff. possible.

The most common positive effect is clearly the increase in energy efficiency (69% of companies agree). This is followed at some distance by the substitution of fossil fuels with renewable energy sources (52%). After this, two effects are almost equally important: the reduction of soil, water or air pollution or noise pollution (42%) and recycling (40%). The reduction of material or water use per product unit is agreed upon by 35%. The least common is the substitution with more environmentally friendly materials (29%).

Innovation cooperations in the environmental technology industry (share of innovative companies)



S: IWI survey of the Austrian environmental technology economy 2024, multi. resp. possible.

The environmental technology industry companies most frequently name partners from science and research (62%). This is followed by corporate partners (51%). These come equally often from supplier companies and customer companies. Affiliated companies (parent companies or subsidiaries) are also quite common innovation partners (40%). The partner structure looks somewhat different for environmental technology service companies. Here, customer companies or clients rank first (55%), ahead of research institutions and universities (52%). Supplier companies follow well behind (39%).

Use of research and innovation subsidies (share of innovative companies)

Innovative companies	Funded
Environmental technology industry	46%
Environmental technology service companies	40%

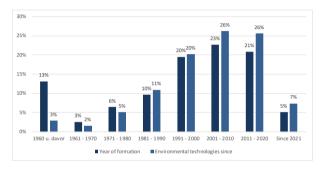
S: IWI survey of the Austrian environmental technology economy 2024.

Research and innovation funding is used by 46% of environmental technology industrial companies and 40% of environmental technology service companies.

The main purpose of the funding is industrial (applied) research (48%). This clearly outweighs basic research (25%). However, since the latter is mainly carried out at universities and research institutes, the fact that a quarter of the companies receiving funding mention it is quite significant. Experimental development comes in second place (41%). Investments (38%) and demonstration or pilot plants (36%) follow closely behind.

Formation and start-ups

Formation and start of environmental technology business of environmental technology companies (share)



S: IWI survey of the Austrian environmental technology economy 2024, round. diff. possible.

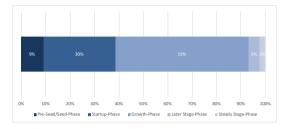
The distribution of age groups - on the one hand the decade in which the company was founded and on the other hand the decade in which business activities in the environmental technology sector began - shows that the environmental technology economy is relatively young. Apart from a few traditional companies, which often entered the environmental technology market later, most environmental technology companies fall into the decades since 1991, both in terms of their founding and the start of their environmental technology activities.

Self-assessment as start-up in environmental technologies (share)

Environmental technology	Start-up
Environmental technology economy (total)	13%
Environmental technology industry	15%
Environmental technology service companies	11%

S: IWI survey of the Austrian environmental technology economy 2024.

Overall, 13% of the companies classified themselves as startups. The startup rate is slightly higher in the environmental technology industry (15%) than in the environmental technology service sector (11%).



Start-up phases of environmental technology companies (share)

S: IWI survey of the Austrian environmental technology economy 2024, round. diff. possible.

In terms of development phases, most startups are already in the growth phase (55%). The proportion of startups in the preceding startup phase (in the narrower sense) follows after that (30%). Significantly fewer companies are only in the pre-seed/seed phase and in the more mature phases towards the end of the founding process (later stage and steady stage).

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