



Manfred Leitner, APIA President

A smoothly functioning energy system, based on a balanced mix of energy sources of the renewable and fossil types, is essential for economic success. It is a prerequisite for safeguarding the country's energy supply in the long run through modern, sustainable, low-cost and competitive means. Global demand for energy is bound to rise, not least due to rapid growth in the developing countries. The choice of available energy carriers is similarly expanding, with renewables accounting for the highest growth rate. Their share will quintuple by 2040, to some 14% of all primary energy. Yet oil and natural gas will together continue to cover over 50% of the global demand for energy.

In spite of the increasing use of alternative energy carriers, and especially natural gas and electricity, oil will continue to dominate the transport sector. It is expected to cover about 85% by 2040, even though there are promising signs that improvements in vehicle efficiency are rapidly progressing. The greater part of the demand will come from non-road-bound means of transport, mostly in aviation, shipping and rail transport, and from lorries. In the mid-term, a wide range of propulsion types will co-exist side by side, including batteries, compressed natural gas (CNG), hydrogen and conventional fuels. Moreover, in the next one or two decades a large part of the growth in demand will derive from uses of oil that do not depend on firing it, including in particular as a resource for the petrochemical industry.

The petroleum industry sees itself as a major player when it comes to reducing global CO₂ emissions, and is regularly investing in research in the field. Employing future-oriented processes, it achieves ongoing improvements at all stages of

crude production and processing. The refining process has been made substantially more efficient. Much less energy is now used to make petroleum products, which has also reduced CO₂ emissions. A special project in refining is the admixture of durable plastic waste to the process of manufacturing petroleum products. Rot-resistant plastic waste is integrated as a basic material in fuel production. Moreover, petroleum businesses are continually improving their fuels which they sell on local and international markets. Using innovative additives and ensuring clean combustion of their fuels cuts down on consumption and emissions alike.

The climate and energy strategy of the Austrian Federal Government, adopted by the Council of Ministers in late May 2018, prioritises a long-term exit from conventional heating oil. However, given its excellent storage properties and flexible availability, heating oil is important for its users. One out of five houses and flats in Austria is heated with oil. To enjoy low-cost heating, many households have renewed their oil heating systems and fitted them with efficiency-improving technologies.

Organic admixtures and coprocessing are promising alternatives to the conventional extra-light heating oil, but they need an environment of legal certainty and time. Industries and scientists are constantly at work to make oil heating ever more economical, reduce its pollutant content and develop future-proof technologies for liquid fuels. Their quest is to create marketable, innovative and renewable fuels that are added in ever greater doses to the conventional heating oil and which will replace it in the long term. Current infrastructure in houses, storage facilities and delivery systems will continue to be useable. Securing the supply of affordable heating products is a primary responsibility of the petroleum industry and must be accounted for in the legal framework.

I am convinced that technological neutrality is and will continue to be an absolute priority. In order to attain the climate goals we will have to explore every avenue. The petroleum industry is part of the solution when it comes to the future of energy, and an indispensable partner on the road to an energy turnaround. So, with this in mind: good luck to us all!

Manfred Leitner
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DECLINING CRUDE OIL PRICE CAME TO AN END

In 2017, the international economy performed much better than had been expected. The global trade volume expanded by 4.9%, powered by higher prices for energy and raw materials. The global economy grew by 3.8%, 0.6 percentage points above the value for 2016. The upswing was more pronounced in the industrialised countries than in the developing or emerging economies. In 2017, both the euro zone and the US reported GDP growth of 2.3%. The ECB continued its monetary policy course in 2017 and, in contrast to the US, left its interest rate at zero percent.

With economic activities once again flourishing internationally, the downward trend in crude oil prices over the past years was arrested, and prices went up again. In January, one barrel of Brent crude sold at US\$ 54.7. Following fluctuations over the year, the price for the barrel reached US\$ 64.0, averaging US\$ 54.3 over the year or 24% (US\$ 10.6) above the annual average for 2016 (US\$ 43.7).

In Austria, the thriving international economy and a tax reform that stimulated consumer spending combined to invigorate business. GDP growth of 3.0% in real terms was double that in 2016. According to the Austrian Institute of Economic Research WIFO, the economy grew dynamically throughout the year. Industrial production could be increased by 3.9%, and both exports and investments increased by 5% each. In nominal terms, GDP grew by 4.6%.

The US dollar weakened against the euro in 2017, with the euro appreciating by over 11% against the dollar. During the year, the euro/dollar exchange rate climbed from US\$ 1.06 per euro in January 2017 to US\$ 1.19 for the euro in September, to settle at US\$ 1.18 at the end of the year. As an annual average, the rate was US\$ 1.13 for the euro, or 2% above the previous year.

Inflation, in terms of the CPI, was +2.1%, or markedly higher than in 2016 or 2015 (+0.9% each), the highest rate since 2012 (+2.4%) and fuelled mostly by rising costs for

transport and in particular fuel prices. In terms of the harmonised consumer price index, inflation rose from 1.0% in 2016 to 2.2% in the year under review.

With the economy booming, demand for labour was felt in all sectors according to WIFO. The number of active dependently employed persons rose by 70,657 or 2.0% to 3,573,088, a figure that includes 98,236 cross-border commuters. The number of unemployed persons was down by 17,337, but unemployment, after 9.1% in 2016, at 8.5% in 2017 according to the national counting method, still remained high. Self-employment rose by 1.2% to 494,500 as an average of 2017, according to WIFO.

Driven by the strong growth of 3.0% experienced by the Austrian economy and its GDP (EU-28: +2.4%), the Austrian transport sector underwent a dynamic development. At a plus of 7.2%, the number of newly licenced vehicles grew at a particularly rapid rate that surpassed the previous year's figure (+6.8% in 2016). Due to robust economic growth and the consequently burgeoning traffic, diesel consumption was up by 2.9%, although petrol consumption shrank by 1.2%. Road haulage capacity rose by 1.7%, that for rail increased by 4.2%.

Since global trade began to accelerate in mid-2016, international demand for industrial goods has been on the increase. Austrian exporters profited, especially those trading in machines, vehicles and processed goods. Exports into the EU flourished, closely followed by demand from third countries. Exports into the US and the BRICS countries once again expanded. According to Statistics Austria, at almost € 142bn, nominal goods exports in 2017 were higher by 8.2% (5.7% in real terms) than in 2016. Increasing demand for capital and consumer goods has driven imports into Austria. Higher in real terms by 5.4%, they were slightly below the figure for exports, so that net exports contributed positively to real GDP growth in Austria.

KEY FIGURES

AUSTRIAN PETROLEUM INDUSTRY

	2017	2016	2015	2014	2013	
Member companies, sold production, employees						
Number of association companies	27	27	28	28	26	
Sold production	€ mn	8,314	7,228	8,097	10,124	10,960
Total employees	4,054	3,999	4,412	4,269	4,192	
thereof blue-collar	787	787	876	847	873	
thereof white-collar	3,172	3,107	3,422	3,322	3,235	
thereof apprentices	95	105	113	100	84	
Production, import, transport						
Domestic oil production (incl. NGL)	tons mn	0.74	0.81	0.91	0.94	0.92
Domestic natural gas production	m ³ n bn	1.74	1.25	1.18	1.24	1.36
Crude oil import	tons mn	7.32	7.21	8.11	7.51	7.78
Natural gas import	m ³ n bn	8.20	7.18	5.72	7.40	6.06
Oil transport ¹	tons mn	7.4	7.3	8.1	7.7	7.8
Oil refining (incl. semifinished products)	tons mn	9.0	8.9	9.5	9.3	9.3
Consumption, products						
Domestic oil consumption ²	tons mn	11.26	11.13	10.80	10.65	10.95
Petroleum imports – products ²	tons mn	6.70	6.65	6.16	6.02	6.18
Petroleum exports – products ²	tons mn	2.90	2.91	2.94	2.77	2.49
Domestic gas consumption (end consumer)	m ³ n bn	8.50	7.85	7.55	7.00	7.73
Filling stations, vehicles						
Number of filling stations total ³	2,685	2,670	2,641	2,622	2,640	
thereof major branded	1,347	1,352	1,357	1,373	1,411	
Approved vehicles	6,771,395	6,654,504	6,545,818	6,466,166	6,384,791	
thereof cars and station wagons	4,898,578	4,821,557	4,748,048	4,694,921	4,641,308	

¹ Adria-Wien Pipeline (2016 merged with OMV Refining & Marketing GmbH)

² Without petrochemicals or in part without pure biofuels

³ Excluding 286 agricultural diesel outlets (2016: 285; 2015: 285; 2014: 298; 2013: 298)



Christoph Capek, APIA Managing Director

The Austrian Petroleum Industry Association (APIA, or FVMI to give it its proper German title) operates within the scope of the Austrian Federal Economic Chamber (WKÖ). Together with its elected functionaries and staff members at the FVMI office it acts as expert interest group for its members. As an Austrian-wide association of petroleum-based industries it is organised, on the basis of the Act Governing Economic Chambers (WKG), as a corporation under public law. A legal interest group, the Association perceives itself as a link between business and the public. Its members are Austrian companies that operate upstream (exploration and production of crude oil), midstream (transport in pipelines and storage) and downstream (processing at their own or associated refineries and sale of petroleum products). At present, the Association has 27 petroleum companies active in the up-, mid- and/or downstream sectors.

The five staff members at the FVMI office provide specialised and organisational coverage of issues of relevance to the industry, such as environment and energy (energy efficiency, climate strategy, emissions trading, regulations governing fuels and biofuels, standards, waste water and garbage, etc.), taxation, commercial law and social policy. On a daily basis they gather and coordinate sector-specific information and communications to members on general economic subjects. One of their primary tasks is to coordinate and draft comments within the scope of reviewing EU directives and national draft laws and regulations for ministries and other government authorities. In doing so, we consult and harmonise our work with the respective expert departments of the Austrian Economic Chamber, its industrial department and, within the frame of a cooperation agreement, with the Chemical Industry Association.

Next to comprehensively representing its members' interest at the legal level, one of the Association's priority responsibilities that has an external impact is the weekly poll of petrol station prices as stipulated in the Price Transparency Act which requires a neutral assessment by the FVMI office and serves to facilitate a publicly accessible EU-wide comparison by the European Commission.

Another key responsibility of the Association is negotiations for the collective bargaining agreement with the Union of Salaried Private Sector Employees in the Print, Journalism and Paper Sector and the Production Workers Union for about 4,000 employees, held every January. The collective bargaining agreement for the employees of the Austrian petroleum industry is published in a paper version as well as on the FVMI's website (also as a PDF file in English) and in the database of collective bargaining agreements kept by the Austrian Economic Chamber.

Also of note is our work to organise and chair several working group meetings per year for segments such as retail sector, commercial business, statistics, HSSE, REACH, transport logistics/hazardous goods, petrol station technology and waste management. In this respect, legal and technical expert opinions are frequently obtained. Examples of such cooperative schemes with other organisations in the field and the technical and financial assistance involve Österreichische Gesellschaft für Erdölwissenschaften (Austrian Society for Petroleum Sciences), the main office of Grubenrettungs- und Gasschutzwesen GmbH (mine rescue and gas protection services) and the SCC platform (Safety Certificate Contractor).

The FVMI office regularly gets industry-specific enquiries from government authorities, the social partners, consumers, students and national and international organisations which require a response with due regard to actual practice and experience, frequently drawing on the expertise of its members.

Accommodating international developments in the crude and product markets and frequent enquiries by the media, the Association sees itself as the mouthpiece for all PR activities. Press releases, interviews, newsletters and fact sheets on the petroleum market in Austria are typical examples of our work, as is the publication of contributions on our website. The FVMI's annual report is part of the Association's publicity work and is available as a printed version or as a pdf file on the FVMI website. The publication includes all the relevant facts and figures on the Austrian petroleum industry across many years since the reports of previous years can also be accessed from our website.

THE AUSTRIAN PETROLEUM INDUSTRY

CRUDE OIL PRODUCTION IN AUSTRIA

Today, OMV and RAG Austria AG explore and produce crude oil and natural gas in economically relevant quantities in the Vienna Basin (Lower Austria) and the molasse zone (Upper Austria and Salzburg). In 2017, production of crude oil declined once again, by 8.3% to 741,891 tons including NGLs (of which 704,678 tons were crude oil in the narrower sense). As to natural gas, production increased over the previous year by 39% to 1.74bn m³n, of which 1.59bn m³n were natural gas in the narrower sense (i.e. without petroleum gas).

Of the crude production (including NGLs), OMV was responsible for 87%, with RAG Austria contributing 13%. In total production amounted to about 742,000 tons, of which 85% were obtained in the Vienna Basin and the remaining 15% of the crude (including NGLs) came from the molasse zone. As to natural gas production (including petroleum gas) in the two regions, 53% derived from OMV and 47% from RAG, with 32% pumped from the Vienna Basin and 68% contributed by the molasse zone.

The assessments and estimates of Austrian hydrocarbon reserves carried out by the Geological Survey of Austria (GBA) found reserves of crude oil (including NGLs) of about 6.1mn tons as of 31 December 2017. This figure covers total proven deposits, a volume that has declined to about eight annual production quantities if current production activities are maintained. Proven reserves of natural gas excluding inerts that have a high potential of being exploited amount to 8.3bn m³n, which covers about five years at today's production volume.

PRODUCTION AND STORAGE OF NATURAL GAS IN AUSTRIA

In Austria, natural gas is stored by OMV at Schönkirchen and Tallesbrunn and by RAG at Puchkirchen, Haidach, Nussdorf/Zagling, Aigelsbrunn and 7Fields. The reservoirs are generally filled during the summer months and partially emptied during the heating season. Austria has recently built up capacities of about 8.1bn m³, of which 2.2bn m³ are stored by OMV and 5.9bn m³ by RAG. The total reservoir volume is used by Austrian as well as international enterprises.

CRUDE OIL IMPORTS

In 2017, OMV imported altogether 7.3mn tons of crude oil into Austria, a plus of 1.5% over the previous year. Imports came from 14 countries, greatly varying in quantities. First in importance continued to be Kazakhstan which supplied almost 2.4mn tons, followed by Iraq (1.1mn tons), Libya (976,000 tons) and Azerbaijan (950,000 tons).

To safeguard domestic supply it is necessary to import considerable quantities of finished products such as diesel (about 4.5mn tons), petrol (743,000 tons) and extra light heating oil (590,000 tons), provided chiefly by Germany, Slovakia, Hungary and Slovenia. Altogether about 6mn tons of fuels were imported in 2017.

Two pipelines supply the Schwechat refinery near Vienna with crude oil from abroad: the Transalpine Pipeline (TAL) and the Adria-Vienna Pipeline (AWP) owned by OMV.

CRUDE OIL PROCESSING

Crude oil needs to pass through many refinery stages before it is available in the form of petrol, diesel, heating oil or basic chemical substances. The four key stages of processing are distilling, desulphurisation, refinement and blending.

The Schwechat refinery, built on premises of 1.42 km² in size, is one of the largest and most state-of-the-art refineries in Europe. Schwechat can process 9.6mn tons of crude oil per year (global refining capacity: 4.6bn tons). The refinery employed some 730 staff (including trainees) in 2017.

In 2017, the total processing volume was 8.1mn tons of crude oil (2016: 8.2mn tons). Capacity utilisation was thus 86% (2016: 86%). Nine percent of the processed crude oil came from domestic production and about 91% derived from non-domestic sources. Semi-finished products made up 0.9mn tons (2016: 0.7mn tons). From the quantities supplied, the refinery in 2017 produced diesel fuels (40%), petrol (22%), extra light, light and heavy heating oils (12%), petrochemical basics (10%), jet fuel JET A1 (9%), bitumen (4%) and other products (3%). Diesel and petrol had biogenic components admixed, altogether about 190,000 tons of FAME and 80,000 tons of ethyl alcohol in 2017.

STORAGE TANKS

In combination with the depots at Lobau and St. Valentin, the refinery at Schwechat constitutes Austria's largest industrial complex. The refinery and its depots at Schwechat, Lobau and St. Valentin have storage capacities totalling some 3.4mn m³. Lobau alone can hold 1.6mn m³ in 84 tanks dispersed over approximately one square kilometre.

Daily supply is ensured not just by the OMV depots at Lobau, St. Valentin, Graz and Lustenau, but also by product depots operated by BP, Danuol, Eni, MOL and Shell. The compulsory emergency reserves (CERs) of petroleum products prescribed under the Oil Stockholding Act are mostly kept at the depots run by Erdöl-Lagergesellschaft (ELG), TAL (in Trieste), Adria-Vienna Pipeline, and those operated by OMV and RAG.

PETROLEUM CONSUMPTION

In 2017, 11.3mn tons of petroleum were consumed in Austria when including all petroleum products such as fuels, gas oil for heating purposes (extra light heating oil), light

and heavy heating oil, lubricants and bitumen, but excluding petrochemical basics, corresponding to an increase of 1.2% over the previous year (2016: 11.1mn tons). Petrol and diesel consumption in Austria was found to be 8.6mn tons (about 10.4bn litres), according to statistics run by the Federal Ministry of Sustainability and Tourism. Petrol sales declined by 1.2% against 2016, diesel sales increased by 2.9%, once again exceeding the previous year's peak figure. Jet fuel consumption was about 740,000 tons in 2017, 3.3% less than in the previous year. Extra light heating oil sales were 1.18mn tons or just below 1.4bn litres, 3.8% more than in 2016.

DEVELOPMENT OF PETROL AND DIESEL PRICES

The petrol price averaged for 2017 was € 1.18 per litre, against € 1.11 per litre in 2016. In the European Union, Eurosuper petrol on average cost 17 cents more or € 1.35 per litre. Diesel sold for € 1.11 per litre at petrol stations in Austria as an annual average, about 8 cents above the previous year. With the weighted average for all EU countries at € 1.21 per litre, the EU price for diesel was thus higher by 10 cents per litre and continued to be clearly above the Austrian average.

As of May 2017, petrol prices were made up of the following components: a 56% levy in the form of petroleum tax and VAT, 36% for the product itself, and 8% for distribution. Diesel carried a tax of 50%, with the product costing 42% and distribution 8%. The greatest part of the receipts from petrol pumps thus goes to the state.

PUMP STATISTICS

In its survey of petrol stations, the Austrian Petroleum Industry Association (APIA) distinguishes between two principal groups: the so-called major branded stations which total 1,347 and include brands by APIA members BP, Eni, JET, OMV (including Avanti) and Shell; and the other group which consists of 1,338 petrol stations, including those like run by Turmöl, Genol, Avia, A1 and IQ. As of the end of 2017, APIA counted altogether 2,685 publicly accessible petrol stations – a slight increase over the 2,670 stations in the previous year. Added to this figure are 286 diesel sales points for farmers. Of the 1,347 major branded stations, 319 are operated by Eni, 266 by BP, 259 by Shell, 212 by OMV, 152 by JET and 139 by Avanti (OMV).