

National Reform Programme 2021

Austria

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1 Introduction

Within the framework of economic coordination, each EU Member State has to present a National Reform Programme and a Stability or Convergence Programme to the European Commission each year by no later than the end of April. This year, the focal point of the European Semester is the Recovery and Resilience Facility. The purpose of the Recovery and Resilience Facility is to foster economic, social and territorial cohesion in the EU and to mitigate the enormous economic and social consequences of the pandemic. However, the facility is also designed to serve as an instrument for reforms and investments in Europe's future, driving both the green and digital transition.

For Member States to be eligible for funding from the Recovery and Resilience Facility, they must prepare national recovery and resilience plans and set out the reforms and investments they intend to implement. Austria is entitled to claim grants in an amount of about EUR 3.5 billion, which it will use in accordance with the requirements defined in Regulation (EU) 2021/241 for recovery and resilience plans.

The measures set out in the National Reform Programme are part of the national reform and investment agenda and complement the National Recovery and Resilience Plan to provide a comprehensive picture of the situation. The Recovery and Resilience Plan is consistent with the National Reform Programme. While the National Reform Programme provides a high-level overview of reform and investment plans, the Recovery and Resilience Plan focuses on selected reforms and investments.

The National Reform Programme documents the services provided by the state as a whole, at the various levels of government, from federal to provincial to local. In addition, numerous measures were developed and implemented in consultation with the social partners, especially when it came to labour market, education and social policies. Among the measures implemented with significant participation by the social partners, the Corona short-time work scheme and the home office package deserve special mention – they are among the most successful instruments in coping with the labour market disruptions caused by the pandemic. At regional level, too, numerous measures were implemented jointly with the federal provinces.

While taking account of the 2019 and 2020 country-specific recommendations, the National Reform Programme 2021 also addresses the six pillars of the Regulation of the European

Parliament and of the Council establishing the Recovery and Resilience Facility, the goals set out in the 2030 Agenda for Sustainable Development (SDGs) and other relevant documents.

Coloured icons provide a consistent referencing system between the measures listed in this programme and the relevant reference points. Apart from current reform and investment projects, the National Reform Programme 2021 also focuses on the reforms and investments scheduled for the next 18 to 24 months, thus providing insights into the federal government's reform agenda. Furthermore, it presents flagship projects at province and local government level which contribute towards implementing the sweeping reform agenda.

In addition to the National Reform Programme, the National Recovery and Resilience Plan and the Austrian Stability Programme 2020-2024, the measures taken by the federal government to implement the 2019 and 2020 country-specific recommendations are being reported on an ongoing basis via the Country-Specific Recommendation Database of the European Commission (CeSaR).

2 Overall economic environment

Economic development in 2020 was impacted significantly by Covid infections and the necessary countermeasures. According to Statistics Austria, the Austrian economy contracted by 6.6% in real terms in 2020 (Statistik Austria, 2021). Once the health crisis has been overcome, the economy is forecast to grow by 2.3% (1.5%) and 4.3% (4.7%) in 2021 and 2022, respectively (WIFO, 2021). Due to the uncertainty about what political measures will be taken over the next few days and weeks, the Austrian Institute of Economic Research (WIFO) this time presents two scenarios to cover the whole bandwidth of conceivable developments. (1) The 'Easing of restrictions' scenario provides for no further Covid-related restrictions being imposed and existing restrictions being gradually eased as from mid-April. (2) The 'Lockdown' scenario provides for a short-term tightening of Covid measures, with an easing of restrictions during the second quarter of 2021. In the paragraphs below, the forecast values for scenario (1) 'Easing of restrictions' precede the respective values for scenario (2) 'Lockdown', which are given in parentheses.

The measures taken during the first lockdown in March and April 2020 triggered both a demand and supply side shock. The country suffered a massive economic downturn in the second quarter of 2020. The summer months saw a relatively strong recovery, also by international comparison, which benefited nearly all sectors, including catering and the hospitality industry. Growth was strong in the construction industry as well as in manufacturing, which had contracted markedly in the preceding months due to the interruption of international supply chains.

After the summer, infection rates soared unexpectedly swiftly, raising the spectre of a collapse of the national health system. In response to this threat, the federal government gradually tightened restrictions and, in November, imposed another lockdown. The progressing pandemic brought the economic recovery to a halt once more. However, industrial production suffered less under the second lockdown in the fall than under the first one in the spring of 2020. A third spike in infections at the end of December 2020 and the lockdown required, as a consequence, caused a slump in private consumption, among other effects. Winter tourism virtually came to a standstill in the 2020/21 season.

In an effort to cushion the economic and social effects as best possible, the federal government implemented a number of support measures. The overriding economic objective and the guiding principle of these support measures is to maintain the Austrian

economy's production potential. Support measures for particularly hard-hit sectors and businesses include, for instance, compensation for revenue lost during lockdown, fixed-cost subsidies, loss compensation and revenue loss bonus, as well as the hardship fund, designed specifically for one-person and micro-enterprises. To safeguard both general interest service provision and investment at the local level, the federal government adopted not only the 2020 Local Communities Investments Act (*Kommunalinvestitionsgesetz*), with a volume of EUR 1.0 billion for 2020-2022, but also, at the end of 2020, a second local communities package (additional EUR 1.5 billion in 2021). Aid for groups particularly affected by the restrictions necessitated by the Covid pandemic has come to supplement these economic support measures, among them the NPO support fund (*NPO Unterstützungsfonds*), the Corona family hardship allowance (*Corona-Familienhärteausgleich*), the bridging financing for self-employed artists (*Überbrückungsfinanzierung für selbstständige Künstlerinnen und Künstler*), the sports leagues fund (*Sportligenfonds*) or the event industry protection fund (*Schutzschirm für die Veranstaltungswirtschaft*).¹

Contact restrictions and business closures in the wake of the pandemic impacted above all private household consumption. The high level of uncertainty further dampened consumers' readiness to spend. According to Statistics Austria, private consumer spending dropped by 9.6% in 2020 (Statistik Austria, 2021). Once the health crisis has been overcome, private consumption is expected to grow by 2.4% (1.1%) in 2021, with this slightly positive trend forecast to continue also in 2022. State aid measures have contributed to keeping disposable income at relatively stable levels, with the savings rate rather high in 2020 at 15%. Even though the backlog in consumption is being partially compensated after the lockdowns, private consumption has not seen a speedy recovery, as households tend to err on the side of caution and save rather more than less. In 2021, too, the savings rate is expected to remain exceptionally high at 12.4% (13.4%).

A high level of uncertainty, low capacity utilisation and lower amounts of equity capital had an unfavourable effect on investments. According to Statistics Austria, gross investment in fixed assets in real terms declined by 4.9% in 2020 (Statistik Austria, 2021). An investment premium has been introduced to foster investments. Applications for funding of climate-

¹ Detailed information about the impacts of these measures on the federal budget is available in the Austrian Stability Programme 2020 to 2024.

friendly new investments in fixed assets, tangible or intangible, were possible from September 2020 to February 2021. In 2021, investment is expected to grow by 4.4% (4.3%).

As Austria's main trading partners were faced with a strong economic downturn as well, the export of goods also suffered a setback in 2020, declining by an estimated 6.9%. Overall, 2020 saw exports fall by 10.4%. Once the recovery gathers steam and restrictions have been lifted as anticipated, exports are likely to grow by 2.8% (2.3%) and 7.2% (7.8%) in 2021 and 2022, respectively.

The measures taken to fight the Covid pandemic have led to a steep rise in unemployment. The first lockdown resulted in employment plummeting and the number of people registered as unemployed soaring. The introduction of the Corona short-time work scheme helped to prevent an even steeper rise. The unemployment rate (according to the definition applied in Austria) hit 9.9% in 2020. Rates of 9.2% (9.3%) and 8.4% (8.5%) are expected for 2021 and 2022 respectively.

On an annual average, the inflation rate for 2020 will probably be 1.4%. While the price for crude oil slowed down the rise in prices, the prices of services, in particular for rent and for catering services, stoked up inflation. Inflation is expected to accelerate, with rates of 1.8% (1.8%) and 1.8% (1.8%) for 2021 and 2022, respectively.

3 Green transition

Relevant reference points



Country-Specific Recommendations:

- CSR 3/2019: (...) Focus investment-related economic policy on research and development, innovation, digitalisation, and sustainability, taking into account regional disparities. (...)
- CSR 1/2020: Take all necessary measures, in line with the general escape clause of the Stability and Growth Pact, to effectively address the COVID-19 pandemic, sustain the economy and support the ensuing recovery. (...)
- CSR 3/2020: (...) Focus investment on the green and digital transition, in particular on basic and applied research, as well as innovation, sustainable transport, clean and efficient production and use of energy.
- CSR 4/2020: Make the tax mix more efficient and more supportive to inclusive and sustainable growth.



Six pillars of the Recovery and Resilience Facility (Regulation (EU) 2021/241):

- Pillar 1: Green transition
- Pillar 2: Digital transition
- Pillar 3: Smart, sustainable and inclusive growth, including economic cohesion, jobs, productivity, competitiveness, research, development and innovation, and a well-functioning internal market with strong SMEs
- Pillar 5: Health, and economic, social and institutional resilience, with the aim of, inter alia, increasing crisis preparedness and crisis response capacity



Goals of the 2030 Agenda for Sustainable Development:

- SDG 3: Ensure healthy lives and promote well-being for all at all ages
- SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all
- SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable
- SDG 12: Ensure sustainable consumption and production patterns
- SDG 13: Take urgent action to combat climate change and its impacts
- SDG 15: Protect terrestrial ecosystems, sustainably manage forests, halt land degradation, preserve biodiversity



Other relevant documents:

- National Energy and Climate Plan (NECP), Climate and Energy Strategy (#mission2030); IGJ/ERDF & JTF-Programme 2021-2027; European Maritime, Fisheries and Aquaculture Fund (EMFAF); Annual Sustainable Growth Strategy 2021

Coping with climate change is one of the greatest challenges of the 21st century. Austria's commitment to implementing the Paris Climate Agreement has been translated into its National Energy and Climate Plan (NECP) and its Climate and Energy Strategy

(#mission2030). In addition, the federal government has, in its current Government Programme, set itself the ambitious target of achieving climate neutrality in Austria by 2040. While this calls for tremendous efforts, it also comes with enormous opportunities. The overall goal is the long-term decarbonisation of Austria's economy without incurring a loss in economic strength.

A key milestone on the road towards meeting the climate goals is currently being implemented. In future, a Climate Cabinet (*Klimakabinett*), presided over by the Federal Chancellor and the Minister for Climate Action, is to make the political decisions for Austria's climate policy and define the relevant framework. A Scientific Climate Advisory Board (*wissenschaftlicher Klimabeirat*) is to provide advice to the Climate Cabinet, review compliance with climate goals in Austria, and make specific recommendations as and where necessary. Against this backdrop, the federal government has suggested that the Austrian Parliament's Budget Office should not only prepare the general budget, but also review the greenhouse gas budget and provide brief analyses on government bills. In addition, there are plans for a Citizens' Climate Council (*Klimarat der Bürgerinnen und Bürger*) to be established as a participative process element. More concrete details are to be set out in the Climate Protection Act (*Klimaschutzgesetz*), which is currently being drafted.

3.1 Sustainable energy production and energy saving

Renewable Energy Expansion Act



In its Government Programme, the federal government set itself the target of covering energy consumption at a 100% (nationwide, in energy balance terms) from renewable sources by 2030. The Renewable Energy Expansion Act (*Erneuerbaren-Ausbau-Gesetz*), which is currently on its way through parliament and scheduled to enter into force in 2021, plays a key role in speeding up the energy transition. While complying with the applicable EU rules on state aid, it provides for a fundamental refurbishment of the green electricity funding system. In future, there will be two types of funding – either one-off investment support or an ongoing market premium for electricity production. The volume of funding is budgeted at EUR 1 billion per year. Overall, EUR 10 billion will thus be invested in developing renewables capacities over the next ten years, in a bid to trigger sweeping

investments with a macroeconomic effect of EUR 30 billion while at the same time saving some 10 million tons of carbon.

The Act will lay the legal groundwork for increasing annual electricity production from renewable sources by 27 TWh until 2030, while observing strict ecological criteria. More specifically, 11 TWh are to come from photovoltaic systems, 10 TWh from wind power, 5 TWh from hydropower and 1 TWh from biomass. The Act is designed to create jobs, attract investment and thus provide a major impetus for economic activity. What is more, the Renewable Energy Expansion Act also provides for the introduction of funding for the production of renewable gases. Under this heading, EUR 100 million per year are to be raised for investment funding, half of which earmarked for electrolysis plants, primarily in the industrial sector for the production of renewable hydrogen.

Bioeconomy



Efficiently using biological resources, renewable raw materials and biogenic waste, residues and by-products to replace fossil resources (raw materials and energy sources) and paying heed to natural life cycles of materials are key elements of Austria's strategy towards reaching the Paris climate goals and reducing imports of fossil raw materials.

The Austrian Bioeconomy Strategy was adopted in 2019. It served as the starting point for work on a Bioeconomy Action Plan. By the end of the second quarter of 2021, first concrete measures are to be adopted and implemented in the form of bioeconomy flagships. Another key step will be the RTI Initiative Circular Economy, which was launched in March 2021.

The aim of the Austrian Bioeconomy Strategy and Action Plan is to identify specific steps necessary to further establish the position of bioeconomy in Austria, thus boosting growth for bio-based products, bioenergy and related technologies and services.

Energy Model Region



The main focus of this initiative is to enable a hands-on experience of what the energy future holds in store. All over Austria, more than 200 project partners have already joined the programme, which features three primary research subjects: 1. Sustainable energy solutions and smart electricity grids, 2. decarbonisation of industrial production, and 3. hydrogen use in business and in energy production. Together, the participating regions form a broad research and innovation network with stakeholders from the worlds of both business and research.

The Energy Model Region (*Vorzeigeregion Energie*) programme is an RTI initiative sponsored by the Austrian Climate and Energy Fund (*Klima- und Energiefonds*) with a runtime from 2018 to 2025. The third (and last) call for proposals under the programme will take place in the first half of 2021. Funding of some EUR 120 million has been appropriated for the entire programme runtime. The purpose of this RTI initiative is to demonstrate, in a model scenario, that a virtual region can cover its energy demand up to a 100% from regional and renewable energies, with a special focus being placed on innovative energy technologies developed in Austria.

klimaaktiv initiative



The *klimaaktiv* climate protection initiative provides incentives and market stimulus to use renewable sources of energy, energy efficiency measures in the field of construction and renovation, and mobility. Its extensive network of partners develops knowledge in respect of standards and quality of climate-relevant technologies and services which in turn enter into education and training offers and help improve both advisory and funding schemes. This serves as an incubator for numerous high-quality projects and as an impetus for reducing the carbon footprint. Raising awareness and providing information results in increased activity and opens up new opportunities for innovative business partners. Top-notch climate-friendly products and services achieve higher market penetration, with a lowering of greenhouse gas emissions as a welcome side effect. *klimaaktiv* standards are being applied more and more frequently, for instance with a growing number of buildings being built or renovated in line with the *klimaaktiv* building standard. More and more

residential areas conform to the *klimaaktiv* standard for residential areas and neighbourhoods. In 2021, some EUR 12 million will be available for this sector.

Flagship projects at province level



- Burgenland: Further development of renewables capacities – wind energy, photovoltaics, biomass-based district heating, hydrogen
- Burgenland: Awareness-raising – climate action, climate change, energy transition
- Burgenland: Regional and local energy and carbon reduction measures (funding)
- Carinthia: Switch from fossil-based heating to renewables (funding)
- Carinthia: Funding for switchover to renewables (private households and businesses)
- Carinthia: Expansion of *the e5*, *KEM*, *KLAR!* and *Klimabündnis Kärnten*. The plan is for all local communities to participate in one of these programmes by 2025.
- Carinthia: Photovoltaic systems on municipal buildings
- Upper Austria: Pilot plants for wood gasification and biofuels to reduce or substitute fossil fuels
- Salzburg: SALZBURG 2050 Climate and Energy Strategy
- Salzburg: Photovoltaic systems on commercial buildings (funding)
- Tirol: Climate, Energy and Circular Economy Platform (*Plattform Klima, Energie und Kreislaufwirtschaft*); energy efficiency and renewable energy with a focus on indoor heating (Oil and Gas Phase-out (*Raus aus Öl und Gas*) and photovoltaic systems); networking among the regions in energy and climate action (KEM, KLAR, CLAR, among others)
- Vorarlberg: The goal is to cover energy consumption at a 100% from renewable sources by 2050 (energy autonomy).
- Vienna: Energy efficiency measures package (SEP 2030 - Energy Efficiency First!)
- Vienna: Heat pump programme for existing buildings (support with planning, implementation and training)
- Vienna: Thermal and energy renovation initiative, conditional upon full decarbonisation of the heating sector
- Vienna: Expansion of district heating capacities: closing gaps in the existing system and exploring opportunities in suitable areas

3.2 The city of the future

Climate-neutral smart cities



Urban planning and urban development are instrumental in reaching climate neutrality. It is with this in mind that the European Commission launched the Climate-neutral and smart cities mission in 2021. One hundred showcase cities with more than 50,000 inhabitants will be selected to demonstrate climate neutrality by 2030. In an effort to prepare Austria's cities as best possible for this EU mission, the theme 'Mission: Climate-neutral City' (*Mission: Klimaneutrale Stadt*) was launched within the scope of the 'City of the Future' (*Stadt der Zukunft*) programme. A major part of this effort under the 8th call for proposals under this funding programme is the R&D service Fit4UrbanMission – Preparation for the EU Mission '100 Climate-neutral Cities' (*Vorbereitung auf die EU Mission '100 Klimaneutrale Städte'*), which is managed by the Austrian Research Promotion Agency (FFG). Programme funding for the 'Mission: Climate-neutral City' was topped up by EUR 15 million for 2021 and 2022, respectively.

The Austrian Climate and Energy Fund (*Klima- und Energiefonds*) is a key driver of forward-looking solutions designed to strengthen both Austria's capacity for innovation and its position as a business location. In the past ten years, the Smart Cities Initiative pioneered trailblazing solutions for an energy and mobility transition on the local level.

The budget for 2021 is EUR 50 million, with at least EUR 200 million to be invested in 300 climate-friendly projects in further cities and (urban) regions over the medium term, until 2026.

These measures are designed to boost energy research in a bid to gradually arrive at a sustainable energy supply and reduce greenhouse gas emissions in an urban context.

The programmes of the Austrian Climate and Energy Fund bring science and business together and build bridges directly to the people on site, in cities, regions and local communities, paving the way for a swift market introduction of innovative solutions and technologies from Austria. Drawing on a budget of EUR 1.6 billion, the Climate and Energy Fund developed 30 programmes in the past twelve years, providing funding for more than

162,000 projects. On average, these projects triggered three times their own volume in additional investments, i.e. about EUR 5 billion.

Renovation initiative



Heating and air-conditioning account for nearly 23% of Austria's final energy demand. The data since 2015 shows that, in spite of an increase in the square footage of homes used as primary residence, energy consumption remained stable up to 2018, thus improving energy intensity by 1.35% annually (BMK, 2020, p. 27). However, substantially more ambitious measures will be needed to boost renovation activity in particular and to set the course for achieving the Paris climate targets in general.

Incentives are provided for switching from non-ecological fossil heating systems to new clean alternatives: Within the scope of the National Heating Strategy, the federal government works together with the provinces to draw up a staged plan for phasing out fossil fuels in heating, with a horizon of 2035 for oil and 2040 for natural gas. In addition, it makes a record total of more than EUR 650 million available for 2021 and 2022 to promote boiler replacement. Of these EUR 650 million, EUR 400 million have been earmarked for the Oil and Gas Phase-out (*Initiative Raus aus Öl und Gas*) initiatives and EUR 250 million for the Renovation Check (*Sanierungsscheck*) scheme designed to promote the thermal upgrading of buildings.

The 2020 School Development Programme, which was launched already in 2020, provides for sustainability and energy efficiency to be a priority when building and renovating federal schools. Over the next ten years, 270 renovation projects are to be conducted in accordance with the *klimaaktiv* building standards. Moreover, the 2020 School Development Programme sets high standards, aiming for a minimum score of 750 out of a potential 1,000 points under the *klimaaktiv* building standards. The investment budget runs to about EUR 2.4 billion.

A drive to strengthen resilience at local community level is to also include thermal renovation projects, complemented by regional and energy planning measures, for instance in terms of soil protection.

Flagship projects at province level



- Lower Austria: Upgrading of existing public buildings to promote energy efficiency
- Tirol: Climate, Energy and Circular Economy Platform (*Plattform Klima, Energie und Kreislaufwirtschaft*); energy efficiency and renewable energy with a focus on indoor heating (Oil and Gas Phase-out (*Raus aus Öl und Gas*) and photovoltaic systems); networking among the regions in energy and climate action (KEM, KLAR, CLAR, among others)
- Vienna: Smart City Framework Strategy
- Vienna: Planning support for urban development areas and quarters and innovative single projects and school building construction
- Vienna: Renovation advice for future-oriented buildings (part of the *Wir SAN Wien* renovation initiative)
- Vienna: Concept for spatial planning from an energy perspective
- Vienna: Refurbishment and exit from fossil fuels drive, especially in cooperation with housing developers
- Vienna: Smart, climate-active and participative municipal housing strategy 2030

3.3 The mobility of the future

RTI strategy: Mobility 2040 and RTI programme Mobility of the Future



The RTI programme Mobility of the Future (2012 – 2021) promotes research, technology and innovation projects that address new or improved products, processes, services, business models or knowledge building approaches with a view to ensuring mobility while at the same time minimising the negative effects of transport. The programme provides for calls in March, May and October 2021. Overall, EUR 34.5 million have been set aside for this programme in 2021, EUR 12 million of which coming from the economic stimulus budget.

November 2019 to September 2020 saw the first-time development of an RTI Strategy for Mobility (*FTI-Strategie Mobilität*). It sets the course for mission-oriented priorities in research and innovation policy measures in mobility from 2022, aimed, inter alia, at

attaining the climate goals and at successfully positioning Austria in mobility-relevant sectors of the EU's future Horizon Europe research framework programme.

The vision proposed therein is innovation in and from Austria for a climate-neutral mobility system in Europe 2040. To translate it into reality, RTI measures are to be taken in four mission fields: (i) Cities: make urban mobility climate-neutral; (ii) Regions: mobilise and connect rural regions in a sustainable manner; (iii) Digitalisation: operate infrastructure, mobility and logistics services in an efficient and climate-friendly manner; and (iv) Technology: develop environmentally friendly transport technologies (BMK, 2020a).

E-mobility and digitalisation in practice



In 2019, energy consumption in the transport sector came to 413 petajoules (353 of which in road transport), nearly twice as much as in 1990 (Statistik Austria, 2020b). Digital technologies are to be leveraged for new, attractive solutions for the decarbonised mobility of the future. Future mobility solutions must be wholistic in design and include all possible modes of transport (multi-modality). Facilitating the switch between different modes of transport ('last mile' being the keyword here) will require cooperative interaction between the different modes of transport and services. What also needs to be taken into consideration are the challenges the automotive industry is facing with respect to growing demand for electricity-powered vehicles and new approaches for future e-drive technology.

A key starting point is the federal government's E-Mobility initiative (*E-Mobilitätsoffensive*) – its goal is to speed up the phasing-out of fossil fuels in road transport by providing incentives for buying cars running on electric energy and hydrogen fuel cells and building the necessary charging and fuelling infrastructure. At the same time, this initiative calls for a first-time funding of multimodal mobility hubs, i.e. places where people can switch from one mode of transport to another. A total of EUR 46 million has been made available for this purpose in 2021. All of these funding options are handled by Kommunalkredit Public Consulting GmbH acting as a one-stop shop.

In a bid to raise awareness and acceptance for sustainable mobility and accelerate the introduction of sustainable mobility solutions in the market, the national Climate and Energy Fund (*Klima- und Energiefonds*) offers specific programmes within the scope of the Sustainable Mobility in Practice (*Nachhaltige Mobilität in der Praxis*) initiative. The overall

budget for 2020 was EUR 0.7 million, the budget available for 2021 has been raised to EUR 1 million.

Cycling and walking infrastructure



In Austria, people travel some 98 million kilometres per person each workday on their way to and from work. 70 million kilometres per person are attributable to car rides (as either driver or passenger). Even though 35% of routes travelled to work are shorter than five kilometres and thus within easy cycling distance, bicycles are actually used for only 7% of them (VCÖ, 2020).

In an effort to improve Austria's climate balance, the federal government, focusing on private transport, makes EUR 35 million available each year from 2021 to 2026 under its *klimaaktiv mobil* programme for provinces, municipalities and businesses to implement climate-friendly mobility solutions.

Rail transport



Austria is the leading 'railway country' in the EU. Passenger rail transport accounts for an average 2,260 km travelled by inhabitant and year, twice as much as the EU average (1,130 km) (Eurostat, 2018). At a rail share of 30% in goods transport, Austria also significantly surpasses the EU average of 20% (VCÖ, 2019). To ensure this share keeps rising in the future and in a bid to further step up environmental and climate protection, EUR 17.5 billion will be invested in rail infrastructure development until 2026. Together with the provinces, the federal government will also invest in regional railways, which are particularly important for rural areas. From 2021 to 2026, more than EUR 1 billion will be spent under this heading, in particular on upgrading stations and stops and on safety features at railway crossings.

The main focus of investments will be on developing local transport in conurbations, further electrifying the railway network and strengthening regional railways in cooperation with the federal provinces. Railway stations and tracks will be upgraded especially around

Salzburg, Innsbruck and in central Carinthia. Graz will benefit above all from an expansion of services on the Koralm, Southern, and East-Styrian railway lines.

With a view to population growth in conurbations, among other things, measures include extending platforms to be able to use longer trains with extra railcars and operating at shorter intervals. In the Linz conurbation area, the Western railway line will be further upgraded to allow services to run at shorter intervals. Using more energy-saving trains and green electricity, rail transport has been able to ecologically outdistance cars, trucks and airplanes even more than in the past.

Mobility Master Plan 2030



In order to reach the Paris climate goals, it will be necessary to systematically reorient the entire mobility system. The Mobility Master Plan 2030 (*Mobilitätsmasterplan 2030*) is a steering instrument for developing and implementing strategic solutions for passenger, goods and private transport. Full climate neutrality is the overarching tenet, with plans to substantially ramp up the infrastructure as well as offers in terms of both rates and vehicles in the system, to provide planning security for all stakeholders.

1-2-3 Climate Ticket



Public transport is to become both more affordable and more convenient. In future, as little as EUR 1,095 per year (which is equivalent to EUR 3 per day) is to enable use of the entire public transport network (including railway, bus, trams, etc.) throughout Austria. The 1-2-3 Climate Ticket (*1-2-3 Klimaticket*) is to be rolled out in stages. This EUR 3-a-day annual ticket valid throughout Austria will make public transport an affordable and central element of personal mobility. The regional tickets are scheduled to be implemented by no later than 2024. Contract negotiations are currently under way with regional transport association companies, provinces and urban transport providers. So far, contracts have been concluded with Salzburg, Tirol, Vorarlberg and Upper Austria. The funds needed to introduce the climate ticket – EUR 95 million for 2021, EUR 150 million for 2022, EUR 160 million for 2023 and EUR 170 million for 2024 – have already been budgeted in the National Financial Framework.

Greener and more resilient air transport



The climate crisis and the Covid-19 pandemic have given rise to major new challenges for the industry. Over the past few months, there has been an increased urgency to reassess the strategic framework and objectives laid down in the RTI Aviation Strategy 2020+. Alongside the first steps for greening air transport, the RTI Air Transport Strategy is being revised in 2021.

The programme TAKE OFF is a tried and tested instrument to implement Austria's RTI strategy for the aviation sector. Its aim is to develop innovative system solutions that point the way out of the climate crisis, and to make the industry greener, above all in areas where avoiding, or switching from, air transport is not possible. Ensuring that the industry goes digital and becomes capable of meeting cycle economy objectives is just as essential, which is why support is available also in this respect.

New priorities include, inter alia, new design and construction approaches, research into alternative drives and sustainable aviation fuels, potentials for reducing emissions, and digitalisation for an air transport industry that is competitive and ecological at the same time. Special attention is attributed to research into potential applications of hydrogen and sustainable aviation fuels, as experts say this might help reduce air travel climate effects by 50% to 70%.

2021 will also see a revision of Austria's aviation strategy, with due consideration of all current mobility trends as well as existing strategies and initiatives at national and international level. In this context, it will be crucial to view air traffic in the holistic transport system needed to meet mobility demands as efficiently and climate-friendly as possible, and to consider sustainability, Austria's position as a business location and domestic value chains alongside the resilience of the sector, not least against the backdrop of the Covid pandemic.

Flagship projects at province level



- Burgenland: Funding of local public passenger transport and alternative forms of mobility (continuation of the Biking Burgenland (*Burgenland radelt!*) initiative)

- Carinthia: Hydrogen fuelling station; purchase of 15 buses (purchase of another 45 buses by 2025)
- Carinthia: Charging stations for e-vehicles
- Carinthia: Construction of local mobility hubs
- Lower Austria: Mobility stations for developing innovative, digital and sustainable mobility solutions
- Upper Austria: Further development of local passenger rail transport (Urfahr-Ost – Main Station (S6 and/or metropolitan railway); Urfahr-Ost – Johannes Kepler Universität (S7); bus link Urfahr – Neue Welt; transfer hub S1 and S3; local transport hub S6 and S7; local transport hub Science Park – Johannes Kepler Universität)
- Upper Austria: Main bike route Steyregg Pulgarn (extending the main bike route network around Linz)
- Salzburg: Construction of a north-south link through the city of Salzburg (regional metropolitan railway)
- Styria: *Radmobil 2030* – cycling master plan for the conurbation of Graz
- Styria: Expansion of the tram network within the Graz city limits
- Styria: Extension of the Graz-Köflach railway lines
- Tirol: Mobility coordinators at regional level
- Vorarlberg: Increase in rail infrastructure capacities: Double-track section Lauterach – Hard towards St. Margrethen (Switzerland)
- Vorarlberg: Upgrading of railway stations and stops to multimodal mobility hubs
- Vorarlberg: Expansion of cross-border rail transport offer (Lake Constance line S7 (Romanshorn in Switzerland – Bregenz – Lindau in Germany))
- Vorarlberg: Increased rail capacities (new S5 line) upon timetable change 21/22
- Vorarlberg: Implementation of biking strategy (e.g. extension of cross-Vorarlberg bike route in Hohenems) and ramping-up of biking infrastructure; Biking-Friendly (*Radfreundlich*) campaign
- Vorarlberg: Development of *vmobil-Card* to include use of multimodal mobility offers
- Vorarlberg: Introduction of bike box systems at mobility hubs (digital reservation via *vmobil Card*)
- Vorarlberg: Launch of *VMOBIL* shared communications platform for sustainable mobility
- Vorarlberg: Development and implementation of a Vorarlberg-wide funding model for (e-)car sharing
- Vorarlberg: Preparation and adoption of the Goods Transport Concept Vorarlberg 2021 (*Güterverkehrskonzept Vorarlberg 2021*) plus implementation programme

- Vorarlberg: Studies on longer-term rail infrastructure expansion and securing of land under zoning law
- Vorarlberg: Guidelines on traffic calming on provincial roads in town centres (*Verkehrsberuhigung auf Landesstraßen in Ortskernen*) and implementation in practice
- Vienna: Cycle Routes Master Plan 2019 (*Masterplan Fahrradstraßen 2019*)
- Vienna: E-mobility centre Wien-Siebenhirten
- Vienna: Hydrogen competence centre Wien-Leopoldau
- Vienna: Erection of multimodal hubs (including so-called *Easymobil stations*)
- Vienna: Expansion of the underground network (new U5 line and extension of U2 line)
- Vienna: Expansion of inner-city tram network

3.4 Ecological financing and incentives

Green finance



According to forecasts by the European Commission, Europe will need an additional EUR 180 billion per year to reach the Paris climate goals by 2030. Austria's investment target for reaching these goals is estimated at EUR 17 billion per year. Given that public funds are tight, private capital will have a key role to play in this scenario.

Green Finance is a Climate and Energy Fund (*Klima- und Energiefonds*) programme designed to create opportunities to invest for private individuals and institutional investors alike. More specifically, the programme helps project developers with preparing their business plans in order to make projects 'bankable' for the capital market. Providing grants to cover part of the ancillary costs incurred in placing climate protection projects on financial markets, for certification, preparation of capital market prospectuses or platform usage fees, removes another obstacle for such projects.

Currently, the federal government is preparing what is called the Green Finance Agenda along with stakeholders from Austria's financial sector. This agenda is to contribute significantly to a green boost for the economy after the Covid crisis.

Aims include mobilising private capital for sustainable investments, reducing climate-related risks and promoting a long-term perspective. Not least, the measures being planned are to avoid negative lock-in effects, to make the transition to ecological or green products easier.

Sustainable market stimulus – sustainable public procurement



With a 12% share in annual GDP, the public sector is a quite significant player when it comes to sustainable consumption. The Action Plan for Sustainable Public Procurement (*Aktionsplan für eine nachhaltige öffentliche Beschaffung*) and the *klimaaktiv* climate protection initiative were created to provide a noticeable market stimulus.

Both instruments hinge on the key principle that the public sector should, when making procurements it has to obtain anyway, use its purchasing power to specifically buy products and services on the basis on sustainability standards, thus creating economic incentives without the need for extra financial grants. In concrete terms, the Action Plan provides that, in accordance with section 20 (5) of the Federal Procurement Act (*Bundesvergabegesetz*), a special focus is to be placed on the longevity and sustainability of products when awarding contracts for construction and civil engineering projects, procuring food, using energy, etc.

Partnerships existing at all levels, such as among the federal procurement agency (*Bundesbeschaffung GmbH*), the federal real-estate agency (*Bundesimmobiliengesellschaft*), the federal government, the provinces, the municipalities and local communities, the Environment Agency Austria (*UBA*), scientific institutions and NGOs, will be leveraged to implement the action plan as best possible.

Another horizontal measure is the *klimaaktiv* climate protection initiative, which, acting as a quality assurance system for public-sector grants, contributes to a more efficient use of funds. For 2021, some EUR 12 million have been appropriated for action related to the energy and mobility transition.

Expansion of environmental support funding



Mindful and more efficient energy use can help reduce the demand for energy by both businesses and private households over the long term. While energy efficiency measures will in most cases entail significant financial savings at any rate, many businesses, but also the public sector and private households are reluctant, in the face of substantial investment costs, to renovate their buildings, infrastructures and facilities. Investments in energy efficiency are often competing internally with other investments. Frequently, preference is given to investments that will boost revenues or to investments in replacements that have become necessary for technological reasons.

This is exactly where Domestic Environmental Support (*Umweltförderung im Inland - UFI*) comes in, offering an attractive portfolio of funding offers. The amendment of public funding legislation, which entered into force on 1 January 2021, also entailed significantly improved funding offers for heating. What is more, the 2020 amendment of the Environmental Support Act (*Umweltförderungsgesetz*) resulted in a massive increase in funding being enshrined in law. The Domestic Environmental Support budget was raised to EUR 110 million and extended to 2022, for the development and expansion of waste heat and biogenic local heat networks. The Renovation initiative can expect an increase in budget for 2021 and 2022 to EUR 650 million (see also 3.2.), while a total of EUR 100 million will be available for low-income households to balance extra costs incurred in transitioning to climate-friendly heating systems or carrying out thermal building renovation measures.

In addition, the newly created EUR 1 billion guarantee scheme for energy contracting projects will also benefit primarily private households. Since private households often lack the funds needed to invest in a transition to climate-friendly heating and contractors that would, in principle, be willing to invest in this segment, often shy away from excessive default risk, the federal government will provide guarantees to make such investments viable. The Domestic Environmental Support scheme complements other existing instruments, such as the investment premium, the Forest Fund (*Waldfonds*) or the Local Communities Investments Act (*Kommunalinvestitionsgesetz*), and contributes to implementing the Climate Billion (*Klimamilliarde*) scheme adopted by the Council of Ministers in the summer of 2020.

Local communities investment support



The Covid crisis has had a massive impact on the financial situation of Austria's local communities. Income is forecast to decline by EUR 1.5 to 1.9 billion (KDZ, 2021). As it is not possible to cut spending to the same extent over the short term, municipal finances are coming increasingly under pressure. Given this economic situation and the importance of regional value chains, the additional funding offers for ecological measures under the Domestic Environmental Support scheme are designed to boost green change as well as post-crisis recovery.

The 2020 Local Communities Investments Act adopted in the summer of 2020 is another key instrument for fostering not only investment at the local level, but also municipal cooperation projects. Overall, EUR 1 billion in federal funds have been budgeted for 2020 and 2021. The federal government takes over up to 50% of the costs of planned investments started in the period 1 June 2020 to 31 December 2021, and also for projects already started after June 2019 but where financing was no longer feasible due to the loss of income during the crisis. Investments eligible for grants include, inter alia, child day care facilities and schools, facilities caring for senior citizens and persons with disabilities, sports facilities, projects for making town centres more attractive, public transport, new public housing, and shared office spaces. Other major aims pursued by the funding scheme include renovation of municipal buildings and development of broadband capacity. From July 2020 to the end of March 2021, nearly EUR 600 million in earmarked grants were paid out, supporting investment projects accounting for a total volume of more than EUR 2 billion. The objective of the 2020 Local Communities Investments Act is to allocate at least 20% of the funds to ecological measures, thus strengthening the public sector's pioneering role in climate and energy matters.

Adjustment of taxes and charges in the mobility sector



Transport is among the sectors that cause the most greenhouse gas emissions. The highest share of emissions is attributable to road transport, and more specifically, to passenger car traffic. A fiscal measure aimed at reducing average carbon emissions by cars is to include an emission component in car registration taxes.

The amendment of the standard fuel consumption tax (*Normverbrauchsabgabe - NoVA*) under the relevant act has provided tax incentives favouring zero-emission or low-emission cars on the market. High-emission cars now are to pay a higher contribution, to make true cost transparent. Pick-ups and lightweight commercial vehicles with a truck registration will also be subject to the *NoVA* tax in future. The planned measures are expected to result in an average annual reduction of greenhouse gases by 36,000 tons in the period 2021-2030. In addition to the *NoVA* tax, carbon emissions have, since 1 October 2020, also entered into the calculation of other motor vehicle taxes, such as engine-related insurance tax and motor vehicle tax. The rules apply to motor vehicles with a first-time registration date after 1 October 2020.

As an additional incentive for green investments, zero-emission passenger cars are also eligible for accelerated depreciation, which means purchasing them will have a positive impact on taxes earlier.

The amendment of the Electricity Tax Act (*Elektrizitätsabgabegesetz*) implements the tax advantages for traction power and self-consumed green electricity envisaged in the Government Programme. Green traction power self-generated by railways from renewable energy sources is fully tax-exempt. Other types of traction power benefit from a significantly reduced tax rate. Another Government Programme item having been implemented is the green flight tax, with a new category of ultrashort flights (less than 350 kilometres) for which a EUR 30 charge per passenger was introduced effective as of 1 September 2020. This makes alternative modes of travel, such as railways, more attractive over short distances.

An amendment of the Income Tax Act (*Einkommenssteuergesetz*) is to make the so-called Jobticket more attractive as well. From July 2021, public transport tickets paid for by employers will be tax-exempt. The rule applicable so far, which limited ticket use exclusively to the route from and to the workplace, will cease to apply, making all-in or zone passes for public transport networks or the 1-2-3 Climate Ticket, in particular, more attractive.

The purpose of these changes in taxes and charges is to correct undesirable developments and reduce non-climate-friendly mobility behaviours, increasing not only the availability of climate-friendly means of transport, but also making them more affordable.

The following elements of Austria's eco-social tax reform are scheduled to be implemented by 2022: (a) measures to counter fuel tourism; (b) greening of the company car privilege for new company cars (stronger incentives for carbon-free cars); (c) greening and increased

accuracy of commuter allowances; (d) pricing-in of carbon emissions outside emission trading, with due consideration of developments at European level.

Flagship projects at province level



- Lower Austria: Introduction of SDG-related impact and risk assessments in public sector strategies and concepts (with stakeholder participation)
- Lower Austria: Public-sector sustainable procurement (*naBe2020*)

3.5 Biodiversity and conservation of resources

Conserving biodiversity



It has not been possible to reverse the loss of biodiversity, a trend observed for many years, neither in Austria nor at global and European level, in spite of numerous efforts and successes achieved in individual cases. The most recent report on biodiversity in Austria found that 44% of habitats and 34% of species had an unfavourable-bad conservation status (UBA, 2020, p. 13).

As early as in 2019, the Biodiversity Dialogue 2030 (*Biodiversitätsdialog 2030*) was initiated with various groups of stakeholders in an attempt to stop the loss of biodiversity. Based on the expertise gathered, a concept paper was prepared and subjected to a public consultation process in the summer of 2020. The Biodiversity Strategy 2030+ will be drafted in 2021.

A fund was set up in parallel, to promote measures contributing to reaching the goals of the Austrian Biodiversity Strategy 2030+, including, without limitation measures to (i) protect and conserve biodiversity (in particular endangered species and their habitats), (ii) improve and restore damaged ecosystems, (iii) link habitats, (iv) raise awareness, in particular for the importance of biodiversity, and (v) improve knowledge about biodiversity in Austria, biodiversity monitoring as well as knowledge bases, including with respect to the causes of

endangerment and how to mitigate them. A total of EUR 5 million has been made available for this purpose in 2021 from the Biodiversity Fund.

Circular economy



To slow down the global erosion of resources as well as climate change, to ensure reusability and to establish sustainable production and consumption patterns, the federal government is currently working on a Circular Economy Strategy and a Raw Materials Strategy.

The purpose of the Circular Economy Strategy is to enable innovative enterprises in Austria to seize the opportunities presenting themselves during and after the transition to a circular economy and thus to prepare the economy for a sustainable, resource-saving and crisis resilient future. In addition, a new funding option was created in March 2021 – endowed with a total of EUR 10 million, it is available for innovative business sector projects that address circular economy issues and the challenges along the value chain.

The vision embedded in the Raw Materials Strategy 2030 is for Austria to act as a trailblazer in strengthening Europe's industrial sector. A smart approach towards the extraction and processing of primary and secondary raw materials, with a focus on national reserves, will help extend the value chains and thus strengthen Austria as a place of business and industrial production. In an effort to speed up the transition to a circular economy, it is planned to develop measures to step up both the reuse rate of beverage containers and capacities for the sorting of plastic packaging materials.

In a bid to foster low-waste and resource-saving structures, the federal government also adopted tax reliefs for certain repair services. Since 1 January 2021, a reduced VAT rate of 10% applies to repairs of bicycles, shoes and leather goods, clothes and household linens.

Green culture



Paying attention to whether public funding available for Austria's art and culture sector is being used in an ecologically appropriate manner has become more and more important.

The Green Producing in Film and TV label (since 2017) and the eco-label for museums and exhibition venues (since 2018) are two labels that send out important signals with respect to sustainability and resource efficiency.

As the federal government uses funding instruments to offer further incentives, it has incorporated Green Filming as a new quality standard in public film funding. Over the next few years, project support for museums will also prioritise initiatives and activities aimed at sustainable and climate-friendly operations. In addition, the Austrian National Committee of the International Council of Museums (ICOM Austria), and the Austrian association of museums (*Museumsbund*) have come up with an instrument for quality control and quality improvement, the museum quality seal (*Museumsgütesiegel*). Relevant criteria include, for instance, eco-friendly conservation and restoration or choice of materials in exhibition design.

Flagship projects at province level



- Burgenland: *BioWende* – a programme to increase the rate of organic production in agriculture
- Salzburg: *Natur in Salzburg* – biodiversity check and implementation of measures (support for five local communities each year)
- Tirol: *Plattform Klima, Energie und Kreislaufwirtschaft* – a platform for circular economy & transformation in business, local communities, etc.
- Tirol: Clean Alpine Region (CLAR) – sustainable tourism regions
- Vienna: Smart City - quality of living, resource saving and innovation

4 Digital transformation, productivity, SMEs, public administration and justice

Relevant reference points



Country-Specific Recommendations:

- CSR 3/2019 (...) Support productivity growth by stimulating digitalisation of businesses and company growth and by reducing regulatory barriers in the service sector.
- CSR 1/2020: (...) Take all necessary measures, in line with the general escape clause of the Stability and Growth Pact, to effectively address the COVID-19 pandemic, sustain the economy and support the ensuing recovery. (...)
- CSR 2/2020: Ensure equal opportunities in education and increased digital learning
- CSR 3/2020: Ensure an effective implementation of liquidity and support measures, in particular for small and medium-sized enterprises, and reduce administrative and regulatory burden. Front-load mature public investment projects and promote private investment to foster the economic recovery. (...)



Six pillars of the Recovery and Resilience Facility (Regulation (EU) 2021/241):

- Pillar 1: Green transition
- Pillar 2: Digital transition
- Pillar 3: Smart, sustainable and inclusive growth, including economic cohesion, jobs, productivity, competitiveness, research, development and innovation, and a well-functioning internal market with strong SMEs
- Pillar 5: Health, and economic, social and institutional resilience, with the aim of, inter alia, increasing crisis preparedness and crisis response capacity
- Pillar 6: Policies for the next generation, children and youth, such as in the area of education and skills.



Goals of the 2030 Agenda for Sustainable Development:

- SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- SDG 5: Achieve gender equality and empower all women and girls
- SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all
- SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- SDG 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels



Other relevant documents:

- Action Plan Digital Austria and Action Plan Digitalisation 2022; Foreign Trade Strategy 2018; Austrian RTI Strategy 2030; EU Industrial Strategy; EU SME Strategy; European Green Deal; IGJ/ERDF & JTF-Programme 2021-2027; EU Strategy on e-Justice 2019-2023; Annual Sustainable Growth Strategy 2021

Increasing productivity is inextricably linked to digitalisation. The use of digital technologies has a great potential for innovation which, in turn, has a positive effect on a broad range of services, from health, education, public administration, justice and transport to

international trade. As well as being a key factor for job creation, the digital transition is crucial for strengthening the social and economic resilience and sustainable growth potential of the EU and its Member States.

Making up 99.6 % of all businesses, SMEs are the backbone of Austria's economy. SMEs in Austria employ 63% of persons in payroll employment and account for 62% of revenues and 60% of gross value added (BMDW, 2021, 14f). The federal government has launched a number of measures to further advance the strengths of Austria's SMEs, and, above all, to counteract imminent challenges. The Austrian RTI Strategy 2030 is meant to have a positive impact on the already high share of innovations attributed to SMEs. An accelerated expansion of broadband services, with optical fibre links to the high-performance backbone network, is to provide a further boost to SME competitiveness. In addition to these measures, the Action Plan Digitalisation 2022, a comprehensive management tool, and the Action Plan Digital Austria, a strategic action programme, are available to promote the digital transformation of the economy, society and public administration.

restarT, an action plan developed specifically for the 'Plan T - Master Plan for Tourism', addresses the impact of the Covid crisis on the tourism and leisure industry, which has been hit particularly hard. More equal opportunities between urban and rural areas are a priority, with closer coordination and consultation among the numerous stakeholders at local, regional and national level. The newly established Internet Infrastructure Platform Austria 2030 (PIA) pools synergies and drives simplified procedures and less red tape in broadband rollout. A key goal is to improve broadband availability especially in regions which so far have had insufficient coverage based on private business initiative alone.

More than any other crisis, the Covid pandemic has put into stark relief how important it is to have a strong industrial base in place also in Europe. The resilience of the economy can be significantly increased by expanding and/or reclaiming key areas of industrial production. Important Projects of Common European Interest (IPCEI), which not only generate high added value, but also engender substantial positive spillover effects for the entire internal market, have turned out to be a key mechanism in Europe-wide collaboration.

4.1 Business liquidity and business growth

Liquidity



Even though the economic situation of Austria's SMEs has been constantly improving over the course of the past ten years, their financial reserves and/or equity capitalisation are usually not comparable to those of large companies. Against this backdrop, banks play a crucial role in financing, in particular for SMEs in Austria, whose demand for debt capital is low in absolute numbers. While in 2019 the share of SMEs needing loans remained stable at 23%, this number significantly increased during the Covid crisis, reaching 44% in 2020. However, in parallel to the increased need for financing, the number of loan applications denied by banks rose as well. In most cases, the main reason for loan applications being denied was the lack of collateral (WKÖ, 2021a, p. 7ff).

In order to tackle liquidity problems related to the crisis, the federal government has adopted a comprehensive guarantee programme. By issuing guarantees for bridge financing under the SME Funding Act (*KMU-Förderungsgesetz*) and the 1977 Guarantees Act (*Garantiegesetz 1977*), Austria Wirtschaftsservice GmbH (aws) and Österreichische Hotel- und Tourismusbank Ges.m.b.H. (ÖHT) help companies remain solvent and bridge liquidity shortages. A number of other instruments adopted in response to the pandemic also help to directly boost the liquidity of affected companies, among them the compensation for lockdown revenue loss (*Lockdown-Umsatzersatz*), the loss compensation (*Verlustersatz*), the revenue loss bonus (*Ausfallsbonus*), the Corona aid fund (*Corona-Hilfsfonds*) (short-time work, tax relief), the fixed-cost subsidy (*Fixkostenzuschuss*) and the hardship fund (*Härtefallfonds*). The above measures aim to prevent healthy companies from becoming insolvent due to the crisis and to maintain the structures needed for economic recovery after the crisis.

2020 also saw the introduction of guarantees by the Austrian hotel and tourism bank ÖHT to cover the insolvency risk of tour operators, enabling them to continue offering package holidays and accepting down-payments from travellers, which help safeguard their liquidity.

Incentives for investment



The Covid crisis brought an exceptionally long and strong investment cycle to an end. While in the period between 2015 and 2019 gross investment in fixed assets increased by an average of 4% p.a., the general uncertainty as to the future economic development had many companies stop or postpone their investment projects (OeNB, 2020, p. 15).

To support the Austrian economy in this respect, the federal government introduced the so-called investment premium as a temporary support programme which offers companies an incentive to invest, thus contributing to safeguarding business establishments, creating and maintaining jobs and training placements, and strengthening international competitiveness. Given the special focus on greening aspects (alongside digitalisation and life sciences), investments in the green transformation will receive targeted support. The premium amounts to 7% of the investment eligible for funding (new investments in tangible or intangible fixed assets subject to depreciation) and is doubled to 14% for investments in digitalisation, greening, health and life science. Explicit exemptions apply, for instance for climate-damaging new investments. A budget of some EUR 5 billion is to be set aside for the future. The scope of guarantees for investments granted in particular to the tourism industry, which has been hard hit by the Covid crisis, was raised from EUR 375 to EUR 625 million so as to be able to continue providing as much investment support as possible.

Establishment of new businesses und start-ups



The Covid crisis has also had an impact on the establishment of new businesses. The spring of 2020 witnessed a marked fall in the number of new businesses being set up. However, as the year progressed, the number increased again so that, as a whole, 2020 saw merely a slight decline (-1.2%) compared to the previous year (WKÖ, 2021b, p. 10).

The founding of innovative businesses – in particular, start-ups – is essential for economic growth, job growth and structural change. A dynamic start-up scene has emerged in Austria in the past few years. Between 2008 and 2017, the number of start-ups rose by 15%. For comparison: In the same period, the number of newly established companies in Austria increased by an average of 3% across all industries and legal forms (AIT, 2019, p. 12).

In order to provide long-term support to growth-oriented start-ups and to boost Austria's attractiveness as a business location also internationally, the Government Programme provides for the introduction of a new legal form (under the working title Austrian Limited), which is scheduled to be put into law in the coming months. It will be tailored specifically to the needs of start-ups and innovative SMEs as well as to social entrepreneurship and will, in particular, allow flexible participation arrangements for investors and employees. The new legal form is meant to accelerate company formation, to make equity financing easier by offering more flexibility in assigning shares to investors, especially in the research and development segment, and to facilitate attracting skilled labour by allowing for flexible employee participation schemes. While intended to be open to all kinds of businesses, it has been purposefully designed with the needs of start-ups and innovative SMEs in their early stages in mind. Another aim of the new legal form is to boost Austria's attractiveness as a business location in general and to send out a strong signal that setting up business in Austria has become a lot easier. This new and innovative legal form will also meet Austria's high standards in terms of transparency and legal certainty, with the fight against money-laundering and social fraud high on the agenda, ensuring that the level of protection afforded to creditors, investors and employees will remain as high as it is now.

Continued development of SMEs



Given the particularly challenging economic circumstances, SMEs are faced with at present (restrictions or even closures of business establishments due to Covid measures), they do need the best possible support. The purpose of the pilot project Future Perspective! (*Perspektive Zukunft!*) is to help SMEs affected by the Covid crisis to develop strategies for their immediate future and to point out to them specific opportunities they have in the 'new normal'. The project offers, on the one hand, an online platform (featuring expert tips on pandemic-related, typical business questions and information on where to get in-depth advice), and, on the other hand, free consultations provided by specialised business consultants. SMEs affected by the crisis will receive advice tailored to their needs, with a special focus on liquidity, business continuity, future-oriented business models and sustainable corporate strategy.

Export promotion



The Covid crisis has put a significant damper on Austrian exports. Supply and production stops in all major world regions as well as problems in cross-border freight transport disrupted global supply and value chains.

go-international, an initiative developed in cooperation with the Austrian Economic Chambers (WKÖ), is an effective instrument that helps companies, in particular SMEs, to enter the global market and also implements numerous measures provided for under the Foreign Trade Strategy. A budget of some EUR 25.6 million has been set aside for the period between April 2021 and March 2023, in particular for direct grants, advisory services, events and digitalisation measures.

COVID-19 Aid (*COVID-19-Hilfe*) is a programme set up specifically to boost exports. Managed by the Austrian Control Bank (*OeKB*), it makes additional EUR 3 billion available in loans to the export industry. The programme's primary aims include securing the liquidity of exporting enterprises and safeguarding jobs.

4.2 Sustainable industrialisation

IPCEI on Batteries



Within the scope of the IPCEI (Important Projects of Common European Interests), Austria has benefitted from the positive spillover effects the pooling of knowledge, know-how and financial means of European businesses has had on growth, employment and competitiveness.

In early 2021, the European Commission approved the project IPCEI on Batteries, which involves 42 enterprises from twelve Member States, six of them from Austria. This makes the IPCEI on Batteries the first large-scale pan-European project involving participants from Austria. The federal government will support these six Austrian enterprises with a total of EUR 45 million. The project is handled by the Austria Wirtschaftsservice GmbH (aws) and the Austrian Research Promotion Agency (FFG).

The project's goal is to make Europe the prime location for the development and production of batteries – from the extraction of raw materials to the design and manufacturing of battery cells, product integration and recycling. The initiative is to provide an impetus for strengthening research, technology and innovation in Europe and to promote climate protection and the implementation of the European Green Deal. In the next few years, the Member States involved will make some EUR 2.9 billion available for setting up the entire battery value chain. This investment is expected to mobilise additional private-sector investments with a total volume of EUR 9 billion. The overall project is expected to be completed by 2028.

IPCEI on Microelectronics



Austria is already home to a strong microelectronics industry with a number of world market leaders and now strives to further strengthen its position and increase its international competitiveness by participating in the IPCEI on Microelectronics. On 23 March 2021, the European Commission approved the participation of three Austrian enterprises in the IPCEI on Microelectronics. A total of 32 direct partners (30 enterprises and 2 research institutions) from four EU Member States and Great Britain are involved in the project. In addition to private investments of more than EUR 6.5 billion, the five participating countries can distribute aids in the amount of nearly EUR 1.9 billion.

The three Austrian projects complement the existing IPCEI by developing new components in the fields of energy-efficient chips and power semiconductors, with potential uses, for example, in the Internet of Things or in the automotive sector. By cooperating with Austrian and European research institutions and businesses – in particular, SMEs – these Austrian enterprises will, thanks to spillover effects, help boost innovation far beyond their original sector. The European Commission has approved up to EUR 146.5 million in potential state aid for the Austrian projects in the period between 2020 and 2024.

IPCEI on Microelectronics II



Based on the Declaration on Microelectronics, 20 Member States are currently involved in negotiations on an IPCEI on Microelectronics and Connectivity. Austria, too, expressed its

interest in participating in the project and conducted the first stage of a call for expressions of interest already in the fall of 2020. This call met with a lot of interest on the part of the industrial sector and identified great potential, in particular in process technology, packaging, sensors, power semiconductors and communication technology. The second stage can be launched in the spring of 2021. In participating in the IPCEI on Microelectronics, Austria aspires to strengthen its digital sovereignty and to make a substantial contribution towards climate protection.

IPCEI on Hydrogen



The Hydrogen Manifesto, which was signed by Austria and 21 other Member States, marked the official start of negotiations on the IPCEI on Hydrogen. The first stage of the call for expressions of interest in the fall of 2020 met with a lot of interest on the part of Austrian industry and identified great potential for contributing to achieving the climate goals as well as for optimising and ramping up production and creating future-proof jobs. Hydrogen as an area of research is a key driver of climate-friendly innovation and sustainable future technologies, especially with a view to Austria's industrial sector remaining competitive in the face of climate change. Austria plans to launch the second stage of the call in the spring of 2021.

IPCEI on the Decarbonisation of Industry



At European level, first exploratory talks are under way regarding an IPCEI on the Decarbonisation of Industry, on the part of the relevant umbrella organisations of European industry. In view of the high level of involvement in the steel, chemical, cement and waste management sectors, Austria will play an active role in shaping the concept of an IPCEI and will, in the event of participation, work with the other partner countries to promote the progress of the IPCEI. Austria already started the first stage of a call for expressions of interest in the fall of 2020, which showed a large potential and promising projects. Austria is aiming for a concrete notification under the rules of state aid in 2022 on the basis of investment needs analyses that have yet to be scientifically confirmed, but this depends to a large extent on the willingness of the necessary partner countries. Participation in a possible IPCEI in this field could advance decarbonisation in strategic areas (e.g. steel and

cement, waste and recycling, etc.), thus making a crucial contribution towards meeting national and European climate goals.

Austrian Innovation and Transition Fund



The Austrian federal government also seeks to use national instruments in its efforts to transform energy-intensive industrial production. Accordingly, the first six months of 2021 will see the establishment of the legal basis for an instrument designed to assist those businesses that are of particular importance for Austria's position as a business location in adjusting to the necessary changes. This instrument is scheduled to enter into effect as from 2022. A transformation and innovation vehicle is to mobilise considerable funds for helping particularly high-emission businesses to adjust while remaining competitive and ensuring compatibility with the Paris climate agreement. This initiative is aimed at consolidating Austria's position as an attractive location for business and industry as well as at maintaining competitiveness, while leveraging funding available at European level, in particular under the EU ETS Innovation Fund, for Austria's economy.

Flagship projects at province level



- Upper Austria: HCMA Hydrogen & Carbon Management Austria demo facility

4.3 Digital transition in businesses

Digital transformation



Businesses in Austria are increasingly adopting digital technologies, and this transformation process is likely to have accelerated even more due to the Covid pandemic (OECD 2020a). More and more businesses and stores have their own websites and handle their business correspondence as well as their advertising and marketing activities via e-mail. Despite this

development, SMEs have been found to substantially lag behind when it comes to more sophisticated ICT applications which require higher integration with the digital economy, and to suffer disadvantages in competitiveness and productivity as a result (OECD 2020a, p. 105).

To support SMEs in tackling the challenges of digital transformation, the federal government has prepared a support program tailored to the specific needs of SMEs. The SME.DIGITAL (*KMU.DIGITAL*) support programme, which is handled by the Austria Wirtschaftsservice GmbH (aws) in cooperation with the Austrian Economic Chambers (WKÖ), has been available to SMEs since 2017. A total of EUR 20 million (EUR 5 million p.a.) has been made available for advisory services and implementation support for the period 2020 - 2023. The Austrian National Tourist Office (*Österreich Werbung*) supports the tourism sector in addressing digitalisation challenges. Projects such as the Next Level Tourism Austria platform and the Austria Experience Data Hub aim at building up expertise, while at the same time setting up a virtual service provision chain by collecting, cross-linking and supplying data.

In the fall of 2020, a tailor-made programme for e-commerce was launched; programme administration lies, once again, with the Austria Wirtschaftsservice GmbH (aws). SME.E-Commerce (*KMU-E-Commerce*) helps companies create a professional online presence and/or online shop, set up the required IT security infrastructure (including protection against cyber-attacks) and to engage in online marketing. For 2021, EUR 10 million have been allocated to this initiative.

The Once Only reform project aims at digitalising and further cutting red tape in the way businesses and citizens interact with public authorities. In accordance with the Once Only principle, data will have to be reported to the public administration only once, with subsequent transfers being possible between various public authorities. The national Once Only project will be launched in the business sector and can later be extended to cover individual citizens' interactions as well. The goal is to decrease the burden on both businesses and administration by implementing the Once Only principle through suitable measures in an effort to reduce incidences of double and multiple data reporting. In addition, it contributes to the objective and obligation, defined at European level, to develop the digital single market by reducing the administrative burden for citizens and businesses and to establish a Single Digital Gateway.

As part of the so-called Once Only Platform, a database covering requirements to provide information is to serve as a data map for all information requirements under federal law, providing a comprehensive overview of existing potential for optimisation in technical, legal and organisational terms. The so-called Registers and Systems Network (*Register- und Systemverbund*) will be the pivotal data hub of the Once Only Platform, enabling the safe and easy transfer between public authorities of information which businesses report to one authority because they are required to supply it, but which is already available at another public authority. The once-only collection and provision of data is to ensure a maximum of transparency for everybody involved, while at the same time ensuring the respect of data privacy.

In addition to the aforementioned grant programmes, regional digital centres also assist SMEs with their digital transformation processes. A network of six Digital Innovation Hubs (DIH) spread across Austria makes sure that the majority of domestic SMEs have a contact person in their region. Digital Innovation Hubs offer information and CPD and make their expertise and infrastructure available to assist SMEs in implementing their digital innovations projects. More European DIH are currently being established within the scope of the Digital Europe Programme.

These support programmes aim to help SMEs catch up with digitalisation in all possible aspects, support them throughout their digital transformation and boost productivity growth as well as competitiveness.

Moreover, a framework document setting out targets, guidelines and principles for speeding up the digital transformation in Austria has been drafted – the Action Plan Digital Austria aims to establish a 'society aware of digital responsibility'. The measures, developed in close cooperation with stakeholders and experts from society, the public administration and the world of business, are aimed at creating jobs and prosperity, improving the citizen's quality of living and offering secure and accessible state-of-the-art administration services.

Digital skills



The digital skills available in a business significantly determine how competitive, productive and resilient it can be. The qualification initiative (which includes Digital Skills Vouchers, Innovation Camps, Digital Pro Bootcamps) is meant to quickly raise and improve the digital

skills of employees (in particular in SMEs). In 2021, the budget for this measure amounts to some EUR 7.6 million excluding processing costs.

The Digital Bonus support programme was developed to ensure that (job-relevant) general digital skills will be acquired swiftly. The programme is to be broken down by major themes and skill levels (DigComp 2.2 AT). A financial and performance-based incentive for different target groups is meant to guarantee that employees will be able to keep pace with the digital transformation of job profiles. The Digital Bonus scheme will support 38,500 persons in acquiring digital skills. A budget of EUR 4.5 million has been made available for the period 2021-2022 (see also 4.4.).

Flagship projects at province level



- Burgenland: Acquisition of a surgical robot for the Oberwart hospital; expansion of robotic surgery (*KRAGES* hospital association)
- Burgenland: Improvement of digital documentation; patient guidance (*KRAGES* hospital association)
- Burgenland: Automated transmission of lab information (*KRAGES* hospital association)
- Burgenland: Creation of a digital study offer (*KRAGES* hospital association)
- Carinthia: Digital Innovation Hub SOUTH – SMEs & digital transformation
- Lower Austria: Broadband ramp-up to expand digital infrastructure
- Upper Austria: Fiber to the Home – FTTH, with a focus on rural areas
- Salzburg: EdTech Austria Hubs – for educational facilities and SMEs (together with the Austrian Economic Chambers)
- Salzburg: Digitalisation campaign for SMEs; business location policy (see also 6.2 and 6.3)
- Tirol: digital.tirol – SME support scheme
- Tirol: Digitalisation support (implementation of digitalisation measures, including training)
- Vienna: Women & digitalisation – strengthening digital skills
- Vienna: Training and education in digital technologies (Digi-Winner; together with the Austrian Chamber of Labour)
- Vienna: Strategy VIENNA 2030 – international encounter and digitalisation
- Vienna: Strategy VIENNA 2030 – smart production

4.4 Human capital in companies

Promotion of entrepreneurship in Austrian schools – Entrepreneurship Week



The challenges of an increasingly uncertain future call for creative ideas for a sustainable and future-ready development of Austria as a successful business location. Against this backdrop, it is important that pupils and students are encouraged early on to choose creative and solution-oriented paths. With this objective in mind, the so-called Entrepreneurship Week was enshrined already in the 2020-2024 Government Programme.

The Entrepreneurship Week is a measure aimed at promoting young talent. It is comparable to a school project week in the course of which young people learn to use their own ideas to solve problems proactively as well as to develop and present their own business models (elevator pitch). Following the successful completion of the pilot project in the fall of 2020, a total of 45 of such Entrepreneurship Weeks with 90 participating school classes is to be rolled out in the course of 2021. The budget dedicated to this initiative amounts to some EUR 500,000.

Apprenticeship-based vocational education and training



Various measures helped to successfully cushion the impact of the Covid crisis on the apprenticeship market. It was in particular the short-time work option for apprentices that enabled companies to keep on their apprentices, a development reflected also in the relatively small decline in the number of apprentices (-0.8% in businesses taking on apprentices as at February 2021). Further support measures for apprenticeship providers included, for example, adjusted home-office rules for apprentices, additional measures for the coaching of apprentices and apprenticeship providers, as well as increased funding for (continued) education and training measures for apprentices under the relevant funding schemes available to businesses offering apprenticeships.

Furthermore, the federal government introduced an Apprentice Bonus (*Lehrlingsbonus*) to effectively counteract the possible decrease in apprenticeship placements for skilled workers. Within the scope of this initiative, companies will receive a bonus in the amount

of up to EUR 3,000 for each new apprenticeship agreement entered into between March 2020 and October 2020. The bonus for small enterprises (*Kleinunternehmerbonus*) included in the scheme puts a further focus on SMEs. Where apprentices are taken over from state-subsidised training centres to continue their apprenticeship at a business enterprise, the relevant apprenticeship agreement must be concluded by no later than 31 March 2021 for the business to be eligible for the bonus.

Digitalisation is transforming all sectors of the economy and causing new business models to emerge and existing ones to change. This is why training contents must be continuously adapted to meet ever-changing market requirements. Austria is continuously modernising its apprenticeship offer, by drafting and adopting three apprenticeship trade packages per year in cooperation with the social partners, while also regularly screening the entire apprenticeship landscape every five years, a process in which businesses are also directly involved. In addition to expert knowledge, transversal skills, in particular in the fields of digitalisation and sustainability, also play a key role in developing new job profiles.

Strengthening the role of girls and women in STEM fields



In March 2021, a call for projects promoting the empowerment of girls and women in education, work and society was published with a special focus on Science, Technology, Engineering and Mathematics (STEM) as well as financial skills. The aim of the initiative is to support, between 1 October 2021 and 31 December 2022, projects all over Austria that are geared towards breaking up gender-specific role models – in particular, those affecting the choice of education and career – and further strengthening economic empowerment. A total of EUR 1.3 million will be made available to implement projects pursuing the following targets: Strengthening empowerment and economic independence of women; increasing women’s visibility in fields of education and work so far dominated by men (focus: STEM); diversification of girls’ and women’s choice of education and career with a view to further fostering income and gender equality on the labour market of the future (particularly, STEM subjects); and promoting financial skills and financial education of girls and women to enable them to make well-informed financial decisions, thus further increasing their economic independence.

Skilled workers



Well-trained skilled labour is the foundation for sustainable economic growth and successful, competitive enterprises. A number of levers are used to effectively counteract potential skills shortages. On the one hand, future skill requirements are mapped in current profile development for apprenticeship trades, with directly involved businesses playing a crucial role in this process. On the other hand, various upskilling and CPD measures ensure that the existing labour potential is used more efficiently, for instance by stepping up the training of women for tech careers.

The Fast-Track Training for Skilled Workers (FIA) and the Skilled Workers Scholarship (FKS) are two key instruments for promoting upskilling and preventing skills shortages (see also chapter 5). The FKS is available for education programmes conferring qualifications below university level. Funding is provided above all for education and training in professions where there is a shortage of labour (e.g. STEM, healthcare, caregiving and social services). In 2020 a FKS was granted in a total of 3,200 cases with an overall funding volume of EUR 56.6 million; 19% of this amount went to persons having merely completed compulsory schooling (see also chapter 5: Support for the low skilled). It is still possible until 31 December 2022 to apply for a FKS for the duration of the respective education programme (no longer than 3 years).

With a view to further increasing the permeability between vocational and university education in Austria and to making educational programmes and qualifications obtainable in vocational tertiary education more attractive, visible and internationally comparable, the federal government is currently working on establishing a legal basis for university-level vocational education.

Flagship projects at province level



- Burgenland: Digitalisation training for technical professions
- Burgenland: IT training measures for unemployed persons
- Vienna: Women & digitalisation – strengthening digital skills
- Vienna: Training and education in digital technologies (Digi-Winner; together with the Austrian Chamber of Labour)

4.5 Public administration

Strategic performance management and impact orientation



Since January 2013, the management of the Austrian federal administration has been paying increasing attention to how its actions affect society. The enshrining of impact-oriented administration management and impact assessment and the resulting evidence-based gearing of budget and personnel resources towards sought impacts has rung in a paradigm shift in administration management.

This organisational and cultural development process is in full swing and must be continuously adapted to reflect the constant changes of framework conditions caused by social and technological developments, while at the same time being aligned with existing strategies (e.g. Digitalisation Strategy) and target structures (e.g. achieving factual equality of men and women, SDGs). Moreover, the opportunities offered by digitalisation must be seized to further improve the entire system, for example by developing suitable management information systems, agent-based modelling or providing more data for evidence-based decisions.

Legal aspects



Up-to-date legal provisions for public sector employment and salaries are pivotal for an innovative and reliable civil service that is free of corruption. Due to current demographics (48% of public sector employees in Austria will retire within the next 13 years), the steeply rising need to recruit personnel for the federal civil service also results in more demanding requirements in organisational terms. Against this backdrop, being considered an attractive employer and taking into account changing social conditions is as important as the introduction of new forms of work, greening, or the various effects of digitalisation on the regulatory environment.

In its capacity as employer, the federal government is well aware of its responsibility vis-à-vis its employees, in particular also in the current pandemic-induced crisis, and maintains a regular and constructive dialogue with the Public Service trade union to be able to respond

swiftly to employment law questions and problems as and when they arise. In its efforts to further develop public sector employment and salary law by way of revisions and other specific law-making projects, the federal government, in its capacity as employer, always seeks to model regulations on similar private-sector legal provisions where this appears feasible and appropriate. What is more, within the scope of its efforts to prevent corruption, the federal government continuously implements measures to promote integrity in the public service (e.g. new code of conduct to prevent corruption in the civil service, including a supplementary e-learning tool). Whistle-blower protection has also been expanded under Directive (EU) 2019/1937.

Human resources management, development and controlling



Effective and forward-looking human resources management aims to identify trends and challenges early on and take the right measures and initiatives in good time to ensure that public service will continue to work efficiently also in the future. At best, reliable forecast and planning instruments enable management to make proactive use of discretionary leeway resulting, for example, from demographic changes, and seize opportunities accordingly. In this context, effective planning tools and controlling mechanisms are just as crucial as having a wide range of HR development instruments at one's disposal.

The Federal Ministry for Arts, Culture, Civil Service and Sport (BMKÖS) and its Division III (Civil service and innovation in administration) promotes forward-looking and transparent human resources management by further developing the data basis, forecast models, monitoring instruments and benchmarks in HR controlling, and by stepping up HR marketing and modernising recruiting processes with a view to future demographics-related challenges. In terms of HR development, CPD and support offers and further development of target-oriented performance appraisals, as needed, help promote new forms of collaboration – in view of digitalisation and new work – as well as leadership development and a cooperative management style. To ensure quality-oriented HR development, the use of shared services is encouraged, and the cross-organisational sharing of good practices is supported by means of international and inter-institutional networking. Another goal is to continuously increase the share of women in public service management positions: to reach this goal, targeted support offers are made available, among them Cross Mentoring, a programme preparing women to take on leadership responsibility.

Public management and innovation



Introducing impact orientation allowed the public administration in Austria to systematically improve the efficiency and effectiveness of its services in past years. However, to continue meeting the ever more demanding requirements posed by technological and social change and increasingly scarce resources, it is necessary to adapt administrative processes on an ongoing basis.

To foster innovation within the federal administration, the BMKÖS and its Division III relies on improving framework conditions (structures and processes), skills development, communications and interconnectedness and provides support for scaling and/or implementing innovative projects. Furthermore, improved decision making, transparency and Open Government are fostered by developing guidelines and support offers for digital and analogue public participation and better visualisation of management-relevant data. Finally, consistent quality management and appropriate instruments help analyse and continually improve public administration services and processes, while developing and providing both analogue and digital knowledge management instruments can ensure that relevant administration knowledge is identified, documented and disseminated.

e-Government



According to a Eurostat study, an average of 56% of Internet users in the EU interact online with authorities and public institutions. At 72%, Austria significantly exceeds the European average (Scheiber, P. et al., 2020, p. 20). In addition, Austria ranks third in the EU's eGovernment Benchmark 2020.

Against the backdrop of the Covid pandemic, many administrations increased their range of digital services and contact channels in response to the overwhelming demand. Such steps have had a positive effect on the citizens' perception of this matter, which is likely to contribute to such services being used more frequently also in the future.

The Action Plan Digitalisation 2022 (Digitalisation Fund) is to promote investments in a citizen and service-oriented administration with an up-to-date infrastructure. An additional EUR 160 million will be made available for further digitalisation measures in 2021 and 2022

(EUR 80 million each year). At least half of the Digitalisation Fund resources will be used for cross-institutional projects for IT consolidation within the federal government. The remainder is available for projects with cross-institutional impact aimed at boosting services for citizens and business alike, but also for projects designed to speed up and increase the efficiency of administrative processes.

The further development of the Business Service Portal (USP), the key e-government platform for businesses in Austria, is a cornerstone of the digitalisation campaign. EUR 3.5 million will be made available for this project in 2021 and 2022, respectively. These funds are earmarked for IT architecture adaptations designed to enable EU-wide cooperation relying on European e-government processes for cross-border use and to improve such cooperation in accordance with the Once-Only principle.

The key platform for Austrian citizens, www.oesterreich.gv.at, and the corresponding app, *Digitales Amt*, will also see major upgrades. Essential new functions include the digital driver's license, the electronic signing of PDF files via the app, and the so-called E-ID, an eIDAS-compliant upgrade of the Citizen Card (*Bürgerkarte*) or mobile phone signature (*Handy-Signatur*). To implement these changes, a budget of EUR 6 million has been made available for 2021 and 2022, respectively. This will also enable towns/cities and municipalities to catch up to the forefront of e-government innovation, bringing public administration closer to the citizens it serves.

e-Justice



The Covid pandemic has had a strong impact on justice systems and revealed a number of challenges affecting their functioning. Digitalisation can significantly contribute to increasing the resilience and strength of justice systems, making them better prepared for future challenges. The EU Justice Scoreboard confirms that Austria has already made great progress. However, it is now time to roll out the digitalisation measures launched under Justice 3.0 on a larger scale, to all courts and public prosecutor's offices, and for all types of proceedings.

In addition to the continued rollout of electronic file-keeping in civil law proceedings and the upgrade of *JustizOnline*, the digital service platform of Austria's courts and public

prosecutor's offices, one of the main goals for 2021 and 2022 is the digitalisation of criminal proceedings, a task which involves EUR 4 million p.a. in development costs.

5 Labour market

Relevant reference points



Country-Specific Recommendations:

- CSR 2/2019: Shift taxes away from labour to sources less detrimental to inclusive and sustainable growth. Support full-time employment among women, including by improving childcare services, and boost labour market outcomes for the low skilled in continued cooperation with the social partners. Raise the levels of basic skills for disadvantaged groups, including people with a migrant background.
- CSR 1/2020: Take all necessary measures, in line with the general escape clause of the Stability and Growth Pact, to effectively address the COVID-19 pandemic, sustain the economy and support the ensuing recovery. (...)



Six pillars of the Recovery and Resilience Facility (Regulation (EU) 2021/241):

- Pillar 3: Smart, sustainable and inclusive growth, including economic cohesion, jobs, productivity, competitiveness, research, development and innovation, and a well-functioning internal market with strong SMEs
- Pillar 4: Social and territorial cohesion
- Pillar 5: Health, and economic, social and institutional resilience, with the aim of, inter alia, increasing crisis preparedness and crisis response capacity
- Pillar 6: Policies for the next generation, children and youth, such as in the area of education and skills.



Goals of the 2030 Agenda for Sustainable Development:

- SDG 1: End poverty in all its forms everywhere
- SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- SDG 5: Achieve gender equality and empower all women and girls
- SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all
- SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all



Other relevant documents:

- European Pillar of Social Rights, Council Recommendation on the integration of the long-term unemployed, Youth Guarantee, ESF+ Operational Programme Employment Austria 2021-2027; Annual Sustainable Growth Strategy 2021

The Covid crisis has brought with it tremendous challenges for the labour market in Austria. The first lockdown in the spring of 2020 caused unemployment to climb to the highest level registered since World War II (Bock-Schappelwein, J. et al., 2020a, p. 371). After massive job losses in the spring (March: -4.9%, April: -5.0% compared to prior year levels), the restart of the economy and thriving tourism activity over the summer months curbed, until

September, the decline in the number of employed persons² at -1.0% year-on-year. The renewed lockdown in November and the total loss of the winter season in tourism led to another drop in employment, which, by the end of December, was down 3.3% from the preceding year. On average, the year 2020 (i.e. including the period at the beginning of the year before the first lockdown) saw the number of employed persons decline by -2.0% (2019: +1.6%) (Bock-Schappelwein, J. et al., 2021). In a bid to safeguard as many jobs as possible, the federal government, alongside the social partners, implemented a multitude of different measures to cushion the effects for workers.

Corona short-time work



The Corona short-time work (*Corona Kurzarbeit*) scheme was introduced to avoid layoffs and to compensate, at least partly, the loss in income suffered by those employed. Under the scheme, normal working hours are reduced temporarily, with workers getting paid between 80 and 90% of their previous income by their employers each month, based on a staggered scale. Those earning more than EUR 2,685 receive 80% of their prior net remuneration, those earning between EUR 1,700 and 1,685 are entitled to 85%, while everyone earning less than EUR 1,700 takes home 90% of their previous pay. The Corona short-time work scheme is open to all businesses, regardless of size or field of activity. Over the past few months, the Corona short-time work scheme has been extended several times, most recently until the end of June 2021. This gives businesses planning security, while employed persons receive remuneration equivalent to at least 80-90% of their previous net income (100% in the case of apprentices). Phase 4 (from 1 April 2021 to 30 June 2021) will see a stronger focus on education and training. The general goal is a phase-out of Corona short-time work after the end of phase 4, with an adapted offer aimed at safeguarding existing jobs.

In 2020, some EUR 5.5 billion were paid out for Corona short-time work, with participation in the scheme peaking in April 2020 with more than 1 million employed persons. The maximum budget appropriated for pay-outs and guarantees amounted to EUR 12 billion. A

² Definition in accordance with the Labour Force Survey. A person is deemed to be an employed person if they have worked one hour during the reference week.

budget of up to EUR 7 billion has so far been set aside for 2021 by way of administrative orders.

The aim of this measure is to safeguard jobs and expertise. For some 200,000 persons, it helped prevent layoffs due to the crisis (AMS, 2021a), enabling businesses to retain their staff and thus be well positioned for the recovery expected to follow the pandemic. What is more, it was also possible to at least partly compensate the loss of income for those affected.

Restart Bonus



In the summer of 2020, the already existing Combination Wage Allowance Policy (*Richtlinie zum Kombilohn*) issued by the Austrian Public Employment Service (AMS) was adapted in an effort to provide support for people re-entering the labour market. The resulting Restart Bonus (*Neustartbonus*) is intended to promote the take-up of employment. It is granted to supplement cost of living during a period of low-pay employment. Previously unemployed persons can apply for the Restart Bonus provided they take on fully insured employment of at least 20 hours per week. The amount granted is equal to the difference between the last monthly unemployment benefit/unemployment assistance received, plus a defined surcharge, and the new net income from employment (including special vacation and holiday pay). The Restart Bonus is capped at EUR 950 per month and applies for employment taken up between 15 June 2020 and 30 June 2021.

Funding for the Restart Bonus is limited to EUR 30 million. Target groups that are disadvantaged on the labour market (older persons, persons with health issues, persons re-entering the labour market) continue to have access to the combination wage allowance without any time or financial limits.

The goal of the measure is for persons who were previously unemployed to take up employment and become integrated in the labour market. It helps create jobs, in particular in businesses which are not operating at full capacity due to the Covid crisis, and prevents long-term unemployment.

Corona Job Drive



The qualifications available on the market frequently fail to match the demand for skilled labour. As long as the labour market shows no signs of recovery, the federal government is seizing the moment to prepare workers for the challenges of the future on a broad basis.

The Corona Job Drive (*Corona Joboffensive*) was launched in 2020 based on the idea to enable people to leverage the crisis for CPD and upskilling and find their way back into employment. Thematically, the focus is on areas where higher demand is likely once the crisis has been overcome: electronics/digitalisation, nursing/social work/caregiving, sustainable jobs/environmental technology, and metal working. The instruments applied in this context include upskilling, employment support, benefits, and a training bonus.

The overall budget for the Corona Job Drive is EUR 700 million, for the period 1 October 2020 to 31 December 2022. Plans for 2021 provide for payments of EUR 428 million, and another EUR 214 million for 2022, with the so-called training bonus accounting for EUR 58 million as well.

Target groups include persons who are unemployed or at risk of unemployment, employed persons (also those in short-time work), young persons, women, and persons with disabilities. Upskilling and reskilling is to prevent or reduce unemployment and help cover the demand for skilled labour.

Persons with disabilities, and young people in particular, often face more difficulties than others, both in vocational training and on the job. To meet this specific demand and provide targeted support to persons with disabilities and young people at risk of marginalisation investments are made in expanding the Austrian Public Employment Service (AMS) offers. Key activities in this respect include enlarging offers for young people by the Job Assistance Network (NEBA), further expanding the easy-access prep-stage modules under the Fit for Education (*AusbildungsFit*) scheme, and a NEBA pilot service for counselling and assistance on work and disability for businesses.

One-off payments to unemployed persons and raised unemployment assistance



In the wake of the Covid pandemic, more people have been affected by longer-term unemployment. The federal government has taken action to provide financial support in this context. 2020 saw two one-off payments to persons having claimed unemployment benefits/unemployment assistance for a longer period of time. In September 2020, all unemployed persons who had drawn unemployment benefits or unemployment assistance for at least 60 days between May and August 2020 received a pay-out of EUR 450. Another one-off payment was made in December 2020, based on a staggered scale. Persons having drawn at least 45 days of unemployment benefits/unemployment assistance from September to November 2020 received EUR 450, while EUR 300 were paid out to those with an unemployment record of at least 30 days, and EUR 150 to those with at least 15 days.

In addition, the amount of unemployment assistance was raised to the level of unemployment benefits for a limited duration, from 16 March 2020 to 30 June 2021, in a bid to provide increased support.

Some EUR 360 million were paid out under the one-off payments scheme, while raising the amount of unemployment assistance accounted for about EUR 100 million in the budget for 2020. These measures are also designed to support the incomes, and raise the purchasing power, of people affected by unemployment.

Young persons



The Covid crisis has further worsened labour market prospects for low skilled young persons and those lacking basic skills. In 2020, the number of young persons registered as unemployed rose by 43%, comparatively steeply compared to the preceding year (while overall unemployment grew by 36%) (AMS, 2021b). Youth unemployment has major knock-on effects, as much on employment prospects later in life as on lifetime income. For this reason, the actions taken for young persons rely on already tried and tested instruments on the one hand, while proactively driving qualification and employment measures in forward-looking sectors on the other (see also 6.1.).

Given the difficulties faced in the Covid crisis by businesses that take on apprentices, the government introduced the Apprentice Bonus (*Lehrlingsbonus*) in a bid to stabilise both the apprenticeship market and vocational training (see also 4.3.). In addition, the Education and Training Guarantee (*Ausbildungsgarantie*) for young people is a reliable instrument for balancing out the decline in apprenticeship placements being offered. For 2021, funding in the amount of EUR 245 million has been set aside for support to businesses offering apprenticeships (for instance, for preparatory courses for the apprenticeship exam, or for coaching of apprentices and apprenticeship providers). This also encompasses funding for projects that implement innovative ideas and schemes in dual education and training and thus contribute to further raising quality levels within the already highly successful apprenticeship system. Priorities include digitalisation and innovation, sustainability, climate action and resource efficiency, inclusion and diversity, as well as internationality and mobility.

State-subsidised training centres that offer training for young people unable to find an apprenticeship placement with a business enterprise provide an opportunity to obtain full-blown vocational training in spite of the crisis. In 2020/21, capacities in this field of apprenticeship training were expanded to 14,500 places. The Corona Job Drive also encompasses an upskilling scheme for young adults who have no higher qualification than a compulsory school leaving exam.

When it comes to reaching out to youths at risk of marginalisation, it is important to have easy-access offers for bringing young persons into the labour market, such as youth coaching (*Jugendcoaching*) and FitforEducation (*AusbildungsFit*) or motivational offers (*Motivationsfördernde Angebote, MofA*). Youth coaching, which offers counselling and coaching on further education/training paths, had about 60,000 participants in 2020. The FitforEducation programme gives participants the opportunity to catch up on basic skills and social skills and to explore different education options. In 2020, the programme provided support to some 5,300 young persons. In 2021, EUR 37.2 million will be made available to secure these easy-access measures (youth coaching, FitforEducation, MofA, and others). The Just2Job youth foundation has been offering qualification options to 1,000 young persons between 20 and 30 since September 2020. EUR 21 million have been set aside for this measure until 2024.

Tried and tested instruments such as the compulsory schooling or training scheme for young people under the age of 18 (*AusBildung bis 18*) continue to be available. Since 2016, the Compulsory Education and Training Act (*Ausbildungspflichtgesetz*) has provided for a

kind of safety net for young persons, aiming to prevent early school-leaving and to guide all young people towards a qualification beyond the end of compulsory schooling. A variety of system partners are involved in this effort, with expertise on labour market, education, and youth matters, to name but a few. To ensure the best possible response to the challenges presented by Covid, a dedicated, cross-institutional Youth Employment Taskforce (*Taskforce Jugendbeschäftigung*) was set up in July 2020 to coordinate the relevant measures. A special package of offers is available to young people under 25. The Education and Training Guarantee until the Age of 25 (*Ausbildungsgarantie bis 25*) programme offers young adults who have completed only compulsory schooling a chance to obtain vocational qualifications later in life. In 2020, the programme provided support to some 11,500 participants.

The aim here is to reduce the number of persons who (i) are not in education, employment or training (NEETs), (ii) who leave school early and (iii) who are among those who quit education and training programmes early (ESLs). The activation strategies mentioned above are applied specifically to target youth unemployment. Disadvantaged groups, among them young persons with a migrant background, are over-represented in these programmes. The provinces also use targeted measures and funding to take varied action against youth unemployment, frequently resorting to ESF-co-financed projects.

Support for the low skilled



A number of further measures are in place to address the problems low skilled workers are facing on the labour market. Groups of persons who are disadvantaged on the labour market have access to targeted support designed to improve their long-term employability (see also 6.1.). Having completed an apprenticeship, for instance, will significantly improve an individual's prospects on the labour market. Nearly half of the vacancies reported as in need of immediate filling require such qualification.

The Fast-Track Training for Skilled Workers (FIA) is a key instrument in the efforts to counter skills shortages (see also 4.3.). The On-the-job Upskilling (AQUA) programme is designed to convey the necessary skills to individuals directly in the business enterprise looking to recruit someone for a specific position. The main focus is on training programmes ending with an apprenticeship exam. In 2020, EUR 9 million were paid out under the AQUA

programme for some 4,800 participants (57% of whom had no higher qualification than compulsory schooling). In 2021, up to EUR 14 million will be earmarked for this programme.

Labour foundations (AST) are a way of offering customised CPD and training to staff of one or more businesses in a region or a sector by way of placements. Training costs will, as a rule, be shared between the business in question and the federal province. In 2020, the Austrian Public Employment Service (AMS) spent some EUR 4.5 million on providing apprenticeship training for more than 1,600 individuals (57% of whom had no higher qualification than compulsory schooling) under a labour foundation scheme.

Until 31 December 2022, the Skilled Workers Scholarship (FKS) scheme provides funding for education programmes conferring qualifications below university level in those professions where there is a skills shortage (e.g. STEM, health, nursing/care, social services) (see also 4.3.).

In a bid for better integration into the labour market of persons who seek an apprenticeship, but have personal placement obstacles, the law permits both a longer apprenticeship term and the achievement of partial qualifications, if any, to be set out in the apprenticeship agreement (section 8b (1) and (2), Vocational Training Act (*Berufsausbildungsgesetz*)). In such cases, vocational training assistance will be provided to apprentices throughout the entire duration of their training. Projects aimed at integration in the apprenticeship and labour market can also be granted funding within the scope of the support available to businesses offering apprenticeships. A special project called *b-mobile* promotes not only integration, but also supraregional placements of young adults between 18 and 25 from Eastern to Western parts of Austria. Currently, this project, which is handled by the AMS and the Federal Economic Chambers (WKÖ), is set to run from March 2018 to January 2023, with funding in an amount of EUR 5.2 million approved for the 5-year project term. In addition, various individual aids and grants offered by AMS (for job interviews, long-distance travel, childcare, ancillary training costs) are being revised with a view to promoting supraregional mobility. In 2020, some 92,800 persons (51% of whom had no higher qualification than compulsory schooling) were granted individual aids and grants, in a total amount of EUR 27.1 million.

The Competence with System (*Kompetenz mit System – KMS*) upskilling programme offers a modular and skills-centred approach for completing a formal education/training programme (preferentially with an apprenticeship exam) during recurring job-seeking phases (e.g. during seasonal unemployment). In 2020, EUR 3.4 million were paid out to 650

eligible persons (62% of whom had no higher qualification than compulsory schooling). Moreover, low skilled individuals with no higher qualification than compulsory schooling may also apply for funding of a preparatory course for their apprenticeship exam, regardless of their specific trade.

Reducing skills shortages, upskilling workers, raising their income and reducing the risk of poverty and long-term unemployment are among the objectives these support measures aim for. Providing education and training with a focus on formal qualifications offers the low skilled, in particular, a chance at long-term integration in the labour market. This is why this target group is increasingly being offered upskilling programmes ending with an apprenticeship exam or vocational training placements in businesses. The provinces also offer specific qualification schemes for the low skilled at regional and local level.

Women



Recent labour market data show that women were hit disproportionately harder by the Covid crisis. While the number of unemployed men saw an increase by 25.2% in January 2021 year on year, the number of unemployed women had risen by 42.4% (AMS, 2021b). One of the factors contributing to women being much more strongly affected is that they are disproportionally overrepresented in the services sector, which felt the impact of the crisis particularly hard. On top of that, the number of persons in minor employment has gone down substantially. After years of relatively stable numbers (2017: approx. 348,000, 2018: approx. 348,000, 2019: approx. 347,000), this value has now dropped to approx. 317,000. 2020 thus saw 29,000 fewer persons in minor employment than 2019; 21,424 of them were women and 7,684 men (Österreichische Sozialversicherung 2021). The significant loss of jobs for persons in minor employment affects above all women and young people (Bock-Schappelwein, J., et al. 2020c).

For this reason, the budget for active labour market policies placed a special focus on supporting women. The aim in 2020 and 2021 is to provide assistance to women at a rate disproportionate to their share in the number of unemployed (+3.5 percentage points). In 2020, EUR 579.5 million, i.e. 51% of the available budget, was spent on specific support for women (excluding short-time work). The Austrian Public Employment Service (AMS) provided assistance in the equivalent of at least one day to 190,468 women in 2020 (employment support excluding short-time work, upskilling and benefits). The AMS support

budget for 2021 (excluding short-time work) amounts to EUR 1,556 million for both men and women.

The AMS labour-market programme for women offers special support for labour market integration as well as education and training. FiT (*Frauen in Handwerk und Technik*), a programme encouraging women to work in trades and technical jobs, offers targeted vocational education and training ending either in an apprenticeship exam or a bachelor's degree. Since 2019, this educational offer has also added digital skills to its agenda. In response to labour market trends, the next few years will see a stronger focus on forward-looking fields such as electronics, electrical engineering, and IT. In 2020, 6,929 women benefitted from FiT offers. The funding available for the programme increased from EUR 22.7 million in 2020 to (planned) EUR 32 million in 2021.

A special counselling format called Returning with a Perspective for the Future (*Wiedereinstieg mit Zukunft*) is available for women returning to the labour market. Women's Career Centres help women plan their careers and provide advice on education and training as well as work-life balance. Moreover, the offers available to businesses also include counselling and support on specific issues arising in training and employment of women in trades and technical professions, as well as on gender equality at work. Women are also being explicitly targeted by the Corona Job Drive.

The labour market policy measures undertaken by the AMS all aim to significantly improve the situation of women on the job market. Measures taken to improve qualifications raise incomes, reduce segregation and boost employment in future-oriented sectors, while expanding childcare fosters full employment.

Persons with a migrant background



Persons with a migrant background frequently find it difficult to gain a foothold in the labour market. The reasons for this phenomenon are varied. On the one hand, some of them have not completed compulsory schooling or have only very poor basic skills (in particular asylum seekers and beneficiaries of subsidiary protection), on the other hand, educational qualifications obtained abroad are often not formally recognised or not adequately valued on the labour market. In the past year, which was dominated by the Covid pandemic, persons with a migrant background were affected in significantly larger numbers. In 2020,

the number of foreigners registered as unemployed was up 46.0% from 2019, while that for Austrian nationals rose by 31.2% year on year (AMS 2021b).

All the measures and programmes offered by the Austrian Public Employment Service (AMS) are also open to persons with a migrant background. Offers range from assistance with finding a job to German language courses, vocational education and training to services by specialised counselling and support facilities that are AMS cooperation partners. The services provided by these facilities include assisting with questions relating to domicile, access to the labour market, validation (nostrification) and recognition of certificates and academic titles obtained abroad, as well as with legal issues.

Linguistic support is one of the key approaches to overcoming barriers to labour market integration. The range of German courses is adapted to the respective demand. The AMS itself is currently offering German language courses, primarily starting from level A2 and in combination with vocational training programs for persons with a migrant background. Part of the German language support for recognised refugees has been taken over by the Austrian Integration Fund (ÖIF). As a result, the number of people receiving such support from the AMS is declining, from 40,459 participants in 2019 to 38,987 in 2020. In addition, measures under the 2017 Integration Act (*Integrationsgesetz*), such as compulsory German language courses as well as values and orientation courses, are to impart crucial basic skills enabling participants to pursue further education and training, and to promote successful integration into the labour market.

Since 2015, the AMS has been offering skills checks (*AMS Kompetenzchecks*), in particular for recognised refugees, which help establish and record the qualifications and job experience these persons have obtained so far. This information can then serve as a basis for initiating further qualification measures as well as for job placement options. In 2020, 1,457 individuals took part in these skills checks, for which EUR 1.1 million had been budgeted.

Various contact points that provide professional counselling and support on matters of recognition are available to persons having obtained qualifications abroad. This approach ensures better leveraging of migrants' labour market potential as well as labour market integration matched to available qualifications. Due to Covid, the counselling offer has been enhanced by telephone, e-mail and video-conferencing options. While in 2019 these offers had still been taken up by 8,204 individuals, 2020 saw a marked decline to 6,263. Depending on how the pandemic develops, 2021 is expected to see numbers between those of 2019

and 2020. The long-term forecast is for these numbers to stabilise at about 8,000 individuals p.a. availing themselves of counselling. This trend has already been reflected in the relevant budgetary figures: While spending on counselling had come to EUR 1.98 million in 2019, the amount dropped to EUR 1.87 million in 2020, with EUR 1.62 million set aside for 2021.

Overall, 185,312 individuals with a migrant background benefited from AMS support measures in 2019, and 183,680 in 2020. Expenditures under this heading amounted to nearly EUR 550 million in 2019 and EUR 558 million in 2020 (employment support excluding short-time work, upskilling, benefits).

Flagship projects at province level



- Burgenland: ESF programmes and programmes under the additionality principle for increased equal opportunities on the labour market
- Burgenland: Imparting of key vocational skills
- Burgenland: Support for young people lacking career orientation
- Burgenland: Apprenticeships for young people in training centres or inclusive apprenticeships
- Burgenland: German language training measures for unemployed persons
- Burgenland: Second chance for completing education and training programmes; preparing for the apprenticeship exam
- Burgenland: Socioeconomic businesses (in particular, for the long-term unemployed)
- Burgenland: Fast-Track Training for Skilled Workers (including apprenticeship exam)
- Carinthia: FEM, a scheme for women to create and seize opportunities, step_UP, a regional network for promoting equality
- Salzburg: Training check (*Bildungscheck*) – vocational education or training
- Salzburg: Salzburg Talent Check (*Talente-Check Salzburg*) and Salzburg Career Check (*Karriere-Check Salzburg*) – skills analysis for pupils/students
- Salzburg: You got skills! 2.0 (*Du kannst was! 2.0*) – recognition of non-formal skills (further training possible up to apprenticeship exam)
- Salzburg: SAFT women’s initiative – case management to bring women who are furthest from the labour market closer to getting work
- Salzburg: job.art – creative activities to leverage young people’s talents
- Salzburg: SINNERGIE – easy-access employment for women

- Salzburg: *CARMI - Caritas ARbeitsMarktIntegration* – employment of older (long-term) unemployed persons
- Tirol: Tirol employment package (regional interlinking and close cooperation with pact partner organisations, such as the Austrian Public Employment Service (AMS), social partners)
- Vienna: Job Drive 50plus (*Joboffensive 50plus*) – programme offered by the City of Vienna and the Public Employment Service Vienna (AMS Vienna)
- Vienna: FRECH – counselling for women with upskilling options
- Vienna: Parental leave and returning to work for persons in employment
- Vienna: Youth & jobs of the future (*Jugend & Zukunftsberufe*) foundation offering new education and training perspectives for unemployed young people

6 Education, science and research

Relevant reference points



Country-Specific Recommendations:

- CSR 2/2019: (...) Raise the levels of basic skills for disadvantaged groups, including people with a migrant background.
- CSR 2/2020: Ensure equal opportunities in education and increased digital learning
- CSR 3/2020: (...) Focus investment on the green and digital transition, in particular on basic and applied research, as well as innovation (...)



Six pillars of the Recovery and Resilience Facility (Regulation (EU) 2021/241):

- Pillar 2: Digital transition
- Pillar 3: Smart, sustainable and inclusive growth, including economic cohesion, jobs, productivity, competitiveness, research, development and innovation, and a well-functioning internal market with strong SMEs
- Pillar 4: Social and territorial cohesion
- Pillar 6: Policies for the next generation, children and youth, such as in the area of education and skills.



Goals of the 2030 Agenda for Sustainable Development:

- SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- SDG 5: Achieve gender equality and empower all women and girls
- SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



Other relevant documents:

- Digital Education Action Plan (2021-2027); European Pillar of Social Rights; European employment strategy; National Strategy on the Social Dimension of Higher Education; Bologna Process; Austrian RTI Strategy 2030; IP Strategy; IGJ/ERDF & JTF-Programme 2021-2027; ESF+ Employment Programme Austria 2021-2027; Annual Sustainable Growth Strategy 2021

The Covid pandemic and its consequences for schools – remote content-delivery – over the past months have created enormous challenges for pupils/students and teachers as well as parents.

The educational sector put great effort into maintaining the quality of both teaching and learning. Adapting to distance learning appeared to be one of the greatest challenges for disadvantaged learners and learners with a low level of education, not least because some 10% of pupils under the age of 15 had no access to a virtual learning environment (OJEU, 2020, p. 132).

The education system plays a major role when it comes to economic recovery and strengthening resilience. A well-educated and skilled population is both a prerequisite and a strategic resource for future prosperity. This is why it is vital to overcome not only the challenges in digital education that have been exposed by the Covid pandemic, but also already existing inadequacies such as with respect to equal opportunities and the need to improve basic skill levels.

As well as in education, the crisis has also exacerbated the challenges posed by the digital transition in the field of science. The labour market demand for STEM experts remains significantly higher in engineering and information technology than in other fields of the natural sciences and mathematics. Many surveys among companies indicate that there is a skilled workers' shortage in IT and engineering, with the skills profiles sought after including, in particular, graduates of higher-qualification, STEM-focused educational institutions (secondary higher technical or universities (of applied science)) (Binder, D./Dibiasi, A. et al., 2021). Another crucial step needed to make research and development investment more effective is to enable more and better links between business and science as well as society and science (OJEU, 2019, p. 120).

In research, Austria pursues the ambitious goal of progressing from the group of strong innovators to the group of innovation leaders (EC, 2020, p. 7). With R&D intensity estimated at 3.18% in 2019³ and continuous growth for more than three decades, Austria has positioned itself as a dynamic research location in Europe. To be able to consolidate this locational advantage and improve both innovation outcomes and productivity growth, Austria needs an active research landscape (OJEU 2020, p. 133). The Strategy for Research, Technology and Innovation 2030 (RTI Strategy 2030) lays the groundwork and opens new perspectives for focal points in research and innovation policy.

³ Due to the imponderable economic effects of the Covid pandemic, Statistics Austria did not prepare a Global Estimate.

6.1 Education

Digital devices for learners and for federal schools



By requiring periods of distance learning, the Covid pandemic has exposed challenges facing Austria in particular when it comes to digital education. Apart from expanding infrastructures and providing resources for digital content delivery, developing teaching/learning materials and providing digital teaching training to teachers are high on the list of priorities (Holtgrewe, U./Schober, B./Steiner, M., 2021).

The aim of the 8-point plan for digital learning is to ensure better leveraging of the possibilities and potentials of digital education. Details on the various projects under the heading of the comprehensive Digital Package can be found at www.digitaleschule.gv.at. The National Financial Framework Act (*Bundesfinanzrahmengesetz*) provides for funding in the amount of EUR 235 million in 2021, with an implementation timeframe until 2024. One of the key measures under the 8-point plan is to make digital devices available to pupils/students at lower secondary level, in order to successively lay the pedagogical and technological foundations for innovative teaching formats and uniform learning platforms. The aim is to implement IT-assisted content delivery at lower secondary level throughout Austria for the long term. The preparation and implementation phase takes place in the school year 2020/21, while roll-out will start in the school year 2021/22. The cost of this step will run to EUR 147.2 million in the period 2021-2023.

In addition, the federal government makes some 14,000 mobile devices available to schools coming within its purview. These notebooks and tablets are loaned to pupils/students, in particular those from low-income households, by federal schools, for the duration of distance learning phases. The cost amounts to a total of about EUR 8.5 million for the period 2020 to 2022.

Updating the existing curricula for the development of basic digital skills within the scope of general curricular development (see below) is another step on the path towards a stronger skills focus.

Broadband and infrastructure upgrading at federal schools



Investments in upgrading basic IT infrastructure are planned to establish the necessary prerequisites for digital education. For federal schools, the aim is to provide broadband connectivity as well as functioning basic IT infrastructures with high-performance WIFI in all classrooms nationwide. Among other things, all federal schools still equipped with copper cables (104 out of 522) are to make the switch to fibre optic lines by October 2022. The cost of this step will run to EUR 16.4 million in the period 2021-2023.

Upskilling of teaching staff in digital education



Continued professional development for teachers in digital education and digital teaching methodology is a sine qua non when it comes to ramping up IT-assisted content delivery. The existing Digital Skills for Teachers (*Digitale Kompetenzen für PädagogInnen, digi.kompP*) skills model and the associated Digital Skills Check for Teachers (*Selbstevaluationsinstrument für Pädagoginnen und Pädagogen, digi.checkP*) are to undergo further development with a view to strengthening and systemically building up teachers' digital education skills. Customised training and qualification offers are planned to be available by 2023.

A project submitted with the EU Technical Support Instrument (TSI) programme will be used to provide support, in terms of content and technology, for ongoing government measures for the digitalisation of the education system. The planned subproject 'Digitalisation in teachers' professional development (CPD)' focuses on measures for digital skills CPD for university teaching staff.

With a view to the growing importance of digital and digitally assisted teaching and learning, an upgrading of curricula for special subject teacher education university programmes has been launched, alongside more virtual teaching being incorporated into the teacher education colleges development plan. These measures and initiatives are based, on the one hand, on the *digi.kompP* digital skills model and the 'Digital skills' report compiled by the teacher education quality assurance council, and, on the other hand, on the 2022-2024 target and performance plan for Austria's teacher education colleges and the respective location-specific digitalisation strategies.

Digital education media and quality mark for learning apps



To complement these digitalisation measures in education, learners and teachers alike are to be given easy access to quality-assured teaching and learning materials. A quality mark is to provide orientation and guidance to parents, teachers, pupils and students when it comes to selecting innovative products that are already on the market.

The first 15-20 certified offers from the pilot project will be available, and published, as from August 2021. The certification process will become fully operational as from September 2021. An EU-funded TSI project, 'Towards an Austrian education system fit for the digital age: upskilling teacher educators and modernising education content delivery', is to provide the framework for developing a concept for implementing the centralised provision of digital educational media.

Covid support package



For many pupils and students, distance learning has entailed not only the loss of social contacts and of a clear-cut learning structure, but has, for some, also substantially impacted learning and education outcomes. The Covid support package has been designed in response to these challenges: Additional support measures (as many as two additional hours of learning support per class, learning support in small groups) will be offered for general-education compulsory schooling institutions as well as academic and vocational secondary schools. Moreover, pupils/students in the last year at their respective schools are eligible for special support equivalent in total to 1.49 million (individual) learning support hours. This offer has been designed to benefit above all those children and youths who have fallen furthest behind. On top of this, there are plans for supervised learning offers during the term holidays (for German, mathematics and foreign languages) and increased summer school offers (primary to lower secondary, as well as academic and vocational upper secondary).

The Ministry of Education, Science and Research (BMBWF) will, in a first step, make funding of EUR 117 million available from its budget for this purpose in the summer term of 2021. 10% of the funding volume will be distributed based on demand for German language support and earmarked for this purpose. Within the scope of REACT-EU, further projects

are planned for schools (e.g. 'Don't Stop Learning' (*Weiterlernen.at*), video interpreting, more psycho-social support staff) as well as in adult education, such as for retaking compulsory school leaving exams and for basic education offers.

Education Investment Act



The increase in all-day school offers will be continued in line with the 2017 Education Investment Act (*Bildungsinvestitionsgesetz*). This gives school operators the choice to apply for earmarked grants or funding for infrastructure measures and staff to supervise leisure activities within the scope of all-day school offers. The federal government makes a total of EUR 750 million available for the school years 2019/20 – 2032/33. This constitutes a major contribution towards more equal opportunities and a better work-family balance.

100 Schools project



The 100 Schools – 1,000 Opportunities (*100 Schulen – 1.000 Chancen*) pilot project was launched in order to achieve sustainable improvements in internal and external conditions at socially disadvantaged school sites over the medium term and to take targeted measures to raise education-related skill levels. The project, which is scientifically monitored by the University of Vienna, identified 100 schools eligible for project participation because of the composition of their pupil population (large share of parents with no more than compulsory school education, many families with low socio-economic status, large share of pupils with a migrant background or a first language other than German).

Within the scope of the project, participating schools will receive, from February 2022, additional resource and action packages as and when needed, for instance extra teaching staff, school social workers, special coaching sessions, equipment and materials, etc. The empirical results of the project will then inform the adjustment of support offers available to schools.

The project is scheduled to run from January 2021 to December 2023, with a budget of EUR 15 million for targeted measures. A further EUR 200,000 per year have been set aside to cover the cost incurred by the University of Vienna.

Obligation to meet minimum educational standards



About 4% of any given age group leave the school system without successfully graduating from year 9, which means they lack sufficient basic skills in German, mathematics and/or English. The obligation to meet minimum educational standards (*Bildungspflicht*) set out in the Government Programme was introduced to counter this trend by defining a minimum level of educational standards pupils/students have to attain before leaving the education system. Using the skill set to be obtained as a benchmark for planning and designing content delivery, and providing targeted support, measures are designed to help pupils/students to achieve the defined minimum skills already during compulsory schooling. Where they fail to do so, measures tailored specifically to this target group are to be offered until the age of 18 to enable these young people to catch up and attain the required levels in German, mathematics and English. The planned introduction of this obligation to meet minimum educational standards will ensure that all learners receive the best possible support, regardless of gender or socio-economic background. It is scheduled to enter into force in the school year 2023/24. Compensatory measures after the end of compulsory schooling are expected to start in the school year 2024/25.

Strengthening basic skills



The Strengthening Basic Skills (*Grundkompetenzen absichern*) project was launched in 2017 in a bid to bring down the persistently high rate of pupils/students who have problems in mathematics, German comprehension and composition, and English. Some 500 compulsory schooling institutions (primary and lower secondary schools) where learners repeatedly scored low (outcomes of educational standard assessments 2012-2017) had to commit to undergoing at least two years of counselling and monitoring. The focus in this approach is on learning and teaching processes, learning outcomes, and improved school management. Multi-professional teams from Austria's teacher education colleges provided the necessary counselling and monitoring to the schools with the aim of improving both the quality of content delivery and learners' achievements. In 2020, the ceiling of schools eligible for participation/monitoring was reached with 370 schools. Due to Covid, ongoing processes at schools had to be interrupted or continued in a reduced or adjusted form.

Regular skills assessments at individual level carried out within the scope of the Skills Assessment PLUS (iKM^{PLUS}) scheme allow pupils/students to receive support based on individual outcomes. These assessments help to balance out differences in performance levels and to satisfy the obligation to meet educational standards. In future, all learners in years 3, 4, 7 and 8 will undergo the annual skills assessments in German, mathematics and English (at lower secondary level). The iKM^{PLUS} scheme will be introduced gradually starting in the 2021/22 summer term. EUR 4.85 million (EUR 7.13 million) will be made available to fund this measure in 2021 (2022).

Adult education



In an effort to carve out a long-term perspective for adult education within the overall education system, offers in this area are being constantly further developed. Here, too, special attention is being paid to strengthening basic skills to enable participants to transition as best possible to more advanced education and training offers. Some EUR 22 million (and an additional EUR 9 million from the provinces) annually have been set aside for the period 2021-2024, with complementary funding from the European Social Fund.

Quality management and educational evaluation



Quality management, external evaluation, educational evaluation and national skills assessments are crucial in analysing strengths and weaknesses and an effective tool for compensating deficits in the school system. In an effort to systematically improve the quality of content delivery and, consequently, learners' achievements, Austria is currently setting up a uniform quality management system, including internal school evaluation. Regularly performed data analysis (pertaining, for instance, to pupils/students' achievements or to digital learning) provides the basis for improved controlling (management of strengths and weaknesses) at school level. In parallel, external school evaluation is to furnish those in charge with aggregated knowledge about the quality of schools and the quality of teaching and to trigger development processes as and where necessary. A pilot evaluation at about 20 schools of different school types has been scheduled for 2021. In 2021, a budget of EUR 1.8 million has been set aside for implementing the platform for internal school evaluation.

In addition, a system of educational evaluation and educational monitoring is to be introduced by the end of 2021 and by 2023, respectively. The purpose of this instrument is to enhance efficiency and effectiveness in school organisation and in educational administration. The targeted monitoring of the prerequisites, processes and outcomes found in the education system provides key insights that can be applied specifically to raise education-related skill levels and ensure more equal opportunities.

German-language support



A standardised test (*MIKA-D*) is to be used to objectively, promptly and transparently assess lack of proficiency in German so measures can be taken to counter the educational disadvantages suffered by learners with a native language other than German. Separate curricula for the various schemes for German language support (German language support classes, German language support courses, support for regular-status pupils/students who have German as a second language) make it possible to tailor instruction to the learners' needs and deliver high-quality content.

In the school year 2020/21, a total of 398 teaching posts is available at primary schools, (new) lower secondary schools and pre-vocational schools to cover such surplus demand. In 2019/20, expenditure for teaching staff involved in linguistic/German-language support came to EUR 24 million at general compulsory schooling institutions and to EUR 2 million at lower and upper secondary schools. In the next school year, pupils/students having transitioned to regular curriculum status will be obligated to take additional compulsory hours of learning support so as to ensure continuity in German-language support.

This measure aims to boost the opportunities, in terms of both education and career perspectives, of children and youths who have German as a second language, while quite generally contributing to improving educational outcomes and ensuring equal opportunities.

Early childhood education and transitions in education



Early childhood education is a key instrument towards achieving equal opportunities both in education and in life. Strengthening proficiency in German, which is after all the language of instruction in schools, lays solid foundations for a successful transition to primary school.

Introducing a compulsory (free-of-charge) year of half-day pre-school education and stepping up early linguistic support have been crucial steps in this respect. Ancillary measures such as raising the qualification level of pre-school teachers in charge of linguistic support, as well as the compulsory nationwide use of a standard linguistic proficiency assessment tool, *BESK (DaZ) KOMPAKT*, have contributed substantially to turning this into a success, while at the same time strengthening the role of early childcare facilities as first-line institutions of education.

In accordance with the agreement entered into between the federal government and the provinces under Article 15a Federal Constitutional Law, the federal government provides EUR 142.5 million in earmarked grants for the enhancement of early childhood education offers, the free-of-charge compulsory pre-school year and early linguistic support in the pre-school years 2019/20 to 2021/22, at least EUR 18.125 million of which must be used for early linguistic support measures.

An early childhood education training initiative will improve conditions and increase quality levels. The school year 2021/22 will see the creation of additional places for students at teacher training institutions for early childhood education (*Bildungsanstalten für Elementarpädagogik, BAfEP*), raising the number of new additional training opportunities established by the federal government to approx. 150. In addition, a higher education advanced programme with a 60 ECTS workload has been developed for lateral entry into early childhood education from other fields – first-time roll-out to teacher education colleges is scheduled for the winter term.

Diversity management



Diversity management has been enshrined as an instrument to be used by the Boards of Education to foster potential as well as reduce inequalities due to learners' socio-economic

background or gender. At the same time, systematic qualification measures are being offered for diversity managers. Nationwide, 109 posts have been created within the Board of Education organisations to cater for inclusion, diversity and special needs teaching. Qualification and evaluation are scheduled to be completed in 2021.

Curriculum development



Curricula lay down educational tasks and objectives, providing guidance for teachers, pupils/students and parents alike. To ensure that curricula reflect contemporary content, it is necessary to update and adapt objectives in terms of skills to be covered in classroom work as well as teaching-content delivery requirements. The Curricula 2020 project incorporates the skills focus into the curricula for primary and lower secondary schools, with a view to strengthening basic skills and cultural techniques. Funding in the amount of EUR 0.75 million has been appropriated for the period 2019 to 2023.

As the world of work is complex and subject to constant change, it is pivotal for the curricula of vocational schools to be flexible and easy to adapt. The new generation of curricula currently under development provides for forward-looking educational offers, with a focus on digital skills, among others. Some EUR 75,000 were made available for preparatory measures, such as a feasibility study on anticipatory mechanisms in curricula, or work on raising school type profiles. The new curricula are scheduled to be implemented successively from the school year 2024/25 to 2026/27.

Flagship projects at province level



- Carinthia: Establishment of educational centres and care facilities
- Carinthia: More early education offers, additional high-quality education and care offers
- Upper Austria: Digitalisation in public general-education compulsory-level schools
- Vorarlberg: *School Kids online* – procurement of used computers, routers, etc.
- Vorarlberg: Language skills training and basic education for adults
- Vienna: Early linguistic support in early childhood education
- Vienna: Free-of-charge all-day school

- Vienna: *Campus+* model
- Vienna: Digitalisation and WiFi upgrading in public compulsory schools in Vienna
- Vienna: Laptops on loan for pupils in compulsory schooling
- Vienna: Girls and digitalisation – strengthening of digital skills

6.2 Science

Digital transformation in higher education



Universities and institutions of higher learning support and drive digital transformation. To do so, they need a favourable environment which allows them to push ahead with successively interlocking analogue and digital teaching, research and the development of the arts. Digitalisation and digital transformation are special focal points under the performance-based funding agreement for the period 2019-2021. The universities have committed themselves to developing an institutional strategy for advancing digitalisation in teaching, research, the development of the arts and administration. Where teaching is concerned, the main issues include use of digital technologies, digital tools and didactic methods in teaching and learning, broad availability of open-access educational resources, and adequate service and support for students and staff, including appropriate technical infrastructure.

In addition, 34 projects with a total volume of EUR 50 million are currently under way at Austria's universities to translate these goals into reality.

More places for STEM students



Austria's universities of applied sciences are continually ramping up capacities for STEM students. The universities of applied science development and funding plan 2018/19-2022/23 sets out relevant topics (such as STEM, digital transformation) on which the annual calls issued by the Federal Ministry of Education, Science and Research (BMBWF) for the funding of additional places for students and new study programmes are based.

Accordingly, a total of roughly 3,700 additional places for students at universities of applied sciences will become available in the areas of STEM/digitalisation from 2024/25.

Strengthening of gender equality and diversity



Many groups of students are underrepresented at universities, among them those with a migrant background, those with disabilities, those whose parents lack higher education entrance qualifications or, in particular degree programmes, either men or women. The National Strategy on the Social Dimension of Higher Education offers support for underrepresented students and students with specific needs (e.g. because of work, chronic illness, care responsibilities). Such support is designed to improve equal opportunities as well as a well-balanced mix of social backgrounds at tertiary institutions.

The diversity management award 'Diversitas' promotes the meeting of strategic targets for diversity management, which should also enter into the performance and target measurement systems at higher education and research institutions. Presented every two years since 2016, the award is meant to raise awareness for establishing a diversity-oriented and discrimination-free culture with the organisational structures of Austrian higher education and research institutions. Candidates for the EUR 150,000 award include all Austrian universities institutions of higher learning, the Institute of Science and Technology Austria (IST Austria), the Austrian Academy of Sciences, and the Ludwig Boltzmann Gesellschaft research institution.

Another challenge in academic life relates to gender-specific inequalities, which tend to become the more pronounced the higher up one climbs on the career ladder. Women are underrepresented in the higher echelons at universities. The performance-based funding agreement concluded with the universities for the period 2019-2021 for the first time included potential-based targets for raising the share of women holding chairs and tenure track positions. In addition, in 2018 the Higher Education Council adopted 36 recommendations aimed to make gender expertise available on a broader basis in higher education processes, thereby driving change towards a culture embracing gender equality and diversity. The implementation of the recommendations should also be accompanied in the upcoming performance agreement period of the universities 2022-2024 - where appropriate. A further incentive for embedding the gender perspective across all disciplines are the 'Gabriele-Possanner Awards' (state, honorary and incentive awards), which were

presented for the 12th time in 2019. True to the motto 'Fix the knowledge', they promote long-lasting gender mainstreaming in all disciplines. Given the constant rise in quality, the prize money, and their high prestige among researchers, these awards are among the most coveted distinctions in gender research. The concept underlying the awards is currently being revised, with plans to also target the younger generation by conferring a so-called *possaner@school* award.

Incorporating the goals of the 2030 Agenda for sustainable development (SDGs) is to ensure inclusive, equitable and quality education at higher education institutions. Sustainability and the SDGs have become strategic priorities in higher education and have therefore been integrated into the relevant steering instruments. The SDGs form part of the 'UniNEtZ project' managed by the Alliance of Sustainable Universities in Austria. The aim of 'UniNEtZ' is to strengthen collaboration between universities in a bid to integrate sustainable development in education, research and higher education management. What is more, the Sustainability Award 2020 and 2022 is conferred in eight different categories.

Flagship projects at province level



- Lower Austria: Lower Austria Higher Education Strategy 2025
- Salzburg: Salzburg Science and Innovation Strategy 2025
- Tyrol: Climate, Energy and Circular Economy Platform (*Plattform Klima, Energie und Kreislaufwirtschaft*) innovation ecosystems (transfer capacity, interlinking and R&D)

6.3 Research and innovation

RTI strategy 2030



The first overall Austrian strategy for research, technology and innovation – 'RTI Strategy 2020. Becoming an Innovation Leader' (*FTI-Strategie 2020. Der Weg zum Innovation Leader*) – was adopted in 2011. 2020 saw the adoption of its successor, the 'RTI Strategy 2030. The Federal Government's Research, Technology and Innovation Strategy', a planning document pointing the way forward for Austria to become fit for the future in innovation

and technology. The key priorities required to bring Austria closer to the forefront of international innovation are set out in a total of eight action areas. Effectiveness and excellence are the guiding principles underlying measures such as increasing the number of economically successful academic spin-offs, strengthening basic research, obtaining more grants per inhabitant from the European Research Council (ERC grants), raising the Horizon Europe success rate and strengthening open-ended and technology-neutral corporate research, cooperation between science and business, science and society as well as knowledge and technology transfer. Another priority focus is on developing knowledge, talent and skills. Among the factors determining successful attainment of this objective are larger numbers of STEM programme graduates, especially women, and higher international rankings for Austrian universities. The period 2021-2023 will see the first RTI pact being sufficiently funded, with further implementation pacts planned to follow for 2024-2026 and 2027-2029, in accordance with the Research Funding Act (*Forschungsfinanzierungsgesetz*).

2020 Research Funding Amendment Act



The adoption of the 2020 Research Funding Amendment Act (*Forschungsfinanzierungsnovelle 2020*) marked a milestone for Austria in research and innovation. Providing for three-year budgets under what are referred to as RTI pacts, this was the first time the groundwork for reliable planning had been laid. Further key issues set out in the amendment are an increased focus on output in measuring performance and success, monitoring of strategic target achievement, and financial controlling for the major research and research promotion institutions falling within its scope of application. The federal ministries in charge of implementation were assigned extensive steering and controlling responsibilities which they have to discharge in the form of performance and/or funding agreements.

Measures to promote excellency in basic research



It is scientific institutions, in particular universities and extramural or non-university institutions (such as IST Austria and ÖAW), as well as universities of applied sciences that stand for excellence in basic research. According to the 2017 R&D survey, some 18% of all R&D spending in Austria (about EUR 1.98 billion) goes into basic research, which

corresponds to roughly 0.5% of GDP. All of Austria's 22 public universities are key pillars of basic research. In 2017, they accounted for some 64% of all basic research expenditure. University budgets have been continually increased in all performance-based funding agreement periods so far, and the same holds true for the upcoming period 2022-2024. In October 2020, the total amount was set at EUR 12.3 billion, which is up EUR 1.3 billion or 12% as compared to the prior period. For the period 2021-2023, the global budget for extramural research and research promotion as well as for participation in international and European research grew as compared to the financial framework 2020-2023.

The planned excellence initiative, which is to be managed by the Austrian Science Fund (FWF), is geared consistently towards achieving excellence in basic research. Cooperation across institutions, disciplines and country borders will offer a long-term perspective for established top research groups with an international outlook and critical mass in Austria. Promotion of young talent, gender equality, knowledge transfer and impact on society are likewise key elements of such an excellence cluster. Exploring new and innovative fields of research, methods and topics means being able to identify forward-looking research areas early on and have them addressed by researchers working in Austria – a key prerequisite for transformative research in science (emerging fields). The Austrian Chairs of Excellence scheme is designed to attract, and retain, university chairs with outstanding qualifications.

Research institutions need to be supported, both to strengthen basic research and research infrastructures which can act as launchpads for solutions to current challenges facing society (for instance in the life sciences), and to develop future innovations (such as research opportunities and long-term application potentials in quantum computing). Translational research is to complement existing research priorities in basic research and clinical research. The establishment of an Austrian Institute of Precision Medicine is a step towards boosting expertise in translational medicine. The first RTI pact will also include a performance-based funding agreement with the Austrian Academy of Sciences (ÖAW) for the period 2021-2023. Overall, ÖAW will have an additional EUR 61 million, i.e. EUR 428.5 million in total, available for the years from 2021 to 2023. The global budget will see a 19% (18.6%) increase over the performance-based funding agreement period 2018-2020.

These additional funds will allow ÖAW to establish new areas of research and invest in cutting-edge research. In times like these, ÖAW's efforts to fight the Covid pandemic are all the more important. The Center for Molecular Medicine (CeMM) was able to put the first Austrian Sars-CoV-2 sequences online as early as in April 2020. As well as prioritising the promotion of young talent by investing EUR 32 million in scholarships for young scientists

over the next three years, ÖAW is also putting new initiatives on track, such as research on metabolism or on antisemitism or the Quantum Physics Hub: Austria – China.

However, excellence in science continues to rely on well-established research institutions as well, among them the Stem Cell Core Facility at the Institute of Molecular Biotechnology (IMBA) of the Austrian Academy of Sciences (ÖAW), which was only recently commended for excellence in an evaluation, and the Erwin Schrödinger Center for Quantum Science and Technology, which has established a network of excellence encompassing the hot spots of quantum research in Austria. A programme for postdoc scholarships was implemented successfully in 2017. Funding is governed by the ÖAW performance-based funding agreement 2021-2023.

Until 2030, the Vienna BioCenter will receive support in a total amount of EUR 60 million, EUR 39 million of which are provided by the federal government, the rest by the City of Vienna. This research funding agreement will ensure the long-term development of the Vienna BioCenter (including research infrastructure) and boost competitiveness in fields such as life sciences, biotech and pharmaceuticals.

The Institute of Science and Technology Austria (IST Austria) was founded in 2006 by the federal government together with the government of the province of Lower Austria, with the official opening of the campus at Klosterneuburg taking place in 2009. IST Austria is a multi-disciplinary research institution authorised to confer PhD degrees and dedicated to cutting-edge research in physics, mathematics, computer and life sciences. In 2019, IST Austria came in third in the normalised Nature Index Annual Tables 2019 ranking, a worldwide comparison of research institutions and universities based on the share of research output in relation to institution size. At 48%, IST Austria has the highest ERC grant success rate among institutions having obtained more than 30 of the prestigious European Research Council grants. Regarding interdisciplinarity as the basis for solving current challenges facing society, the institute plays a major role in shaping the development of future innovations. Funding is based on three-year performance-based funding agreements. In March 2021, the two founding entities signed a Memorandum of Understanding reaffirming the further development and expansion of the institute. Funding is governed by an Article 15a agreement between the federal and the provincial government, with the federal side providing a maximum amount of EUR 988 million for research until 2026.

Boosting innovation in business



In applied research, the key priorities of Austria's research and innovation policy include, inter alia, closer collaboration between science and business and forging ahead with digitalisation.

The Digital Innovation Hubs (DIH) are attractive innovation and research networks which provide targeted digitalisation support to Austrian SMEs. Currently, there are five DIH distributed all over the country, which makes it easier for innovative SMEs to find contact persons and support close by.

A technology initiative comprising research, innovation and digitalisation projects as well as incentives for creating new and attracting existing businesses helps to strengthen the basic RTI capacities of innovative enterprises and to advance Austria as an attractive location for manufacturing.

Bolstering the life sciences sector, which is not only particularly research-intensive, but also of special socio-economic importance in Austria, has been another priority, and not just since the outbreak of the Covid pandemic.

Spin-off Fellowship programme



Being highly research-oriented, spin-offs (businesses founded directly out of research institutions or universities) are particularly efficient vehicles of knowledge and technology transfer (such as in the form of subsequent research collaborations and job creation), which is why they are eminently important for making a location attractive for business. The Spin-off Fellowships programme is a crucial lever for raising the number of university spin-offs even further. Since the programme's inception in 2017, seven new businesses have been established, and 24 projects have been funded. Programme administration lies with the Austrian Research Promotion Agency (*FFG*), and the university knowledge transfer centres are involved as well. The aim is to provide support for as many as 40 teams of business founders. A programme budget has been appropriated for the period 2017-2021. Continued funding is planned for 2022-2024, with support for the founding of new businesses remaining a programme mainstay.

National Contact Point for Knowledge Transfer and Intellectual Property (NCP-IP), implementation of the National Strategy for Intellectual Property (IP Strategy) and for Open Innovation



To be able to succeed amid global competition and to fully leverage the social and economic revenue of research, it is vital to have an unbroken innovation value chain. This is what makes the sharing of knowledge between public research institutions, universities and the private sector so essential.

In an effort to further strengthen the ties between science and business and to assist public research institutions and universities in addressing intellectual property issues, the Strategy for Intellectual Property (IP Strategy) aims to boost innovative capacity and leverage IP potential. The measures set out in the IP Strategy make sure that all actors within the Austrian innovation system know how to use their Intellectual Property Rights (IPRs) more effectively for future innovations. The National Contact Point for Intellectual Property (NCP-IP) is tasked with implementing the IP Strategy, which also has to be taken into account in the performance-based funding agreements concluded with the universities. The 'Phönix Award' (*Gründerpreis Phönix*) for new businesses was created to support these efforts.

Another approach to generating more new knowledge and more radical innovation is to apply open innovation on a broad basis. Open innovation is the deliberate and systematic crossing of boundaries between organisations, sectors and disciplines in a bid to generate new knowledge and develop new products, services or processes. Individual users as much as user crowds and user communities can contribute inputs on requirements, problems and solutions to the innovation processes of businesses, scientific research and public administration entities, thus raising the success rate of innovations. This approach helps overcome barriers in research, development and innovation and provides a dynamic impetus for innovation that cannot be achieved using traditional methods. In this context, the Open Innovation Strategy has defined 14 measures which are to be implemented by 2025.

Austrian Micro Data Center and digitalisation in research



Data are a valuable commodity. Currently, secure access for the scientific study of microdata produced by Statistics Austria and administration and register data owned by Austria's federal ministries is possible only to a limited extent.

Setting up an Austrian Micro Data Center at Statistics Austria is to provide a joint nationwide one-stop shop infrastructure for official statistics and register data. Austrian researchers will get (remote) access to data owned by the federal ministries and by Statistics Austria.

An infrastructure has been developed to ensure state-of-the-art and forward-looking archiving of social science research data and to optimise the potential for subsequent data use. Additional funding has been made available to the Austrian Social Science Data Archive (AUSSDA) in 2021 to ensure that Covid-related data can be made available even faster.

Updated guidance under the Digital Humanities Austria Strategy, the Go Digital programme of the Austrian Academy of Sciences (ÖAW), and seed capital for the operation of the headquarters of the European Time Machine Organization (TMO) in Vienna are steps designed to improve conditions for research in the humanities and cultural sciences and to push ahead with digitalisation. Another project in this field is the digitalisation of Austria's cultural heritage and collections owned by the federal government.

Flagship projects at province level



- Burgenland: Research and innovation networks – ecology & digitalisation
- Lower Austria: Lower Austria RTI Strategy 2017
- Lower Austria: Institute of Science and Technology Austria (IST Austria)
- Salzburg: Salzburg Science and Innovation Strategy 2025
- Tirol: Climate, Energy and Circular Economy Platform (*Plattform Klima, Energie und Kreislaufwirtschaft*) innovation ecosystems (transfer capacity, interlinking and R&D)
- Vienna: Smart City – quality of living, resource saving and innovation
- Vienna: Strategy VIENNA 2030 – science and & research

7 Social affairs, health, care and pensions

Relevant reference points



Country-Specific Recommendations:

- CSR 1/2019: Ensure the sustainability of the health, long-term care, and pension systems, including by adjusting the statutory retirement age in view of expected gains in life expectancy. (...)
- CSR 2/2019: (...) Support full-time employment among women, including by improving childcare services, (...) in continued cooperation with the social partners. (...)
- CSR 1/2020: Take all necessary measures, in line with the general escape clause of the Stability and Growth Pact, to effectively address the COVID-19 pandemic, sustain the economy and support the ensuing recovery. (...) Improve the resilience of the health system by strengthening public health and primary care.



Six pillars of the Recovery and Resilience Facility (Regulation (EU) 2021/241):

- Pillar 4: Social and territorial cohesion
- Pillar 5: Health, and economic, social and institutional resilience, with the aim of, inter alia, increasing crisis preparedness and crisis response capacity
- Pillar 6: Policies for the next generation, children and youth, such as in the area of education and skills.



Goals of the 2030 Agenda for Sustainable Development:

- SDG 1: End poverty in all its forms everywhere
- SDG 3: Ensure healthy lives and promote well-being for all at all ages
- SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- SDG 5: Achieve gender equality and empower all women and girls
- SDG 10: Reduce inequality within and among countries



Other relevant documents:

- European Pillar of Social Rights (including action plan); European employment strategy; European Child Guarantee; Youth Guarantee; National Energy and Climate Plan (energy poverty section); ESF+ support for addressing material deprivation; Annual Sustainable Growth Strategy 2021

The social protection schemes in Austria have proved their worth during the Covid crisis and softened the income losses of many employees. By combining measures such as the short-time work allowance, reliefs on tax and charges, extra family benefits, extra benefits for unemployed persons or raised unemployment assistance, the government took further steps to cushion social hardship.

Despite this positive assessment of social safeguards, the months since the outbreak of the virus have made already existing socio-economic inequalities even more visible and have put the spotlight on where the challenges of the future lie.

In its country-specific recommendations, the European Commission regularly addresses the employment situation of women, putting a particular emphasis on the large number of women in part-time employment. In principle, working fewer hours directly translates into lower income and lower pension benefits. Expanding the range of childcare facilities being offered is not just key to tackling gender inequality but also an investment in the children's future, while at the same time enhancing equal opportunities.

The Covid pandemic has tested the Austrian healthcare system to an unprecedented extent, and so far the healthcare system has been able to manage the challenge successfully. But the pandemic has also brought structural problems to light. The system can be made more resilient and efficient by expanding outpatient healthcare with a focus on health promotion, disease prevention, pooling of regional resources and increasing the offer for psychotherapeutic treatment.

7.1 Social affairs

One-off payments for children and energy costs



The consequences of Covid present special socio-economic challenges, above all for people at risk of poverty and marginalisation. To prevent the health crisis from turning into a social crisis, it is necessary to offer special support to this group and avoid social hardship. For this reason, a total of EUR 34 million is made available in 2021 in the form of one-off payments to children and/or energy cost subsidies to households receiving means-tested minimum income and social assistance, in an effort to fight poverty in the wake of the pandemic (COVID-19 Poverty Act (*COVID-19-Gesetz Armut*)).

Promoting projects of charitable organisations



The Covid pandemic also entailed a rise in the number of citizens in need of social support services. Faced with rapidly growing demand, the support structures offered by aid organisations have already come under enormous strain, both in terms of personnel and finances.

Under the special directive COVID-19 Combating Poverty (*COVID-19 Armutsbekämpfung*) and the COVID-19 Poverty Act, which were also adopted to support the work of charitable organisations in particular during the Covid crisis, a total of EUR 32 million was made available in 2020 to cushion the negative social and poverty-driving effects of the crisis and set up projects for particularly vulnerable groups. Target-group specific projects are aimed at preventing poverty and social exclusion from taking root.

National strategy to combat poverty



To prevent the health crisis in Austria from becoming a social crisis, the national social protection schemes must become even more resistant against poverty and crises. Based on a scientific analysis of the consequences of the pandemic, the National Strategy 'Combating Poverty with Opportunities' (*Chancen gegen Armut*) has been in the making since the fall of 2020 and will be adopted in the current legislative period (BMSGPK, 2020).

Fighting poverty is a multi-disciplinary topic, which is why poverty can only be sustainably reduced and prevented if all stakeholders contribute equally to achieving this goal. Hence, the relevant ministries, the provinces and, as far as possible and reasonable, also the towns/cities and municipalities, the social partners and NGOs will be included in this process.

Expansion of pre-school educational institutions



The past ten years saw a continuous rise in the childcare coverage rate (share of children attending childcare compared to same age resident population) for children aged 3 to 5.

Among 3-year-olds, the childcare coverage rate rose from 77.6% in 2009 to 86.5% in 2020, according to the 2019/2020 childcare facilities statistics published by Statistics Austria. With respect to 4-year-olds, the past ten years saw an increase from 93.8% to 96.1%, and from 93.9% to 97.6% for 5-year-olds (Statistik Austria, 2020d). However, only 46.8% of 3-to-6-year-olds attend childcare facilities whose opening hours are compatible with both parents working full-time, which means that one of the parents, usually the mother, must work part-time or cannot work at all (Statistik Austria, 2020e, p. 113).

By expanding pre-school education offers and extending the opening hours of childcare facilities, both parents are enabled to take on employment or upgrade their employment from part-time to full-time, and women are enabled to benefit from increased social protection. Against this backdrop, the federal government decided to keep up its financial contribution towards expanding pre-school education offers and extending opening hours. At least EUR 47.125 million p.a. will be made available for this purpose in the years 2020/21 and 2021/22.

Flagship projects at province level



- Salzburg: Free German language courses for asylum seekers (*VHS Salzburg*)
- Salzburg: *Re-impuls* – re-establishing fitness to work after difficult stages in life
- Salzburg: *ProActive* – support for the long-term unemployed
- Salzburg: *Trapez* – case management for unemployed migrants to foster integration in labour market and education
- Salzburg: ESF projects focusing on coping with the Covid crisis for persons in precarious life situations, bridging qualifications for women
- Salzburg: COVID-19 training for asylum seekers
- Vienna: *Back to the Future* – employment project for young persons receiving means-tested minimum income, with a focus on single parents

7.2 Health

Expansion of primary care units



99.9% of Austrian citizens have insurance coverage under the national social health insurance scheme. Furthermore, public healthcare offers a very wide range of services to those insured. In comparison to the rest of the EU, Austria has one of the lowest rates of healthcare needs not covered by insurance. By international comparison, Austria spends a lot of money on healthcare, and according to the calculations of the European Commission, these expenditures are set to increase by 1.3 percentage points, to 8.3% of GDP, by 2070 (EC, 2018).

To relieve the burden on the cost-intensive acute in-patient hospital sector, Austria decided to redirect medical care, wherever possible from a medical perspective, to the out-patient sector, with a special focus being put on expanding and improving primary care.

75 multi-professional and interdisciplinary primary care units will be set up in the next few years. To promote the establishment of primary care units, the federal government introduced a support initiative for this purpose. Until the end of 2021, specific support for starting up a primary support centre will be offered under the European Commission's Structural Reform Support Programme (SRSP) to increase the number of such units, also in rural regions. Especially in times of crisis, the team-based organisational structure and infrastructure of primary care units can be crucial in ensuring that persons in acute need of medical care and chronically ill patients receive the care they need. Primary care units thus play an essential role in ensuring the smooth functioning of the healthcare system as a whole, with the importance of their role having been confirmed during the Covid pandemic.

Expansion of psychotherapeutic treatment offer



The 2020-2024 Government Programme stipulates the expansion of psychotherapeutic services to ramp up capacities and offer more fully-financed treatment slots in a move towards fully meeting existing demand. In October 2020, first steps were taken towards achieving equality between the treatment of mental and physical illnesses.

Comprehensive conceptual preparatory work has already been done for ramping up capacities in psychotherapeutic treatment funded by social insurance to a level where it will meet existing demand. Potential further implementation steps are being continually reviewed on this basis. The medium-term goal pursued together with the social insurance funds is to increase the number of available slots for treatment and to reduce access barriers to psychotherapy.

Early childhood interventions



Early childhood interventions (*Frühe Hilfen*) have become more and more important over the past few years. Providing an easy-access offer of assistance in the form of networks for early childhood interventions is key to promoting health and preventing illness. Early childhood interventions not only foster equal opportunities in health and society but contribute in particular to making the health system more sustainable as early intervention helps ensure prevention. The mother-and-child medical report card (*Mutter-Kind-Pass*), a tried- and tested prevention instrument, is to be further developed to also include psychosocial aspects.

Flagship projects at province level



- Burgenland: Simulation centres for the training of medical doctors
- Burgenland: Covid measures-compliant and barrier-free design of the entrance hall (*KRAGES* hospital association – Güssing)
- Burgenland: Telemedicine, e.g. by way a video conference or image exchange (*KRAGES* hospital association)
- Burgenland: Digital transmission of patients' vitals from the patient bed to central monitoring (*KRAGES* hospital association)
- Lower Austria: Primary care units in rural areas
- Upper Austria: Construction of a new children's wing at the Kepler University Hospital
- Upper Austria: Braunau hospital, new building structure 10
- Upper Austria: Ordensklinikum Linz hospital, new build of operating theatre wing
- Upper Austria: Implementation of a new hospital information system at *OÖ Gesundheitsholding GmbH* and religious order hospitals (*Ordenskrankenanstalten*)

- Vienna: Vienna Hospital Association construction programme
- Vienna: *Strategy VIENNA 2030* – health metropolis Vienna

7.3 Care

Task Force Care



With regard to long-term care, the European Commission expects expenditure to increase from 1.9% of GDP (2016) to 2.6% in 2040 and 3.8% in 2070 (EC, 2018).

The Task Force Care (*Task Force Pflege*) was set up in 2020 to deal with the projected increase of age-related expenditure and the challenges the system of long-term care will be faced with due to increasing life expectancy. The Task Force was charged with defining key thematic areas and corresponding targets for a reform of the care system, and with subsequently preparing the relevant operational packages of measures (Rappold, E./Juraszovich, B. et al., 2021).

Similarly to the set-up for objectives management in healthcare, the Task Force Care is to ultimately become a federal-level objectives management committee tasked with consultation and coordination with the provincial governments, local governments and municipalities. The broad lines of an agreement on objectives are to be drafted by the summer of 2021, and, depending on the progress of consultations, the groundwork for putting these objectives into law is expected to be laid in the second half of the year.

Community nurses at the local level



Considering the projected increase in age-related expenditure, and with a view to ensuring both the sustainability and resilience of the long-term care system, it is necessary to adopt measures to promote easy-access care in line with actual demand. The purpose of the Community Nurses project is to provide professional support to caregiving relatives and assist in coordinating mobile care services and medical and social services. Community nurses play a key role in prevention, even before the need for nursing care arises.

Implementation is scheduled to begin in mid-2021. The estimated costs amount to some EUR 54 million for the period between mid-2021 and late 2024.

The measure is aimed at strengthening the self-help capacities of those in need of care and their relatives and ensuring that older persons can remain in their own homes for as long as possible.

Support for caregiving relatives



To better guide and support caregiving relatives in their tasks, courses are to be offered to prevent caregiving relatives from becoming overburdened by their role and to help them acquire the basic knowledge they need. An annual budget of EUR 200,000 has been approved to finance caregiving courses which are to impart, among other things, basic knowledge about caregiving, avoiding fall injuries, dealing with impairments caused by dementia, as well as tips for personal hygiene.

Improvements for persons with impairments caused by dementia



Experience has shown that the hardship allowance equivalent to an extra 25 hours per month granted on top of the standard care allowance as classified does not provide adequate compensation for the challenging and difficult task of caring for persons with dementia. To improve the situation of persons with impairments caused by dementia, it is envisaged to increase the hardship allowance from currently 25 hours to 45 hours per month.

Covid measures within the scope of the Long-Term Care Fund Act



An agreement on the granting of earmarked subsidies was reached on the basis of the Long-Term Care Fund Act (*Pflegefondsgesetz*) to support the provincial governments in coping with the extraordinary challenges they are currently facing due to the Covid pandemic. The agreement provides that the federal government reimburses certain pandemic-related

expenditures in the care sector including bonus payments, costs of Covid tests for 24-hour-caregivers, costs for establishing substitute care facilities, and expenditure for auxiliary staff to relieve professionally trained personnel. Under the 2017 Fiscal Equalisation Act (*Finanzausgleichsgesetz*), the provincial governments received a special subsidy in the amount of EUR 100 million, pro-rated based on number of residents as determined for the respective calendar year.

Flagship projects at province level



- Burgenland: Simulation centres for the training of care staff
- Upper Austria: Easy-access training for accompaniment and assistance to persons in need of assistance in the social and healthcare sector
- Upper Austria: Digitalisation in elderly care and nursing
- Salzburg: Protective equipment for social care facilities; hygiene training in retirement homes; hygiene training in facilities for persons with disabilities
- Vienna: *DocMobil* – medical assistance in residential and care facilities
- Vienna: Roll-out of the Electronic Health Record System (*ELGA*) in all residential and care facilities
- Vienna: Future Care Vienna (*Pflege Zukunft Wien*) – training initiative in the care sector
- Vienna: Raising the profile of the nursing and care professions

7.4 Pensions

Abolishment of deduction-free early retirement pensions accompanied by the introduction of an Early Starter Bonus



In order to improve the sustainability of the pension system and to reduce cost-intensive incentives for early retirement, the federal government decided to abolish deduction-free early retirement pensions, which had so far been available upon accumulation of 540 months of contribution payments, while at the same time introducing an Early Starter Bonus (*Frühstarterbonus*). Due to their lower statutory retirement age, women had so far

been excluded from deduction-free early retirement pension as it was not possible for them to accumulate the required 540 months of contribution payments in the course of their working life.

The Early Starter Bonus is to increase gender equality as it allows for both men and women to profit equally from the new scheme, irrespective of the amount of their individual pensions, while at the same time specifically acknowledging early contribution periods accumulated before the age of 20. The new regulation provides for an Early Starter Bonus in the amount of EUR 1 being granted for each contribution month acquired through gainful activity before the first day of the month following one's 20th birthday. In total, at least 300 contribution months must be acquired through gainful activity and at least 12 of these must have been acquired before the first day of the month following one's 20th birthday. The Early Starter Bonus is limited to EUR 60 being added on top of the pension amount each month and forms an integral part of the pension payments from the moment the pension is granted.

The abolishment of deduction-free early retirement pensions will enter into force as of 31 December 2021, and the Early Starter Bonus will be introduced as of 1 January 2022. Another measure designed to improve the sustainability of the pension system is the introduction of pro-rated first-time pension adjustments. As from 2022, pension adjustments will be applied on a pro-rata basis in the first year after taking retirement, i.e. the adjustment will be contingent on the month in which a given individual took retirement.

Automatic pension splitting between spouses is a further step towards raising women's old-age pensions. Automatic pension splitting will be introduced to compensate for the pension deficit that women still face due to longer child-rearing periods and part-time work. It reduces the gender pension gap by aligning old-age pensions in the long term, contributes significantly to reducing old-age poverty among women and thus also improves the sustainability of the pension system.

2021 pension adjustment



With an economic crisis in full swing and a social crisis looming large, it is becoming all the more important to increase people's purchasing power and acknowledge the role of pensions as a means of social protection. Against this backdrop, the Austrian federal

government adopted the 2021 pension adjustment, which provides for social staggering, thus ensuring that lower pensions will see a higher increase.

Pensions of EUR 1,000 per month or less will be raised by 3.5%, while the adjustment for pensions of more than EUR 1,000, but not exceeding EUR 1,400 will be subject to a linear decrease from 3.5% to 1.5%. For pensions above EUR 1,400, but not exceeding EUR 2,333, pension payments will be raised by +1.5%, which is the benchmark value. Pensions exceeding EUR 2,333 will be increased by a fixed amount of EUR 35. In 2021, the reference rate for the means-tested equalisation supplement for individuals was raised to EUR 1,000.48, and the reference rate for families to EUR 1,578.36, which constitutes a disproportionately high increase.

This measure strengthens lower pensions in the long term, thus contributing to preventing old-age poverty. The additional expenses incurred for this adjustment in excess of the statutory adjustment factor will amount to EUR 164.4 million in 2021 and decrease to EUR 158.2 million in 2022.

8 EU funds

Relevant reference points



Country-specific recommendations:

- CSR 1/2019: Ensure the sustainability of the health, long-term care, and pension systems, including by adjusting the statutory retirement age in view of expected gains in life expectancy. (...)
- CSR 2/2019: (...) Support full-time employment among women, including by improving childcare services, (...) in continued cooperation with the social partners. (...)
- CSR 1/2020: Take all necessary measures, in line with the general escape clause of the Stability and Growth Pact, to effectively address the COVID-19 pandemic, sustain the economy and support the ensuing recovery. (...) Improve the resilience of the health system by strengthening public health and primary care.



6 pillars of the Regulation establishing the Recovery and Resilience Facility (DIR (EU) 2021/241):

- Pillar 1: Green transition
- Pillar 2: Digital transition
- Pillar 3: Smart, sustainable and inclusive growth, including economic cohesion, jobs, productivity, competitiveness, research, development and innovation, and a well-functioning internal market with strong SMEs
- Pillar 4: Social and territorial cohesion
- Pillar 6: Policies for the next generation, children and youth, such as in the area of education and skills.



Agenda 2030 goals for sustainable development:

- SDG 1: End poverty in all its forms everywhere
- SDG 3: Ensure healthy lives and promote well-being for all at all ages
- SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- SDG 5: Achieve gender equality and empower all women and girls
- SDG 10: Reduce inequality within and among countries
- SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable



Other relevant documents:

- CAP Strategic Plan 2023-2027; European Pillar of Social Rights; European Green Deal; Annual Sustainable Growth Strategy 2021

The following is an update on the state of preparations for Austria's Partnership Agreement and programmes for the period 2021-2027 in relation to the EU funds under shared

management covered by the CPR⁴ (including the EU's cohesion policy) and how these relate to the country-specific recommendations.

Partnership Agreement



To ensure that money from the EU cohesion policy instruments for the funding period 2021-2027 is being used effectively, efficiently and in a coordinated manner, EU Member States have to prepare so-called Partnership Agreements, which will have to be adopted by the European Commission.

The Austrian Partnership Agreement will again be drawn up within the context of the Austrian Conference on Spatial Planning (ÖROK). Including JTF resources, a total of some EUR 1.29 billion in EU funding will be available for the programmes co-financed under the ESF+, ERDF and EMFF, alongside Austrian public-sector funding (from the federal and provincial governments) and, where applicable, Austrian private-sector funding.

The Partnership Agreement 2021-2027 will essentially include the programmes co-financed under the ESF+⁵, ERDF and EMFF. The JTF, which was newly created within the scope of the Green Deal, will be taken into account as well.

New items to be addressed include the complementarities and synergies with the so-called HOME funds, which include the Asylum, Migration and Integration Fund (AMIF), the Border Management and Visa Instrument (BMVI) and the Internal Security Fund (ISF). Complementarities and synergies will also be a focus in relation to the EAFRD⁶. In this context, it has to be noted that the Austrian Rural Development Programme 2014-2020 will be extended by two years and will, just like the CAP Strategy Plan 2023-2027, contribute to attaining the objectives set out in the National Reform Programme.

⁴ EU Regulation laying down common provisions for the funds (CPR or Common Provisions Regulation) [planned]

⁵ ESF+ merges the European Social Fund (ESF), the Youth Employment Initiative (YEI), the Fund for European Aid to the most Deprived (FEAD) and the Employment and Social Innovation Programme (EaSI).

⁶ In contrast to the prior period, the EAFRD is no longer fully encompassed by the Partnership Agreements.

Overall, the Partnership Agreement is to provide a summary view of the funds falling under the CPR and disclose complementarities with other EU instruments.

Programming in Austria is at the preparation stage, under the leadership of the relevant administrative bodies and involving further entities in charge of programming as well as partners. Once the pertinent EU legislation has entered into force (scheduled for mid-2021), the Partnership Agreement and the programmes can be officially submitted for adoption.

In this context, it must be noted that what is said here on the EU's Cohesion Policy and Common Fisheries Policy 2021-2027 is (as at March 2021) of a merely preliminary and non-binding nature, given the circumstances described, the fact that the EU legal bases have not entered into force yet and planning is still ongoing.

In thematic terms, the EU funds under the CPR will generally support the following five policy objectives: (i) A smarter Europe – for competitiveness, digital transition, entrepreneurship and innovation. (ii) A greener, carbon-free Europe. (iii) A more connected Europe – mobility, energy and regional ICT connectivity. (iv) A more social Europe – delivering on the European Pillar of Social Rights. (v) A Europe closer to citizens – sustainable and integrated development.

The JTF contributes to the single specific objective of enabling regions and people to address the social, economic and environmental impacts of the transition towards a climate-neutral economy.

The following is an outline of the preliminary contents of currently ongoing planning for the Austrian EU Cohesion Fund programmes and the EMFF programme:

(IGJ/ERDF & JTF-Programme 2021-2027) (Investment for Growth and Jobs/ European Regional Development Fund & Just Transition Fund - Programme)



According to current plans, the programme will address policy objectives 1, 2 and 5 as well as the specific JTF goal. Policy objective 1 – *A smarter Europe* will likely be a programme priority. In spite of substantial R&D spending, there is a need to act when it comes to exploiting scientific output. Other goals are to step up the integration of businesses in the R&D process, raise the share of knowledge-intensive sectors in value generation and

strengthen SME innovation capacities. The same holds for digitalisation and the use of state-of-the-art technologies in businesses. The second policy objective – *A greener, carbon-free Europe* – will likewise figure high on the agenda. In terms of achieving national and European climate change-related targets, Austria sees a need to act on reducing greenhouse gas emissions. The programme also includes measures designed to contribute to policy objective 5 – *A Europe closer to citizens*. Digitalisation as well as improved resource efficiency based on circular economy principles are to become an integral part of programme actions.

European Social Fund (ESF+)



Within the scope of the IGJ objective, ESF+ will contribute to achieving policy objective 4 – *A more social Europe*. In Austria, the following two programmes will implement ESF+: (i) ESF+ Operational Programme Employment Austria 2021-2027 and (ii) ESF+ Operational Programme for Fighting Material Deprivation (ex-FEAD).

The purpose of the ESF+ Operational Programme Employment Austria 2021-2027, as currently planned, is to address the following challenges: Work-life balance and equality between men and women, strengthening the labour market potential of older workers, combating poverty and social exclusion of specific groups, reducing school dropout rates and supporting the transition from school to work, and fostering lifelong learning.

The ESF+ Operational Programme for Fighting Material Deprivation (ex-FEAD) specifically addresses the fight against material deprivation by providing food aid and/or basic material assistance, including ancillary measures for the most deprived people. Making school material available free of charge each year to children from families affected by poverty and households receiving means-tested minimum income is planned to remain a key measure under the programme.

European Maritime and Fisheries Fund (EMFF)



According to current plans, the European Maritime and Fisheries Fund will address the second policy objective – *A greener, carbon-free Europe*. The EMFF Programme Austria

2021-2027 is to contribute to making the Austrian aquaculture and fisheries sector fit for the future while also paying heed to the objectives set out in Austria's National Strategic Plan for Aquaculture and Fisheries (NSP-AF). The programme will likely comprise two priority strands: (i) promoting sustainable fisheries and preserving aquatic bio-resources, and (ii) promoting sustainable aquaculture activities as well as processing and marketing of fisheries and aquaculture products.

In light of the current plans for the EU's Cohesion Policy and Common Fisheries Policy 2021-2027, the Austrian programmes will support and pursue the above-mentioned five European policy objectives, while at the same time also taking into account of the other objectives of EU Cohesion Policy (economic, social and territorial cohesion) and the Common Fisheries Policy.

Implementation of the country-specific recommendations 2020



With respect to the recommendations addressed to Austria for 2020 and 2021 under the European Semester 2020, Austria can, given the present preliminary status of the EU's Cohesion Policy and Common Fisheries Policy 2021-2027, expect contributions – for specific programmes and limited in amount – in the field of education, amongst others (based on planned ESF+ actions). The measures planned under the ERDF and the EMFF deserve mention as well – these measures can be attributed to policy objectives 1 (A smarter Europe – for competitiveness, digital transition, entrepreneurship and innovation) and 2 (A greener, carbon-free Europe). Again, given the present preliminary status, Austria can expect contributions – for specific programmes and limited in amount – for supporting the economy, for assisting SMEs, for research and innovation, as well as for the green and digital transitions. Finally, Austria also plans to use the REACT-EU funds available to it in 2021 and 2022 for crisis intervention purposes. These funds make it possible to offer targeted forward-looking support for businesses and for human resources development under the new EU Cohesion Policy programmes, which will contribute to reaching the goals set out in the recommendations.

9 Institutional aspects

The National Reform Programme 2020 was adopted by the Austrian Council of Ministers on 14 April 2020 and submitted to the Austrian Parliament for deliberation in accordance with the rules of procedure. The Budget Committee deliberated on the National Reform Programme in a public session held on 8 May 2020 and acknowledged the Programme with a majority of the votes cast.

The present National Reform Programme 2021 complements the National Recovery and Resilience Plan and documents the numerous initiatives and measures launched by the federal government with a view to sustainable growth and employment.

Within their respective spheres of responsibility, the provincial and local governments contribute to implementing the country-specific recommendations for 2019 and 2020. Collaboration between the various layers of government in early childhood education and the health sector is governed by so-called Article 15a agreements, which are used to regulate competences across the different levels of government. A key aspect of health-sector policy is to consistently increase the resilience of the healthcare system by means of target management. 2021 will see work on the reform of the care system based on the same model. By expanding the offer of high-quality formal childcare, the federal provinces and local communities contribute to the aim of improving women's labour market participation and overcoming educational disadvantages. As well as increasing public transport capacities, research and development, innovation, digitalisation and boosting of competitiveness count among the central topics addressed at regional and local level.

Numerous initiatives at federal and provincial level reflect the contributions made by the Austrian social partners, whose expertise has helped to find swift and problem-focused solutions, in particular against the backdrop of the pandemic. Examples include leave of absence for members of at-risk groups or a legal claim to extra leave of absence for childcare. The bonus for taking on new apprentices has been extended, and two apprenticeship trade packages have been revised. In addition, the newly launched Corona labour foundation (*Corona Arbeitsstiftung*) is a major contribution towards upskilling and combating the shortage of skilled labour.

In its efforts to include all relevant stakeholders in the European Semester process, the federal government is in regular contact with representatives of the various layers of government, the social partners and civil society.

In addition, the various ministries also have measures in place to involve civil society. In accordance with Austria's standards for public participation, the government strives to launch participation processes as early as possible to make the best possible use of existing leeway and scope for action. Here, too, the progress in digitalisation presents key opportunities for fostering public participation tailored to specific objectives and target groups. A green book prepared as guidance for fostering public participation and open government provides the basis for developing practical guidelines in a participative process (Rosenbichler, U./Grünwald, A., 2020).

References and bibliography

AIT 2020: Start-up Monitor 2019. <https://austrianstartupmonitor.at/wp-content/uploads/2020/04/Austrian-Startup-Monitor-2019-compressed.pdf>. Last accessed: 15 April 2021

AMS 2021a: Spezialthema zum Arbeitsmarkt. Kurzarbeit sichert nachhaltig Arbeitsplätze und Know-how. https://www.ams.at/content/dam/download/arbeitsmarktdaten/%C3%B6sterreich/berichte-auswertungen/001_spezialthema_0820.pdf. Last accessed: 15 April 2021

AMS 2021b: Übersicht über den Arbeitsmarkt. Jänner 2021. https://www.ams.at/content/dam/download/arbeitsmarktdaten/%C3%B6sterreich/berichte-auswertungen/001_uebersicht_0121.pdf. Last accessed: 15 April 2021

AMS 2020a: Spezialthema zum Arbeitsmarkt 2020. https://www.ams.at/content/dam/download/arbeitsmarktdaten/%C3%B6sterreich/berichte-auswertungen/001_uebersicht_jahr2020.pdf. Last accessed: 15 April 2021

AMS 2020b: Gender-Budgeting im AMS. <https://www.ams.at/arbeitsuchende/frauen/jeder-tag-ist-ein-frauentag-beim-ams#gender-budgeting-im-ams>. Last accessed: 15 April 2021

Binder, David/Dibiasi, Anna et al., 2021: Entwicklungen im MINT-Bereich an Hochschulen und am Arbeitsmarkt. Projektbericht IHS im Auftrag des Bundesministeriums für Bildung, Wissenschaft und Forschung. https://www.bmbwf.gv.at/dam/jcr:158c1c57-2e65-4842-9746-c727903e21bb/IHS_Entwicklungen_im_MINT-Bereich.pdf. Last accessed: 15 April 2021

BMDW, 2021: KMU im Fokus 2020. Bericht über die Entwicklung und Situation kleiner und mittlerer Unternehmen der österreichischen Wirtschaft. https://www.bmdw.gv.at/dam/jcr:e3509931-b2ad-4e4d-be64-79b018daf91a/KMU_im_Fokus_Barrierefrei_FINAL.pdf. Last accessed: 15 April 2021

BMK, 2020a: FTI-Strategie Mobilität. Innovationen in und aus Österreich für ein klimaneutrales Mobilitätssystem in Europa.

https://mobilitaetderzukunft.at/resources/pdf/broschueren/BMK_FTI_Strategie_Mobilitaet_barrierefrei.pdf. Last accessed: 15 April 2021

BMK, 2020b: Energie in Österreich. Zahlen, Daten, Fakten. [https://www.bmk.gv.at/dam/jcr:f0bdbaa4-59f2-4bde-9af9-e139f9568769/Energie in OE 2020 ua.pdf](https://www.bmk.gv.at/dam/jcr:f0bdbaa4-59f2-4bde-9af9-e139f9568769/Energie_in_OE_2020_ua.pdf). Last accessed: 15 April 2021

BMSGPK, 2020: Covid-19. Analyse der sozialen Lage in Österreich. https://www.sozialministerium.at/dam/jcr:e655d53a-0349-4c10-a8e8-88bf1de9f4ca/BMSGPK_Armutskonferenz.pdf. Last accessed: 15 April 2021

Bock-Schappelwein, Julia, Eppel, Rainer, et al., 2020a: Abgeschwächter Arbeitsmarktaufschwung 2019 und der COVID-19-Schock im Frühjahr 2020. In: WIFO-Monatsberichte 5/2020, S. 363-375. https://www.wifo.ac.at/jart/prj3/wifo/resources/person_dokument/person_dokument.jart?publikationsid=66021&mime_type=application/pdf. Last accessed: 15 April 2021

Bock-Schappelwein, Julia, Famira-Mühlberger, Ulrike, Mayrhuber, Christine, 2020b: COVID-19 Ökonomische Effekte auf Frauen. WIFO Research Briefs 3/2020 https://www.wifo.ac.at/jart/prj3/wifo/resources/person_dokument/person_dokument.jart?publikationsid=65897&mime_type=application/pdf. Last accessed: 15 April 2021

Bock-Schappelwein, Julia, Hyll, Walter, 2020c: COVID-19-Pandemie: Beschäftigungssituation für Frauen schwieriger. WIFO Research Briefs 9/2020 https://www.wifo.ac.at/jart/prj3/wifo/resources/person_dokument/person_dokument.jart?publikationsid=66188&mime_type=application/pdf. Last accessed: 15 April 2021

Bock-Schappelwein, Julia, Huemer, Ulrike, Hyll, Walter, 2021: Beschäftigung 2020: Bilanz nach einem Jahr COVID-19-Pandemie. WIFO Research Briefs 1/2021. https://www.wifo.ac.at/jart/prj3/wifo/resources/person_dokument/person_dokument.jart?publikationsid=66814&mime_type=application/pdf. Last stand: 15 April 2021

EC, 2020a: European Innovation Scoreboard 2020. <https://ec.europa.eu/docsroom/documents/42981/attachments/1/translations/en/renditions/native>. Last accessed: 15 April 2021

EC, 2020b: Annual Sustainable Growth Strategy 2021. Communication from the Commission to the European Parliament, the European Council, the Council, the European Central Bank, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank. <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1600708827568&uri=CELEX%3A52020DC0575>. Last accessed: 15 April 2021

Eurostat, 2018: Rail passenger transport by type of transport, 2018 (passenger kilometres per inhabitant). [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Rail_passenger_transport_by_type_of_transport,_2018_\(passenger-kilometres_per_inhabitant\).png](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Rail_passenger_transport_by_type_of_transport,_2018_(passenger-kilometres_per_inhabitant).png). Last accessed: 15 April 2021

Holtgrewe, Ursula/Schober, Barbara et al., 2021: Schule unter COVID 19 Bedingungen: Erste Analysen und Empfehlungen. <https://irihs.ihs.ac.at/id/eprint/5667/7/holtgrewe-schober-steiner-2021-schule-unter-covid-19-bedingungen.pdf>. Last accessed: 15 April 2021

KDZ, 2021: Prognose Gemeindeeinnahmen in mehreren Szenarien. <https://www.kdz.eu/index.php/de/aktuelles/blog/prognose-gemeindeeinnahmen-mehreren-szenarien>. Last accessed: 15 April 2021

Kirchengast, Gottfried/Steininger, Karl, 2020: Treibhausgasbudget für Österreich auf dem Weg zur Klimaneutralität 2040, Wegener Center für Klima und Globalen Wandel, Universität Graz. https://wegcwww.uni-graz.at/publ/downloads/RefNEKP-TreibhausgasbudgetUpdate_WEGC-Statement_Okt2020.pdf. Last accessed: 15 April 2021

OECD 2020a: Digital Economy Outlook 2020. <https://www.oecd-ilibrary.org/docserver/bb167041-en.pdf?expires=1615031502&id=id&accname=ocid43018308&checksum=995C61CF1C1AA8566AB0F3343C9D695A>. Last accessed: 15 April 2021

OECD 2020b: Education at a glance. https://www.oecd-ilibrary.org/education/education-at-a-glance_19991487. Last accessed: 15 April 2021

OeNB, 2020: Gesamtwirtschaftliche Prognose der OeNB für Österreich 2020-2023. https://www.oenb.at/dam/jcr:2ae68b72-0777-40b7-97a2-69be576625c9/prognose_dez_20.pdf. Last accessed: 15 April 2021

OJEU, 2021: Regulation (EU) 2021/241 of the European Parliament and of the Council of 12 February 2021 establishing the Recovery and Resilience Facility (2021/L57:17-75) <https://eur-lex.europa.eu/eli/reg/2021/241/oj>. Last accessed: 15 April 2021

OJEU, 2020: Council Recommendation of 20 July 2020 on the 2020 National Reform Programme of Austria and delivering a Council opinion on the 2020 Stability Programme of Austria (2020/C282) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.C_.2020.282.01.0129.01.ENG&toc=OJ%3AC%3A2020%3A282%3ATOC. Last accessed: 15 April 2021

OJEU, 2019: Council Recommendation of 9 July 2019 on the 2019 National Reform Programme of Austria and delivering a Council opinion on the 2019 Stability Programme of Austria (2019/C301) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.C_.2019.301.01.0117.01.ENG&toc=OJ%3AC%3A2019%3A301%3ATOC. Last accessed: 15 April 2021

Österreichische Sozialversicherung, 2021: Statistische Daten aus der Sozialversicherung. Geringfügig Beschäftigte. Geringfügig freie Dienstverträge – Jahresdurchschnitt 2020. <https://www.sozialversicherung.at/cdscontent/load?contentid=10008.742034&version=1610974907>. Last accessed: 15 April 2021

Rappold, Elisabeth/Juraszovich, Brigitte et al., 2021: Taskforce Pflege. Begleitung des Prozesses zur Erarbeitung von Zielsetzungen, Maßnahmen und Strukturen. Ergebnisbericht. https://www.sozialministerium.at/dam/jcr:d7f5ca44-95d2-43f2-bb0c-304ed51d50d2/Bericht_TFPflege_fin_.pdf. Last accessed: 15 April 2021

Rosenbichler, Ursula/Grünwald, Alexander, 2020: Grünbuch: Partizipation im digitalen Zeitalter. https://www.oeffentlicherdienst.gv.at/verwaltungsinnovation/oeffentlichkeitsbeteiligung/201103_Partizipation_Gruenbuch_A4_BF_1.pdf?7t15d4. Last accessed: 15 April 2021

Scheiber, Patricia/Müller, Lena-Sophie et al., 2020: eGovernment Monitor 2020. https://initiated21.de/app/uploads/2020/10/egovernment_monitor_2020_onlineausgabe.pdf. Last accessed: 15 April 2021

Statistik Austria, 2021: Wirtschaft im Jahr 2020: Historischer Rückgang von -6,6%. https://www.statistik.at/web_de/statistiken/wirtschaft/volkswirtschaftliche_gesamtrechn

ungen/bruttoinlandsprodukt_und_hauptaggregate/jahresdaten/index.html. Last accessed: 15 April 2021

Statistik Austria, 2020a: Globalschätzung/Forschungsquote jährlich. https://www.statistik.at/web_de/statistiken/energie_und_innovation_mobilitaet/forschung_und_innovation/globalschaetzung_forschungsquote_jaehrlich/index.html. Last accessed: 15 April 2021

Statistik Austria, 2020b: Energetischer Endverbrauch im Jahr 2019 um 1% gestiegen. https://www.statistik.at/web_de/statistiken/energie_und_umwelt/energie/energiebilanzen/124842.html. Last accessed: 15 April 2021

Statistik Austria, 2020c: Verkehrsstatistik 2019. https://www.statistik.at/web_de/services/publikationen/14/index.html?includePage=detailedView§ionName=Verkehr&publd=695. Last accessed: 15 April 2021

Statistik Austria, 2020d: Kindertagesheime. https://www.statistik.at/web_de/statistiken/menschen_und_gesellschaft/bildung/kindertagesheime_kinderbetreuung/index.html. Last accessed: 15 April 2021

Statistik Austria, 2020e: Kindertagesheim-Statistik 2019/20. <https://www.statistik.at/wcm/mvc/publicationsCatalogue/redirectDetailedView?publd=791§ionId=133>. Last accessed: 15 April 2021

VCÖ, 2020: Arbeitswege in Österreich auf Klimakurs bringen. Factsheet 2020/01 https://www.vcoe.at/files/vcoe/uploads/News/VCOe-Factsheets/2020/2020-01%20Arbeitswege%20in%20Oesterreich%20auf%20Klimakurs%20bringen/FS_Arbeitswege%20auf%20Klimakurs%20bringen.pdf. Last accessed: 15th April 2021

VCÖ, 2019: Wachstum des Gütertransports in EU braucht Bahnausbau. <https://www.vcoe.at/files/vcoe/uploads/News/VCOe-Factsheets/2019/2019-06%20railfreight/VCO%CC%88-Factsheet%20Railfreight%2030by30.pdf>. Last accessed: 15 April 2021

WIFO, 2021: Prognose für 2021 und 2022. https://www.wifo.ac.at/themen/konjunktur/kurz-und_mittelfristige_prognosen/wifo-konjunkturprognose. Last accessed: 15 April 2021

WKÖ, 2021a: Unternehmensfinanzierung 2020. Strukturbefragung unter österreichischen Betrieben. <https://news.wko.at/news/oesterreich/analyse-unternehmensfinanzierung-2020.pdf>. Last accessed: 15 April 2021

WKÖ, 2021b: Unternehmensneugründungen 1993 – 2020. Vorläufige Ergebnisse. https://wko.at/statistik/ng/ng2020v-gesamt.pdf?_ga=2.146270388.1422799511.1615825544-20139640.1597305300. Last accessed: 15 April 2021

List of abbreviations

AIT	Austrian Institute of Technology
AMS	Austrian Public Employment Service (<i>Arbeitsmarktservice</i>)
AMIF	Asylum, Migration and Integration Fund
approx.	approximately
AQUA	On-the-job Upskilling (<i>Arbeitsplatznahe Qualifizierung</i>)
AST	Labour foundations (<i>Arbeitsstiftungen</i>)
AUSSDA	The Austrian Social Science Data Archive
aws	Austria Wirtschaftsservice GmbH - Austrian promotional bank
BMBWF	Austrian Federal Ministry of Education, Science and Research
BMDW	Austrian Federal Ministry for Digital and Economic Affairs
BMK	Austrian Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology
BMKÖS	Austrian Federal Ministry for Arts, Culture, Civil Service and Sport
BMSGPK	Austrian Federal Ministry of Social Affairs, Health, Care and Consumer Protection
BMVI	Instrument for financial support for border management and visa
B-VG	Federal Constitutional Law (<i>Bundes-Verfassungsgesetz</i>)
CAP	Common Agricultural Policy
CeMM	Center for Molecular Medicine
CeSaR	Country-Specific Recommendation Database of the European Commission
CLAR	Clean Alpine Region
CPD	Continuing Professional Development
CPR	Common Provisions Regulation
DIH	Digital Innovation Hubs
EAFRD	European Agricultural Fund for Rural Development
EC	European Commission
ECTS	European Credit Transfer and Accumulation System
e.g.	example given
ELGA	Electronic Health Record System (<i>Elektronische Gesundheitsakte</i>)

EMFAF	European Maritime Fisheries and Aquaculture Fund
EMFF	European Maritime and Fisheries Fund
ERC	European Research Council
ERDF	European Regional Development Fund
ESF+	European Social Fund
ESL	Early School Leavers
et al.	et alia
etc.	et cetera
EU	European Union
EU ETS	EU Emissions Trading System
Eurostat	Statistical Office of the European Union
FEAD	Fund for European Aid to the Most Deprived
FFG	Austrian Research Promotion Agency
FIA	Fast-Track Training for Skilled Workers (<i>FacharbeiterInnenintensivausbildung</i>)
FKS	Skilled Workers Scholarship (<i>Fachkräftestipendium</i>)
FTTH	Fiber to the Home
FWF	Austrian Science Fund
GDP	Gross Domestic Income
ICT	Information and Communication Technology
IGJ	Investment for Growth and Jobs
iKM ^{PLUS}	Skills Assessment PLUS (<i>Kompetenzmessung PLUS</i>)
IMBA	Institute of Molecular Biotechnology
IP	Intellectual Property
IPCEI	Important Projects of Common European Interests
IPR	Intellectual Property Rights
ISF	Internal Security Fund
IST Austria	Institute of Science and Technology Austria
JTF	Just Transition Fund
KDZ	Centre for Public Administration Research
KEM	Climate and Energy Model Regions (<i>Klima- und Energie-Modellregionen</i>)

KLAR!	Climate Change Adaptation Regions (<i>Klimawandelanpassungsregionen</i>)
KRAGES	Burgenland Health Institutions Ltd (<i>Burgenländische Krankenanstalten GesmbH</i>)
NEBA	Job Assistance Network (<i>Netzwerk Berufliche Assistenz</i>)
NECP	National Energy and Climate Plan
NEET	Not in Education, Employment or Training
NGO	Non-Governmental Organisation
NoVA	Standard Fuel Consumption Tax (<i>Normverbrauchsabgabe</i>)
NPO	Non-Profit Organisation
NSP-AF	Austrian National Strategic Plan for Aquaculture and Fisheries (<i>Nationaler Strategieplan Österreich für Aquakultur und Fischerei</i>)
OECD	Organization for Economic Co-operation and Development
OeKB	Austrian Control Bank (<i>Oesterreichische Kontrollbank</i>)
OeNB	Central Bank of Austria (<i>Oesterreichische Nationalbank</i>)
OJEU	Official Journal of the European Union
ÖAW	Austrian Academy of Sciences
ÖIF	The Austrian Integration Fund
ÖHT	Austrian Hotel and Tourism Bank Ltd. (<i>Österreichische Hotel- und Tourismusbank Ges.m.b.H</i>)
ÖROK	Austrian Conference on Spatial Planning
p.	page
p.a.	per anno
PIA	Internet Infrastructure Platform Austria 2030
REACT-EU	Recovery Assistance for Cohesion and the Territories of Europe
RTI	Research, Technology and Innovation
SDGs	The 2030 Agenda for Sustainable Development
SEP	Energy Framework Strategy (<i>Städtisches Energieeffizienz-Programm</i>)
SMEs	Small and Medium-sized Enterprises
STEM	Science, Technology, Engineering and Mathematics
TMO	Time Machine Organization
TSI	Technical Support Instrument

TWh	Terawatt-hours
UBA	Environment Agency Austria
USP	Business Service Portal
WIFO	Austrian Institute of Economic Research
WKÖ	Austrian Economic Chambers
VAT	Value-Added Tax
VCÖ	Mobility With a Future (<i>Mobilität mit Zukunft</i>)
VHS	Austrian Adult Education Centres