Meld. St. nr. 27 (2016-2017) A greener, smarter and more innovative industry

## 1. Introduction

## 1.1 Summary

The Government's vision for an active industrial policy is:

Norway will be a world leader in industry and technology.

This means that we must become greener, smarter and more innovative to foster future growth, jobs and tax revenues. The Government will facilitate growth in both existing and new enterprises and promote Norway as an attractive country for industrial activity. Economic stability and a weak krone are important factors for creating new growth in businesses and industries exposed to foreign competition, and the Government takes this into consideration when forming its economic policy.

Norway has a proud industrial history. We have many strong industrial communities, and our industry will continue to evolve through the exploitation of our abundant natural resources, our capability to adapt, knowledge transfer between industries and exploitation of new market opportunities. We have a small and open economy, and trade with foreign markets has generated substantial revenues.

We have strong academic communities and supply enterprises that are based on Norwegian expertise, but we also acquire capital and knowledge from abroad. Flat organisational structures, a high level of trust and a good social safety net foster improvement, development and industrial restructuring so that expertise can be transferred to new profitable activities.

Industrial activity contributes to business development throughout the country. Although Norwegian industry is dominated by certain sectors, it is far more diversified than before. In the past local communities were often dominated by cornerstone companies. Today we see growing interaction between a wider variety of businesses and between research and education. Other contributing factors that are rarely mentioned are the roles of industry as a developer of technology and supplier to other businesses, and as a driver of technology development in other sectors. Industry and the ripple effects it creates therefore continues to be of high significance for Norway and for the many local communities throughout the country.

The industry contributes to building the welfare of our country. We must build on the strong industrial communities and enterprises we already have. We also need to develop new profitable business activities that will help increase total value creation. We need enterprises – both existing and new – that can take advantage of favourable framework conditions, a skilled labour force and extensive technology and market opportunities to create new activities and jobs in Norway.

Norwegian business and industry is changing. Continued globalisation and an ageing population affect the national and international framework conditions that Norwegian industry is facing. The petroleum industry is highly significant for Norway's economy. Although the petroleum industry will continue to be important for the Norwegian economy for many decades to come, industry demand will no longer contribute as strongly to supporting activity in the mainland economy. Our main challenge will be to strengthen other parts of the private sector and facilitate growth and employment in industries exposed to international competition. Many industries must contribute to achieving this, and industry will play an important part. Simultaneously, we are facing climate challenges that require society – both in Norway and internationally – to make the transition to a more sustainable, low-emission

society. We must think greener, and many of tomorrow's low-emissions solutions will need to come from or through cooperation with industry.

In parallel, we are facing technology advancements in the area of digitalisation and other enabling technologies which over time will transform Norwegian industry as we know it. This is occurring at a rapid rate. New materials are being used, and processes are being changed, automated and digitalised. It is a matter of more effective, more precise and more automated production, as well as of new products, new value chains and new business models. Combining this trend with our industrial skills base presents many new industrial opportunities.

Technology development is reducing the importance of wage costs when enterprises decide where to produce. More emphasis is now placed on delivery time, quality, flexibility, development potential, proximity to expert communities, suppliers and customers. This trend presents new opportunities to relocate industrial activity to a high-cost country like Norway, something we are already witnessing.

This is the backdrop against which the Government now presents the first white paper on industry since 1981. Then, like now, the focus was on technology development. But at that time the situation was rather different. It was a period when Norwegian and international petroleum activities were experiencing strong growth. Many other industries underwent major restructuring as a result of fierce competition from low-cost countries, and the structure of Norwegian industry was far less diverse than it is today. Although environmental awareness was growing, climate challenges were not a key issue.

In Norway we have succeeded in creating significant value, providing us with a level of welfare that is among the best in the world. We are producing goods and services effectively and to a high standard, and at the same time hold a strong position in a number of key markets. Norwegian enterprises have expertise in different fields, something that has evolved over many years of research, development and practical experience. We also have a strong industrial culture based on trust, inclusion and cooperation, all of which promotes advancement, development and restructuring. Our industry has a workforce that is skilled, that cooperates, and that places emphasis on exploiting opportunities for profitable activities.

Over the next 10 years, the rising living standards we know today may be challenged. Good welfare schemes are contingent on a good balance between those who contribute to government budgets and those who receive benefits. We must create more value, and industry must contribute.

The need for restructuring will grow, and this in turn will create both challenges and opportunities. Norwegian industries and enterprises have always had to adapt, and modernday business and industry is radically different from that of 40 to 50 years ago. Over time, restructuring has led to exceptional productivity growth in industry. Technology development changes production processes, products, services, business models and trading patterns. New actors are entering the market and challenging the position of established businesses. This trend will affect the labour market. New work tasks will arise, while others will disappear or be automated. Skill requirements will change. In addition to changes that can be attributed to digitalisation and advances in enabling technologies, Norway has to become less reliant on the oil industry as the main engine in our economy. More Norwegian enterprises than ever before must find their revenue base in markets outside the petroleum industry. Simultaneously, enterprises in all industries must facilitate sustainability and low-emission solutions.

The will to adopt new technology is strong, and our digital infrastructure offers ample value

creation opportunities. We have a number of well-developed clusters and networks that are based on exploiting our natural resources in the ocean and on land. The expertise, overviews and collaborative culture of our business clusters can lay the groundwork for further growth.

We must address both the challenges and the opportunities presented by climate and environmental issues. Norwegian industry has already achieved significant success in adapting to increasingly stringent emission and pollution requirements by adopting smarter production processes, new technical solutions and new technology. Efforts to adopt more climate-friendly and environmentally friendly production methods continue. These will help enhance green competitiveness and may have positive effects for Norwegian industry in both national as well as global markets, where emphasis is increasingly placed on environmental aspects.

Yesterday's solutions will no longer adequately address current and future challenges. We must constantly think smarter and more innovatively. The Government's vision for Norway is to become a leading knowledge-driven industrial nation. Norway will need more high-productivity industries and jobs in the future, industries that can finance and maintain a high level of welfare.

The Government's industrial policy is to achieve greatest possible total value creation within sustainable limits. The Government's industrial policy will contribute to achieving the same main objective. The Government will contribute to providing favourable framework conditions for Norwegian business and industry. There are several features of industry that distinguish it from other sectors in Norway. It has strong local entrenchment while at the same time operating largely in global markets. It is highly export-oriented and is exposed to fierce international competition, a situation that requires continuous restructuring and improvement. Our front-runner model means that wage trends set the premises for wage levels for the rest of Norway, and thus has a bearing on other sectors as well as on society at large. The Government's focus on research and innovation has a direct impact on industry. Norwegian industry is allocated a large share of research and development funding, making it well equipped to backsource high-technology production to Norway. These will all be central issues in the Government's consideration of the present and future situation for Norwegian industry.

Norway stands out in the sense that our industry has always been based on renewable energy. This has provided us with a unique starting point for future development. In the transition from a low-emission society, industry will play a key role in developing new and smarter solutions that can replace activities which currently produce emissions.

The Government will facilitate conditions for business and industry through favourable framework conditions that support the development of new activity and increased value creation. The Government has given priority to growth-oriented tax relief for Norwegian enterprises and ordinary employees. Appropriations for market-driven research and innovation have risen significantly. And we have facilitated faster construction of roads and railways. The Government has also focused on simplification and digitalisation to enable enterprises to spend less time on reporting and more time on creating value and jobs.

High employment rates and rising living standards will in future require an economic policy that will accommodate improvement, innovation and restructuring rather than preserve old organisational structures and production methods. The tax level should therefore continue to be lowered, and infrastructure, government regulation and the education system must be designed in such ways as to provide enterprises with competitive conditions.

Norway is already a leading industrial nation in oil and gas activities, and the Government will