

Summary in English

The Impello analysis 2017

The Trondheim Region has a total population of 250,000 and has 675 technology companies employing 11,800 people. The dominating technology sectors are ICT and Oil & Gas. The number of new start-ups was record high in 2016 (79 new companies). Preliminary data indicate that 70 new companies was incorporated in 2017. Although the low activity in the oil and gas sector affected overall key ratios in 2016, other industries such as marine, health and ICT had strong revenue growth from 2015 to 2016.

Aker BP, Statoil Research Centre, Autronica Fire and Security, Nordic Semiconductor, Evry Norge, Siemens, Rambøll, Powel and Aker Solutions are among the largest (technology) employers in the Trondheim Region.

The university and research communities NTNU and SINTEF employ 7,000 scientists and researchers, and have more than 40,000 students enrolled. Through history, these institutions have contributed with expertise and ideas that have led to the creation of companies with cutting-edge technology.

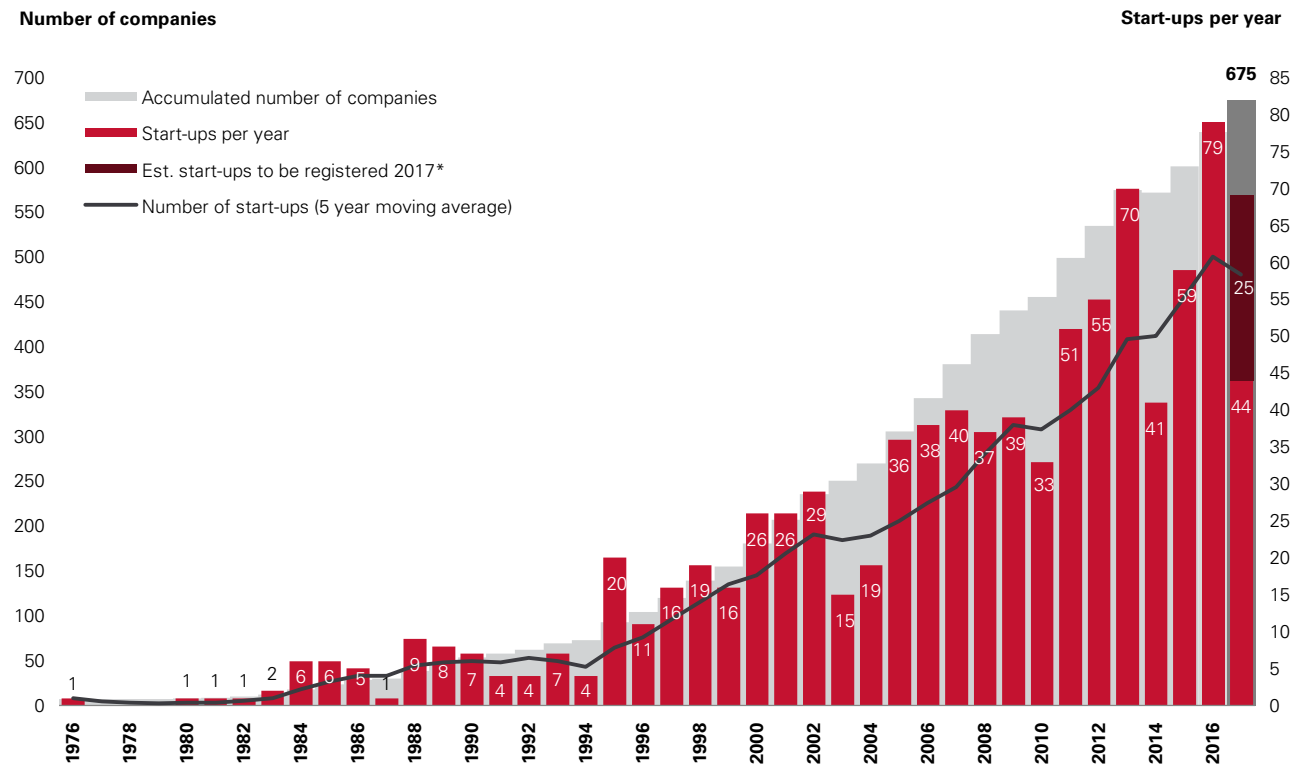
Key financials for 2016 shows an annual turnover of NOK 21.3 billion and EBIT of 0.3 billion, which is a decline of 5.3 % in revenues and a 50 % decline in EBIT compared to 2015.

The oil and gas related technology companies had a downturn in both 2015 and 2016, which significantly affected the results for the tech sector.

At the end of 2017, the total number of employees was 11,809. This is an increase of 3.4 % compared to 2016.

Number of technology companies in the Trondheim Region (1976-2017)

The Trondheim Region consists of the ten municipalities Trondheim, Orkdal, Melhus, Malvik, Leksvik, Stjørdal, Rissa, Midtre Gauldal, Klæbu and Skaun. The graph shows the total number of active limited companies, subdivisions (with enterprise no.), and start-ups per year. * Data as of Jan. 2018. Number of start-ups and total number of companies (31.12.2017) is expected to be 70 and 675, respectively, when all new companies have been duly registered.



2016: Facts about the tech sector in the Trondheim Region

640 technology companies

- 545 limited companies («AS»)
- 95 subdivisions («avd.»)

79 start-ups / new companies

- 70 limited companies
- 9 subdivisions

11,421 employees (growth -5.0 %)

- 6,873 in limited companies
- 4,548 in subdivisions

21.3 bn NOK i total revenues

- Growth 2015 - 2016: -5.3 %
- Revenues limited companies: 12.4 bn NOK
- Revenues subdivisions: 8.8 bn NOK

0.3 bn NOK EBIT combined (ltd. companies only)

- Growth 2015-2016: -50.2 %

2017: Facts about the tech sector in the Trondheim Region

675 technology companies (650 identified per Jan. 2018)*

- 553 limited companies («AS»)
- 97 subdivisions («avd.»)
- 25 not yet identified (estimate)

70 start-ups / new companies (estimate, 44 identified)*

11,809 employees (growth 3.4 %) in 650 companies

- 6,903 in limited companies
- 4,906 in subdivisions

* Data as of January 2018. Number of start-ups and total number of active companies is expected to be 70 and 675, respectively, when all new companies have been duly registered.

Technology start-ups (2013-2017)

	2013	2014	2015	2016	2017
Ltd. companies	65	37	55	70	41
Subdivisions	5	4	4	9	3
Total	70	41	59	79	44

Revenues in subdivisions

Revenues in subdivisions have been estimated based on the number of employees in each subdivision compared to the total number of employees in their respective parent companies.

Impello has made manual adjustments for large subdivisions if we have encountered wrong or misleading figures. Impello has contacted the largest subdivisions to increase the accuracy of the estimates.

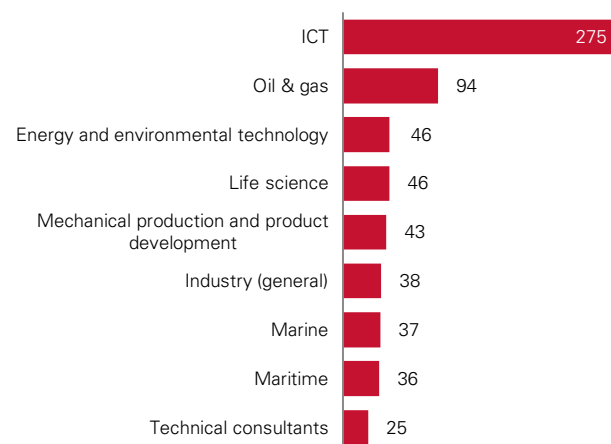
Key sectors

ICT is the largest sector in the Region with 275 companies representing 43 % of the total companies in 2016. Oil & gas is the second largest sector (15 %), followed by energy and environmental technology (7 %) and life science (7 %).

Nearly half of the start-ups in 2016 were ICT companies, which have been a dominating trend for several years.

Technology sectors in the Trondheim Region (2016)

Figures include 545 limited companies and 95 subdivisions, total 640.



With the exception of energy and environmental technology, all industries have had a positive revenue growth (CAGR) over the period 2007-2016.

The marine sector has had a strong growth both in turnover and company start-ups. From 2007 to 2016, the number of companies has increased from 12 to 37. The marine companies have had an average revenue growth of 14 % in the same period. Over the last five years, the life science-related technology companies have seen a significant revenue growth, from NOK 98 million in 2012 to 236 million in 2016.

Key figures for the technology sectors (2007 - 2016)

The figures include 545 limited companies and 95 subdivisions, tot. 640. Growth figures indicate average annual growth rate (CAGR) 2007-2016.

Sector	Revenues [MNOK]		No. of companies	
	2016	Growth	2016	Growth
ICT	8.7	10 %	275	6 %
Oil & gas	4.1	4 %	94	5 %
Industry (general)	2.9	1 %	38	3 %
Technical consultants	1.7	8 %	25	4 %
Maritime	1.5	4 %	36	6 %
Mech. production and prod. dev.	1.0	1 %	43	5 %
Marine	0.9	14 %	37	13 %
Energy and environmental	0.3	-7 %	46	6 %
Life science	0.2	2 %	46	8 %

Growth companies of the year: Epcon and Zedge

Largest one-year revenue growth in 2016: Epcon Evaporation Technology AS delivers energy effective evaporation plants and solutions for separating solids from fluids. The evaporation plants can be used for product concentration, waste water treatment, and industrial energy recovery.

Epcon has delivered over 120 plants worldwide to various sectors such as biomarine ingredients, dairy, food and chemical industry. From 2015 to 2016, the company's revenues increased from NOK 22 million to 80 million. Operating profit in 2016 was 8 million.

Largest five-year average growth 2012-2016: Zedge Europe AS has developed a smartphone app allowing the user to personalize their smartphones by downloading ringtones, wallpapers and widgets. The app has more than 30 million active users per month, and number of downloads exceed 280 million. The company head-quarter is in Trondheim, with offices in New York, Helsinki, Silicon Valley and Bodø. Average revenue growth (CAGR) the last five years is 40 %. Total revenues was 54 mill. NOK in 2016.

Key figures

Financial data and employment figures are based on the most recent publicly available data. Financial records (31.12.2016) and employment data (31.12.2017) are provided by the Brønnøysund Register Centre (Register of Business Enterprises) and NAV (Norwegian Labour and Welfare Administration).

About the Impello analysis

The report is published annually (first published in 2006) and covers the technology-based companies in ten municipalities in the Trondheim Region in Mid-Norway. Key topics are financial figures, sectorial revenues, value creation and employment.

The analysis is co-funded by national and regional partners: Venture and seed investors, research and innovation communities, bank and finance, education and government institutions.

About Impello Management

Impello is an independent strategic, financial and M&A adviser for technology-based companies.

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Key figures for the technology companies in the Trondheim Region (2012-2016)

Aker BP, Teekay Petrojarl (financial figures) and Reinertsen (financial figures and employees) are not included in the table. Employment statistics before 2015 has been increased with an estimate to adjust for the effect of a new reporting system to NAV (600 for ltd. companies and 150 for subdivisions).

* Data as of January 2018. Number of start-ups and total number of companies (31.12.2017) is expected to be 70 and 675, respectively, when all new companies have been duly registered.

ENTERPRISES	2012	2013	2014	2015	2016	2017	2017 est.	Change 2015-16
Number of limited companies	459	495	488	515	545	553	*	5,8 %
Number of subdivisions	76	80	84	86	95	97	*	10,5 %
Total active companies	535	575	572	601	640	650	675*	6,5 %
EMPLOYEES								
Employees in ltd. companies	6 851	6 990	7 084	7 542	6 873	6 903		-8,9 %
Employees in subdivisions	3 808	4 181	4 390	4 485	4 548	4 906		1,4 %
Total employees	10 659	11 171	11 474	12 027	11 421	11 809		-5,0 %
KEY FIGURES [MNOK]								
Revenues in ltd. companies	13 378	13 095	14 170	14 010	12 434			-11,3 %
Revenues in subdivisions	6 303	7 555	8 208	8 464	8 839			4,4 %
Total revenues	19 680	20 651	22 378	22 474	21 273			-5,3 %
EBIT in ltd. companies	726	803	1 118	585	291			-50,2 %
Net income ltd. companies	278	416	701	72	-302			N/A
Equity in ltd. companies	6 470	6 980	7 067	7 601	7 251			-4,6 %
Value added in ltd. companies	6 001	6 420	7 015	6 607	5 649			-14,5 %