

**Guidelines and best practices
for micro-, small and medium enterprises
in delivering energy-efficient products and
in providing renewable energy equipment**

Consultant: Andrey Dodonov

August 2020

Executive Summary

United Nations Economic Commission for Europe (UNECE) is one of the partners implementing UNDA project “Global Initiative towards post-COVID-19 resurgence of the MSME sector.” The overall goal of the project is to strengthen the capacity and resilience of micro-, small and medium enterprises (MSMEs) in developing countries and economies in transition to mitigate the economic and social impact of the global COVID-19 crisis.

As part of its task under the project, UNECE is developing Guidelines and Best Practices for MSMEs in delivering energy-efficient products and in providing renewable energy equipment (can be shortly termed “Clean Energy MSMEs”) after the COVID-19 crisis.

The severe health crisis caused by the COVID-19 has forced governments of the world to take drastic measures such as administrative business shutdowns, quarantines and restrictions on mobility and social contact to contain the spread of virus and has brought economies of the world to a standstill. Business are seeing a downturn in their revenues and the financial commitments to suppliers, employees, lenders and investors are depleting liquidity buffers of the firms. The reversal of earnings expectations has significantly weakened the projected interest coverage and profitability ratios for these companies. Effect of the pandemic on a large number of industries simultaneously and the drop in sales of producers of intermediate goods and services even if confinement measures did not apply to them is also a cause for concern. Many companies along with the supply chains also face liquidity shortfalls, increase in trade credit losses, further adding to loss of cashflow.

These are the main findings from the analysis in the report:

- Availability of various funding programmes, which have been used to financially stabilize the MSMEs or start-ups. These funding programmes are helpful in giving financial security to the MSMEs working in renewable and energy efficiency sectors in such uncertain times. There should be more such initiatives by funding agencies to support the vulnerable MSMEs who have lost a source of financing their businesses during the pandemic.
- Many MSMEs have adjusted already to the new normal of remote working conditions and social distancing. Thus, it is evident that to survive the pandemic, it is imperative to follow the social distancing norms while working. Work from home can be an option that can be explored more by MSMEs.
- Delaying the non-essential and non-priority projects to some future date is also a way in which the crisis could be mitigated. As the focus of the world is to fight the virus and search for technologies which help in this fight, it is obvious that some of the funding sources might be temporarily unavailable for the projects which are not relevant to this end. Thus, the MSMEs can delay such projects which do not put into jeopardy their immediate survival. The funds, which are currently available in the MSMEs, can be used to develop and implement only those projects which have a direct and immediate effect on the sustenance of the company.
- Virtual (online) activities for MSMEs become the most important now. By remaining active on social media and through blog posts on the website, the MSMEs can tap into the

investors and customers even amidst social distancing norms. These blog posts or activities that the organization does over social media or the internet also instil confidence among the current and potential investors and customers. It is also a means of keeping the MSMEs relevant during these times.

- Companies could start to provide classes and skill-based sessions to students and professionals worldwide during the pandemic at a nominal fee. These sessions are primarily based on the sustainable energy knowledge dissemination. This is also a way to counter the threat of becoming irrelevant in such difficult times.
- Some MSMEs have repackaged their products and have branded themselves as a health-tech start-up amidst the pandemic. This is one more option for companies to get funds for their operations. It is also possible, instead of full rebranding, to put out products aimed at fighting the pandemic in addition to their regular products.

Table of Contents

Executive Summary	i
Introduction	1
1. Analysis of the environment the clean energy MSMEs face as a result of the COVID-19 crisis.....	3
1.1. General impact of COVID-19 crisis on MSMEs.....	3
1.2. Impact of working environment on MSMEs as a result of the COVID-19 crisis.....	4
1.3. Overview of specific conditions for MSMEs facing new working environment.....	8
2. Best practices in the energy efficiency sector relevant for MSMEs response to the COVID-19 crisis and post-crisis recovery	9
2.1. Estonia: energy efficiency equipment in the industry sector	9
2.2. Switzerland: energy-efficient solutions for large data storage.....	9
2.3. Russian Federation: production of energy-efficient battery packs.....	10
2.4. Spain: information technology based solutions for equipment operations monitoring.....	10
2.5. Slovakia: software for energy consumption optimization	11
3. Best practices in the area of renewable energy relevant for MSMEs response to the COVID-19 crisis and post-crisis recovery	12
3.1. Sweden: installation of a solar energy park.....	12
3.2. Belgium: installation of backup energy supply	12
3.3. Sweden: project development and services, wave energy technology.....	13
3.4. Latvia: recycling of PET plastic waste.....	14
3.5. Sweden: wooden wind turbine tower	15
4. Case studies on practical measures for MSMEs in getting access to markets, financing, and advanced technologies to MSMEs providing renewable energy equipment and energy efficiency products and services.....	16
4.1. European Union: Horizon 2020 Funding Programme for MSMEs	16
4.2. European Union: European Institute of Innovation and Technology InnoEnergy PowerUp! Challenge	17
4.3. European Union: support for MSMEs from the clean energy sector by the European Investment Bank	17

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

4.4.	Italy: Life Material Match Making Platform	18
4.5.	Poland: Internationalization of Wielkopolska’s MSMEs	19
4.6.	Ireland: Trading Online Voucher Scheme	19
4.7.	Spain: Centr@tec Program: Advanced Innovation Services for SMEs	20
4.8.	Spain: SME innovative and financing facility	20
4.9.	Netherlands: Business Cluster collaboration	21
4.10.	Germany: entrepreneurial crisis management of innovative start-ups during COVID-19.....	21
5.	Guidelines to MSMEs delivering energy-efficient products and providing renewable energy equipment on access to financing, markets, and advanced technologies.....	22
5.1.	Analysis of potential for use and dissemination	22
5.2.	Activities for the post-pandemic recovery strategy development of MSMEs	24
5.3.	Guidelines for MSMEs in the UNECE Subregions.....	25
	Conclusions	29
	Recommendations	30
	Recommendations to governments for developing policy guidelines.....	30
	Recommendations to governments for establishing financial incentives schemes	31
	References.....	33
	Annex 1. Measures taken by selected countries from the UNECE region to support MSMEs during COVID-19 crisis	40
	European Union.....	40
	Western and Central Europe	41
	South-Eastern and Eastern Europe and Turkey	64
	Russian Federation, Central Asia and the Caucasus	69

List of Figures and Tables

Figure 1: Impact of pandemic on MSMEs and large industries	3
Figure 2: Overall impact of the pandemic on businesses in Europe.....	4
Figure 3: Availability of funds with MSMEs	5
Figure 4: Percentage loss in sales for MSME and self-employed	5
Figure 5: Share of different businesses shutdown by the pandemic	6
Figure 6: Potential impact of pandemic on investments in different sectors	7
Figure 7: Opinion of MSMEs on governmental financial support measures	23
Table 1. Measures taken by MSMEs during the pandemic lockdown	23

List of Acronyms

5G	Fifth Generation
ABS	Asset-Backed Securities
ALL	Albanian Lek
ALTUM	The National Development Finance Institution of Latvia
AMD	Armenian Dram
AVRA	Andalusian Agency for Homes and Rehabilitation
AZN	Azerbaijani Manat
CBA	Central Bank of Armenia
CBAM	Carbon Border Adjustment Mechanism
CEO	Chief Executive Officer
CHF	Swiss Franc
CIT	Corporate Income Taxes
COSME	Competitiveness of Enterprises and Small and Medium-sized Enterprises
CZK	Czech Koruna
DKK	Danish Krone
eBOI	Electronic Database of Investment Areas of the Wielkopolska Region
ECB	European Central Bank
EFSI	European Fund for Strategic Investments
EIB	European Investment Bank
EIC	European Innovation Council
EIF	European Investment Fund
EIT	European Institute of Innovation and Technology
EKF	Danish Export Credit Fund
ELY	Centers for economic development, Transport and Environment in Finland
EMS	Environmental Management Systems
ERDF	European Regional Development Fund
ESF	European Social Fund
ESIF	European Structural and Investment Funds
ETF	Exchange-Traded Funds

ETS	Emissions Trading Schemes
EXIMBANKA	Export-Import Bank of Slovakia
FFA	French Insurance Federation
FIN-FSA	Finnish Financial Supervisory Authority
FTA	Free Trade Agreements
GEL	Georgian Lari
GHG	Greenhouse Gas
H2020	Horizon 2020
HAMAG-BICRO	Croatian Agency for SMEs, Innovation and Investment
HBOR	Croatian Bank for Reconstruction and Development
ICE	Institute for Business Competitiveness, Spain
ICE1	Italian Trade Promotion Agency
IFO	International Institute for Economic Research
INSEE	National Institute of Statistics and Economic Studies, France
ITC	International Trade Council
KOSGEB	Small and Medium Enterprises Development Organization of Turkey
KZT	Kazakhstani Tenge
MKD	Macedonian Denar
MNC	Multinational corporation
MNE	Ministry of National Economy, Kazakhstan
MSME	Micro-, Small and Medium Enterprises
NBM	National Bank of Moldova
OBR	Office for Budget Responsibility, United Kingdom
OECD	Organisation for Economic Co-operation and Development
PET	Polyethylene terephthalate
PHA	Public Health Authority of Slovak Republic
PLN	Polish Złoty
R&D	Research & Development
RON	Romanian Leu
SACE	Servizi Assicurativi del Commercio Estero, Italy

SID	Slovenska izvozna in razvojna banka, d.d., Ljubljana
SSP	Statutory Sick Pay
SZRB	Slovak Guarantee and Development Bank
TESI	Finnish Industry Investment Ltd.
TL	Turkish Lira
UNDA	United Nations Development Account
UNECE	United Nations Economic Commission for Europe
VAT	Value Added Tax
WEF	World Economic Forum
WTO	World Trade Organization

Introduction

United Nations Economic Commission for Europe (UNECE) is one of the partners implementing UNDA project “Global Initiative towards post-COVID-19 resurgence of the MSME sector.” The overall goal of the project is to strengthen the capacity and resilience of micro-, small and medium enterprises (MSMEs) in developing countries and economies in transition to mitigate the economic and social impact of the global COVID-19 crisis.

Although there is no particular definition of MSME as it can depend on many factors, such as business culture, the size of the country’s population, industry and the level of international economic integration. In this report we will be taking the European Commission’s definition of MSMEs as a reference, established according to the number of employees and the annual turnover or balance sheet:

- Micro-enterprise: fewer than 10 employees and an annual turnover or balance sheet below €2 million.
- Small enterprise: fewer than 50 employees and an annual turnover or balance sheet below €10 million.
- Medium-sized enterprise: fewer than 250 employees and annual turnover below €50 million or balance sheet below €43 million.

As part of its task under the project, UNECE is developing Guidelines and Best Practices for MSMEs in delivering energy-efficient products and in providing renewable energy equipment (can be shortly termed “Clean Energy MSMEs”) after the COVID-19 crisis.

The severe health crisis caused by the COVID-19 has forced governments of the world to take drastic measures such as administrative business shutdowns, quarantines and restrictions on mobility and social contact to contain the spread of virus and has brought economies of the world to a standstill. Business are seeing a downturn in their revenues and the financial commitments to suppliers, employees, lenders and investors are depleting liquidity buffers of the firms. The reversal of earnings expectations has significantly weakened the projected interest coverage and profitability ratios for these companies^[1]. Effect of the pandemic on a large number of industries simultaneously and the drop in sales of producers of intermediate goods and services even if confinement measures did not apply to them is also a cause for concern. Many companies along with the supply chains also face liquidity shortfalls, increase in trade credit losses, further adding to loss of cash-flow.

MSMEs have an above average representation in sectors affected by the COVID-19. These sectors are transport, manufacturing, construction, wholesale and retail trade, air transport, accommodation and food services, real estate, professional services, and other personal services (e.g. hairdressing)^[2]. As per a recent OECD data, although overall MSMEs account for over 50% of employment across OECD countries, particularly in these sectors the share of MSMEs in employment is 75% on average across OECD countries and 90% in Greece and Italy. The share of microenterprises in the affected sectors in some OECD countries is very high, for example, in Greece and Italy in the affected it is 60% and their share of total employment is 45% and 55% of

the business economy respectively ^[3]. The good news is MSMEs in the eco, energy efficiency, renewable and building were already at the edge of implementing innovative, circular, green and sustainable initiatives before the COVID-19 pandemic hit ^[4].

The role of MSMEs in delivering energy-efficient products and in providing renewable energy equipment can become crucial in the post-COVID-19 recovery phase if they are provided with necessary incentives. This can be one of the ways to restart MSMEs or even to create new ones when job opportunities are scarce. MSMEs can benefit from clear guidelines on access to financing, access to markets, access to advanced technologies, and a favorable environment created by proper government policies and legislation. They will also benefit from concrete examples of successful implementation of measures by MSMEs, including repurposing that led to significant economic gains. In return, MSMEs can become engines for post-crisis economic recovery, creating job opportunities and leading socially responsible and environmentally friendly economic development thus helping to achieve numerous sustainable development goals.

In the absence of a robust government policy response and financial incentives the liquidity crisis may turn into a global corporate solvency crisis. With less or no income revenue the firms may decide on voluntary closure followed by bankruptcy. Human and organizational capital may vanish altogether. Global value chains would be disrupted if highly integrated firms are forced to exit the market. This could lead to serious long-term negative effects on world economies by dragging down employment, productivity, growth, and well-being.

On both the supply and demand sides MSMEs have been severely affected by the pandemic. While on the supply side, companies are experiencing a reduction in the supply of labour due to workers being unwell or having to look after their family and interruptions due to shortage of parts and intermediate goods. Measures to contain the disease through lockdowns and social distancing have led to severe drops in capacity utilization.

On the demand side, a dramatic and sudden loss of demand and revenues has affected MSMEs ability to function and has led to severe liquidity shortages. Furthermore, uncertainty of the economy and fear of contagion has reduced consumption demand.

The risk of a financial crisis is very high. Highly uncertain future of the economy will reduce corporate investment and consumption demand. Significant number corporate defaults would undermine balance sheets of banks and institutional investors. To avert this risk, governments have adopted several emergency measures such as direct and indirect financing of the wage bill (including by extending the coverage and increasing the unemployment benefit replacement rate, short-term work schemes and temporary unemployment benefits), tax deferrals, debt moratoria and extension of state loan guarantees ^[5].

The effect on MSMEs is especially severe, particularly because of higher levels of vulnerability and lower resilience related to their size. Due to the low level of digitalization and difficulties in accessing and adopting new technologies, the costs of prevention and change in work processes may be relatively higher for MSMEs given their smaller size. To add to their problems, MSMEs may find it hard to obtain information on COVID-19 prevention, possible business strategies to lighten the shock and government initiatives available to provide support.

1. Analysis of the environment the clean energy MSMEs face as a result of the COVID-19 crisis

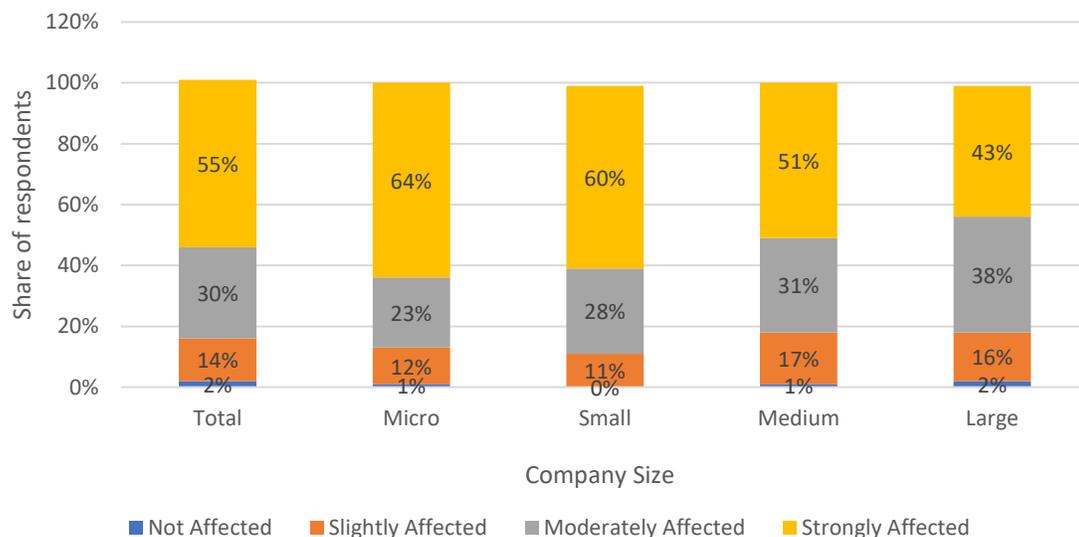
As a major consumer of energy Europe faces several challenges to meet its demand in the future. Under the Paris Agreement many European countries have pledged to reduce their Greenhouse Gas Emissions. Countries are rapidly developing their renewable energy capacity, but to meet the growing demand it becomes increasingly important to invest in energy efficiency to avoid increased capacity addition and mounting infrastructure costs.

Due to number of obligations taken by the countries towards promotion of the green and renewable energy capacity, the rising cost of energy can be detrimental to the financial health of MSMEs during the post COVID recovery phase, and potentially require more subsidiary stimulation from the side of national and local governments.

1.1. General impact of COVID-19 crisis on MSMEs

As per the International Trade Council's (ITC) report titled "COVID-19: The Great Lockdown and its Impact on Small Business"^[6], the MSMEs travel through 4 phases as a result of the impact of the COVID-19 crisis, namely, Shutdown Impacts, Supply Chain disruptions, Demand Depression and eventually the recovery. The survey done by ITC on the various companies and the impact that they have faced due to the COVID-19 crisis throws further light on the matter. Fig. 1 shows impact of pandemic on MSMEs and large industries.

Figure 1: Impact of pandemic on MSMEs and large industries



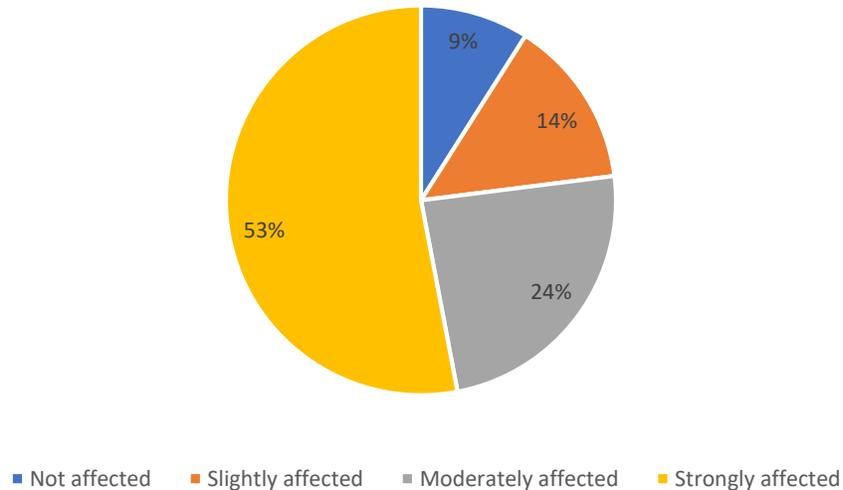
For the above data, the definitions of the micro, small, medium and large enterprises is as follows:

- Micro enterprise: Up to 4 employees
- Small enterprise: 5-19 employees
- Medium enterprise: 20-99 employees
- Large enterprise: 100 and above employees

The above data as obtained from the survey paints a clear picture on how badly the small businesses have been impacted by the lockdown situation. The data, however, includes responses from world over and is not Europe specific.

However, another data set from the same report points to the possible impacts on the businesses in Europe (Fig. 2).

Figure 2: Overall impact of the pandemic on businesses in Europe



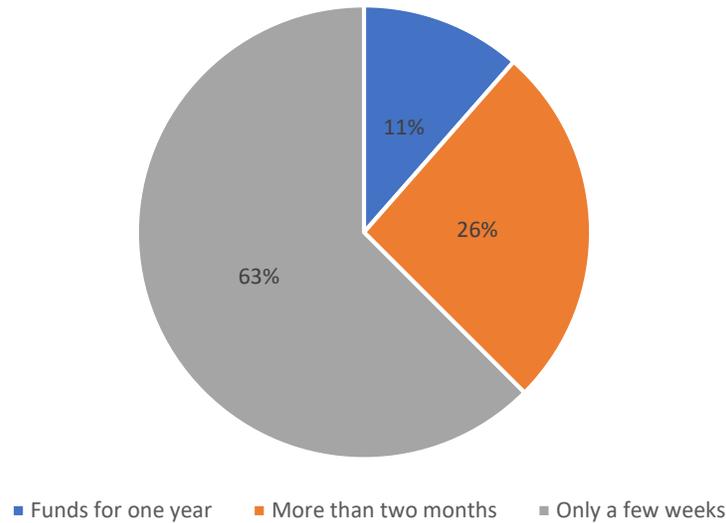
The above data is collected from the survey in Europe and contains information on all the enterprise sizes taking part in the survey. However, the major portion of the enterprises is formed by the MSME sector. Also, the survey also throws some light on the general business environment prevalent in Europe due to the Coronavirus crisis.

1.2. Impact of working environment on MSMEs as a result of the COVID-19 crisis

The COVID-19 crisis has had an extraordinary impact on the MSMEs worldwide. However, the impact is felt especially hard in parts of Europe which reeled under the lockdown for months. The supply chains have been adversely impacted and the market access is either limited or in some cases there is no market access at all because of the measures taken up the states to prevent the spread of the virus. Consumers are changing their market behavior and many industries are experiencing massive market slumps as result.

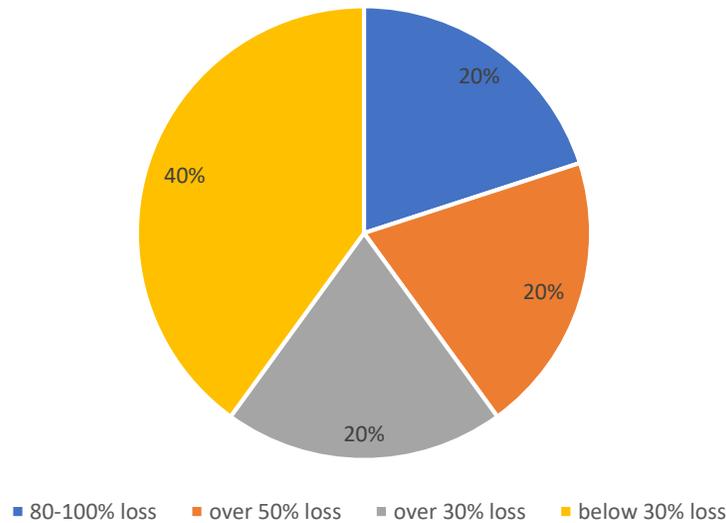
Fig. 3 shows the effect of pandemic on MSMEs' financial situation. Two third of the MSMEs surveyed reported that with normal business disrupted, they had funds that would last only for a few weeks

Figure 3: Availability of funds with MSMEs



More than half of the MSMEs surveyed in the report experienced over 30% loss in their sale. This was largely due to the government-imposed lockdowns preventing MSMEs from conducting business (Fig. 4).

Figure 4: Percentage loss in sales for MSME and self-employed



The above pie-charts show the effect of pandemic on MSMEs' availability of funds and loss in sale.

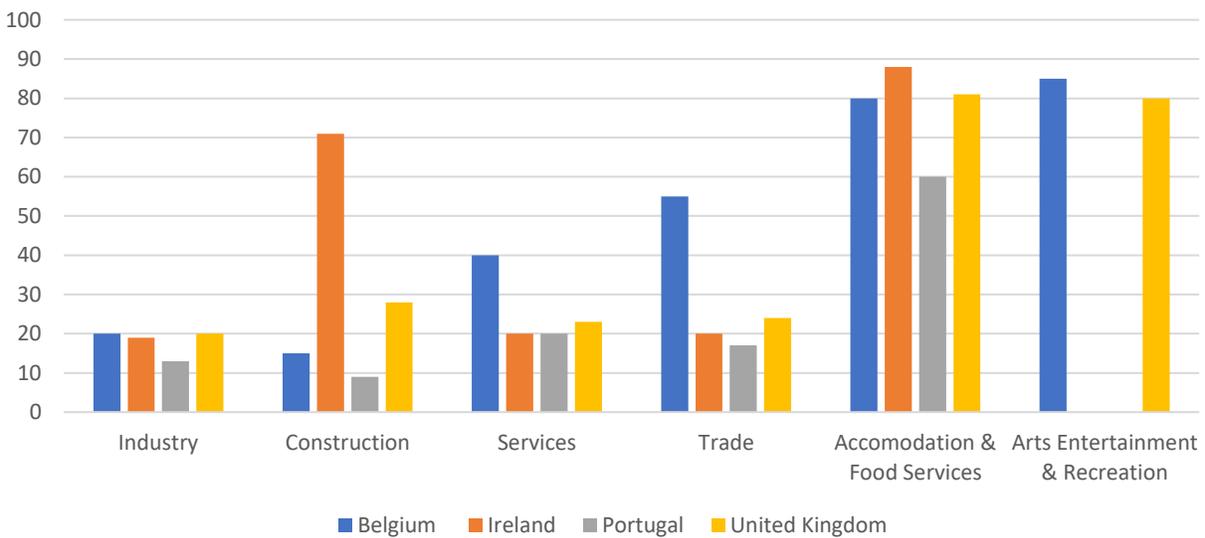
The manufacturing sector, which is more integrated in supply chains than the service sector faces a decline of around 30% in output once input-output linkages and the fact that few manufacturing industries are shut down directly. Manufacturers of building materials, metals and electrical equipment are among the most affected by supply linkages. Service industries have been hit the hardest, with the strongest impact on travel, tourism, food services, arts and recreation and retail

trade. Survey by OECD also suggested that around 20-30% of companies have shut down temporarily during the pandemic.

Productive investment could potentially fall by around 20% in selected advanced economies if it were to decline proportionately with output in sectors in which full or partial shutdowns took place.

Although industrial, construction, services and trade were largely unaffected; accommodation, food services, entertainment and recreation sectors were severely affected as people stayed at home and avoided crowded and enclosed spaces to prevent exposure to the virus (Fig. 5).

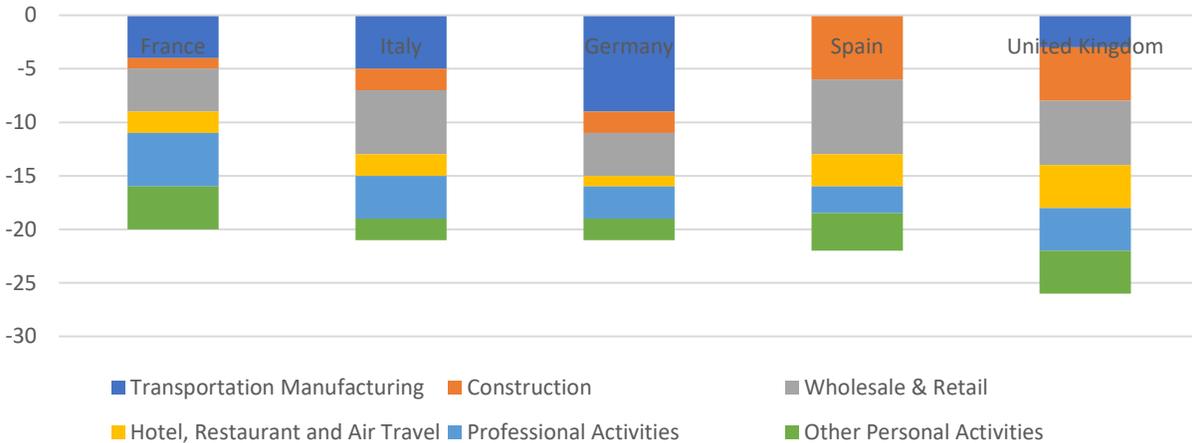
Figure 5: Share of different businesses shutdown by the pandemic



Results of the pandemic impact analysis shows, that worst affected are the transportation manufacturing, wholesale and retail sectors as well as professional activities, as more and more people are staying at home and avoiding crowded places like markets or public transport to prevent the spread of virus (Fig. 6).

Figure 6: Potential impact of pandemic on investments in different sectors

Benchmark estimates of the potential impact of shutdowns on productive investment in selected advanced economies



Information on consumer spending during lockdowns are relatively limited but a sharp decline is seen in several countries from indicators of consumer spending. One study estimated that private consumption could be reduced by about a third during the shutdown in France^[7]. In Ireland, the central bank estimated that consumption could drop by 28% during a full month of shutdown^[8].

Effect on different industries:

- Agriculture: The impact of COVID-19 is generally estimated to be relatively mild in this sector. Although constraints such as transport and the availability of seasonal workers may affect the output.
- Manufacturing: This is one of the more severely affected sectors. In the United Kingdom, a 55% decline in activity is assumed^[9] and for France it is estimated at about 40%^[10] in view of the pandemic. A milder decline of 15% is estimated in manufacturing output is for Germany by^[11]. In Italy, the estimates suggest a decline by over 50% in the industrial sector^[12]. For Europe as a whole a 40% loss in manufacturing activity is estimated^[13]. In Estonia, a decline of 25% is estimated^[14].
- Construction: Impact of shutdowns on construction activity vary widely across countries, from a decline of around 75% in France to under 10% in Estonia and Germany; 40% hit has been estimated for the euro area as a whole.

Another report by SME United throws further light on the specific impact on the MSMEs in Europe due to the COVID-19 pandemic and the subsequent lockdown. Some of the key points from the report are listed as below^[15]:

- On average, about 90% of MSMEs report to be economically affected. For instance, in France and Spain 90% and 95% of MSMEs were affected respectively. The most impacted sectors are services (60%-70%), construction and production (35%-55%); followed by the food sector with an impact of 10%-15%.

- Moreover, 30% of total MSMEs reported that their turnover is suffering at least an 80% loss, with an European Union average of about 50%. For instance, Belgium reported a decline in turnover of 72% for MSMEs and for 28% of MSMEs a loss of more the 75%; Germany reports a decline of 50%, France and Spain a decline of 80% and 75% in sectors confined.
- In addition, although a detailed forecast on employment is premature, MSMEs expect an increase in the unemployment rate in a range between 3% and 5% points.

1.3. Overview of specific conditions for MSMEs facing new working environment

Start-up founders reported that the current economic climate for innovation is unfavorable. Key allies, consumers and investors are themselves completely engaged to reacting to the crisis, and the confusion regarding how the crisis will grow discourages any experiments. Start-ups recorded being compelled to take corrective actions and adopt alternate behavior. Also, most of the interviewees were of the view that their companies had to change their operational structures suddenly, because the processes of value-creation are on hold and the supply chains are disrupted by the crisis.^[16]

MSMEs are quite vulnerable to sudden changes in their working environment due to their scarce technological, human and financial resources. Therefore, a stable and certain climate policy and legislation are required along with an enabling framework at European Union and national level to unlock their true potential to fight climate change.

Tailored government programmes to meet urgent demand for financing for MSMEs have been formulated in the form of capital investment. These include purchases of short-term commercial paper and corporate bonds in primary and secondary markets, purchases of shares of investment funds and exchange-traded funds (ETFs) of corporate bonds, indirect lending through banks, either by providing expanded collateral eligibility that increases banks' ability to borrow from central banks and indirect and direct lending to firms to ensure viable firms remain liquid until economic and market stability are restored. Many lending programmes – particularly for MSMEs – rely on banks facilitating lending, which requires them to take on additional credit risk. Some banks, however, have been permitted to retain a small portion of the loans to limit this credit risk exposure. A few government programmes also provide support through credit guarantees or forms of equity. These credit guarantee serves to support losses on debt that can help absorb downside risks, and thereby incentivizing banks to lend to businesses. Some governments also have provided support through equity investment and co-investment in the businesses, this provides the firms with greater financial flexibility to reduce cash constraints due to high interest payments on debt^[17].

Design features of these governmental programmes limit the scope to only those businesses in need, while protecting the government against material loss. The government lending programmes have sought to ensure broad-based availability of loans to corporate issuers and as well as MSMEs.

2. Best practices in the energy efficiency sector relevant for MSMEs response to the COVID-19 crisis and post-crisis recovery

2.1. Estonia: energy efficiency equipment in the industry sector

In Estonia^[20], funding has been provided to improve resource efficiency in MSMEs on circular economy principles. This has been mainly accomplished by raising awareness of companies, supporting resource use analyses/audits and investments in resource efficient solutions. Measure "Improving resource efficiency in enterprises" is being implemented for the European Union budget period of 2014 - 2020 through the European Union Structural Funds amounting to €101 million.

Case study

Programme on "Improving resource efficiency in enterprises" includes 4 activities: raising awareness of companies, training resource specialists/auditors, supporting resource use analyses/audits and investments in resource efficient solutions, including implementation of environmental management systems (e.g. EMAS). This action has a special focus on MSMEs and the manufacturing industry.

Resource audit is required for investment support. In the first stage, 5 sectors could apply for funding, i.e. mining, food processing, wood industry, paper and pulp industry, and processing of mineral material. In the beginning there were no resource efficiency specialists in the market, Estonia trained these specialists with funding support. In the second phase, the scope was broadened to all the mining and manufacturing industries.

Companies who apply for funding must provide at least 50% financing. Analysis of local needs and situation was necessary prior to the implementation of this measure.

This type of measure helps to fulfill these gaps in energy efficiency knowledge in industries and the financing difficulties. Following this measure, resource productivity of Estonia has improved by 10%.

2.2. Switzerland: energy-efficient solutions for large data storage

Company: Swiss Vault Systems Gmbh

Number of employees: 1-10

Background: Basel-based Swiss Vault Systems Gmbh provides storage and protection systems for large data. Industries including genomics, Telecommunications, Seismic, Astronomy require an exceptional amount of data storage as well as intensive data access and analysis operations. Their unique hardware design and software setup ensures rapid analysis, with secure long-term storage at exceptionally low energy consumption ^[21].

Case study

Swiss Vault, like any other organization has had to adapt to the new normal of remote working and social distancing during the COVID-19 pandemic. The company's website states that all the employees are working from home and the office space is completely out of bounds. This,

however, has not deterred the tech start-up (founded in December 2017) to work around to find ways of improving and growing even in the crisis. The data solutions company providing energy-efficient storage solutions for large data has pitched in to provide one for the healthcare systems. Their project has received a multi-million-euro fund through the EIC accelerator programme through the emergency fund sanctioned to fight off against COVID-19 situation. The organization has also placed itself and is in contention for the award of the Top Swiss Health-Tech Startup award.

2.3. Russian Federation: production of energy-efficient battery packs

Company: Volts Battery LLC

Number of Employees: 13

Background: Volts Battery LLC is a manufacturer of Li-ion based energy storage systems and solar panels, founded in the year 2017 and, headquartered in St. Petersburg, Russia. The company has more than 30 representative offices in Russia, the CIS and Europe.

Case study

Due to COVID induced travel bans and restrictions, the company's logistics were completely halted. They were unable to receive necessary components to manufacture the battery packs. This in turn affected their production.

However, as the restrictions eased, the company took a production facility on lease and started their own production. For this they hired 5 new employees, who followed COVID safety protocols and, the company was able to manufacture 10 units.

Since the unique selling point of their product required demonstration. The company also took the opportunity to engage with their future consumers at a time when, most people were staying at home and might be actively engaging in social media, to promote their product.

2.4. Spain: information technology based solutions for equipment operations monitoring

Company: AEInnova

Number of employees: 11-20

Background: Based out of Terrassa, Spain, and founded in 2014, AEInnova is a young and small company that owns a very strong conviction and very clear ideas about who they are, where they are going and how they want to go. The organization is currently involved in researching and developing Waste Heat Recovery (WHR) systems including thermoelectric energy generation offering the cutting-edge technology capable of improving its energy efficiency and reducing its environmental impact. The organization is also involved in developing Energy Harvesting and IIOT solutions for Industry 4.0 (the 4th Industrial Revolution) [22].

Case study

COVID-19 lockdown has not had much of an impact in terms of R&D work being carried out by the organization. The primary reason for this being the decision to work exclusively from home. This has ensured that the research part of the operations continue unabated. However, the production

of new units of WHR systems has been hampered due to the lockdown because of the labour shortage. Due to the logistics disruption, the organization has had implementation hurdles as far as the WHR units are concerned. However, during the lockdown phase, the organization had also applied for funding from European Union for their INDUEYE under the Horizon 2020 programme and received €507.6 thousand for the project. INDUEYE is a wireless industrial IT device aimed at solving the limitations in digitization of industrial systems where heat is involved. Apart from this, AEInnova has also come up with an IT-based solutions for monitoring the operation of ventilators used in the treatment of COVID-19.

2.5. Slovakia: software for energy consumption optimization

Company: Fuergy

Number of employees: 11-50

Background: FUERGY, a Slovak start-up, has developed its own proprietary, highly scalable hardware device and AI-powered software called “brAI”. This unique solution helps to optimize energy consumption and maximize efficiency of renewable energy sources. Through this software’s automated energy management, one can significantly reduce energy costs and achieve an exceptional 3-year payback period of the investment in renewables ^{[30][31]}.

Case study

COVID-19 lockdown impacted the companies’ non-essential projects which had to be either put on hold or shelved. The reason for this has been a low demand and hampered office activities. It meant that almost all the activities that involved close physical contact had to be put on hold. Research work, however, continued as is. The employees were either working from home or came to office in a staggered manner for only the most essential and priority projects.

As a result of putting a break on other activities, the company could focus on installing and putting into service 2 large-scale battery systems. Both are first of its kind in Slovakia and the neighborhood countries. This has allowed the company to sustain and remain relevant in these challenging times. Another important aspect has been the unwavering support and faith by the investors and the clients in the company. This was made possible due to frequent communication through social media and other virtual modes with these important stakeholders.

3. Best practices in the area of renewable energy relevant for MSMEs response to the COVID-19 crisis and post-crisis recovery

3.1. Sweden: installation of a solar energy park

Company: Azelio

Number of employees: 117 as of December 2019

Background: Azelio is a Swedish solar company founded in 2008, headquartered in Gothenburg. Azelio's solution uses a Stirling engine-based renewable energy storage system to store excess solar energy to be used later and lower the renewable energy cost. It also allows grid flexibility ^[25].

Case study

Due to COVID-19 and its associated travel restrictions, Azelio's overall operations had stopped completely pushing their timeline forward by 3 months. The travel restrictions also disrupted the verification of their new project installation at Noor Solar Park in Morocco.

To overcome these problems, Azelio devised a plan to verify the installation at the company's development center in Åmål, Sweden, which is identical to the installation in Morocco. Thus, the adjustments for COVID-19 have been implemented without the need to cancel any projects or lay off personnel.

The postponed timeline of the projects has led the company to an additional funding of approximately SEK 75 million. As a result of this, Azelio's financing needs stood at SEK 375 million compared to SEK 300 million as estimated during earlier stages of the Q1 of 2020. At the same time, investments related to the start of production have been moved forward, which is why the company is now financed until December 2020 (earlier September 2020).

The saving grace for the company was inauguration of its energy storage system at Noor Solar Park in Morocco that garnered considerable attention worldwide. This led to a large influx of new opportunities from potential customers and partners. Commercial development of the company continues with new Memorandums of Understanding with partners and clients. The latest is with VOGT, a leading supplier of pump systems in Latin America, including supply to the mining industry.

3.2. Belgium: installation of backup energy supply

Company: Energy Engineering BVBA

Number of Employees: 11-50

Background: EREA is a manufacturer of highly efficient electrical transformers, founded in 1933 and headquartered in Wijnegem, Antwerp, Belgium. They supply to a variety of sectors such as renewable, marine and offshore, agriculture, public transport, medical applications, telecoms and for EV charging infrastructures ^{[26][27]}.

Case study

EREA had completely stopped production at its factory due to COVID 19 related restrictions. Although the commercial services of the company remained open, delivery of new products to their customers had completely stopped. The company's sales were not affected as much, since they had existing product stock that they could sell. They also stopped taking any new in-person appointments in order to comply with government regulations.

After the restrictions were relaxed EREA also started installation and commissioning of its medical transformers and insulation monitor for operation quarters in hospitals. Two hospitals in Jolimont and Waremme were among the first hospitals to receive the new services. These new services add value to the total solution already being provided by the company and also generates additional revenue, at a time when other energy projects might be delayed.

The company has also been active on the LinkedIn about its products and associated new services. This will help them become a one-stop solution for medical transformers, by providing both the product and its commissioning. This is particularly attractive to the customers, since they do not have to contact multiple entities to get one job done.

3.3. Sweden: project development and services, wave energy technology

Company: EWPG Holding AB

Number of Employees: 15

Background: EWPG Holding AB is a Swedish company, founded in 2011 and headquartered in Stockholm, Sweden with operations also in Tel Aviv, Israel. Eco Wave Power has developed a cost-effective way of harnessing wave energy to generate electricity. Eco Wave Power also claims to be the only wave energy company in the world, to own and operate a wave energy array, which is connected to the grid in accordance with a Power Purchase Agreement (PPA) ^{[28][29]}.

Case study

Like all business that heavily rely on production and logistics, Eco Wave Power too was affected by the COVID pandemic. In an interview with Israel21c, the company CEO admitted that the pandemic has created unforeseen challenges, since most of their projects are B2G (Business to Government). As the pandemic sweeps across the globe, for many governments, investments in renewable energy is not on their list of priorities; this will affect EWPG's ability to secure new projects in different countries.

Although the pandemic had halted their work on already installed projects, the company decided to stick to their strong growth strategy. The company has prioritized expansion in markets which present significant business opportunities for project development, such as those with significant wave heights, governmental support for renewable energy projects, favourable feed-in-tariffs or subsidy schemes, high electricity demand, strong promotion of renewable energy, lack of electricity access and available grid-capacity. For this, Eco Wave Power has focused on growth in Europe, North America, and Oceania, where there is high wave energy potential and established support for renewable energy technologies. Potential local investors and development partners, such as utilities and ports are also being engaged for new project collaborations. Target customers,

such as utilities and ports are selected and targeted in order to produce additional reference customers and to establish a robust market presence, with strategic partners.

Through IPO they raised enough capital for execution of one commercial scale project and decided to take the time to decide where such a project will be built. At the same time, they are submitting to multiple grant opportunities to leverage on such financing and achieve additional projects execution possibilities. Upon the execution of their first commercial scale wave farm their goal is to secure debt financing, which will enable the company to execute several projects in parallel and create a resilient, self-sufficient wave energy business.

Eco Wave Power also has plans to expand its product offering by providing increased project development products and services for its wave energy technology such as feasibility studies, power plant design, project management, and project planning. These activities will generate additional revenue for the company.

Eco Wave Power has also been active in their communication with investors, partners, and consumer alike. They have continuously showcased their technology and have proven its feasibility through projects at multiple locations. This in turn adds to their credibility and may help overcome the fact that they do not have any sales.

The company's growth strategy seems to be working well as for the coming years the company will be working on EWP-EDF project at Jaffa Port and have won another contract in Portugal with APDL to set up 20MW power plants in 4 locations. This has also helped them generate funds through European Union funding programmes.

3.4. Latvia: recycling of PET plastic waste

Company: Polylabs

Number of employees: 1-10

Background: PolyLabs is a chemical production company established in close partnership with the Institute of Wood Chemistry of Latvia. Their main area of expertise is manufacturing bio polyol - a polyol synthesized from renewable materials, such as rapeseed or tall oils ^{[32][33][34]}.

Case study

COVID-19 and the associated lockdown has led to reduced manufacturing activities for the company. Lack of labor, because of the disrupted transport and mandatory social distancing practices, is one of the main reasons behind this situation. Moreover, the slowdown in the polyurethane industry has led to low demand of bio-polyol by the regular customers. This, together with the travel restrictions imposed throughout the region have led to a situation where the sales have been adversely impacted for the company.

One of the innovative ways in which the company has operated during the lockdown has been by strengthening its R&D portfolio. As the manufacturing activities are at a minimum due to the lack of labor, the company has been able to dedicate the available resources in devising a new solution for recycling previously unprocessed polyethylene terephthalate (PET) plastic waste into an energy-saving material – polyurethane. Polyurethane is one of the most prominent materials that

can be used in the industries as a substitute for the fossil fuels, hence the energy saving aspect. This solution has also been selected to represent Latvia at the InnoEnergy PowerUp challenge finals. This innovative solution also helps in tackling the problem of waste generation while helping the company generate some funds at the same time.

3.5. Sweden: wooden wind turbine tower

Company: Modvion

Number of employees: 11-50

Background: Gothenburg-based company Modvion develops demanding designs for large-scale applications in laminated wood – nature’s own carbon fiber. By replacing emission-intensive materials such as steel and concrete, wooden structures offer radical reductions in greenhouse gas emissions. The company’s current focus is on wind turbine towers made out of wood, where Modvion’s patented module system offers reduced manufacturing costs and more efficient transportation of high towers to installation sites ^{[35][36]}.

Case study

COVID-19 lockdown has impacted and delayed certain development and implementation projects of the company in the areas in and around Gothenberg. Logistics disruption has led to a situation where procurement of material has been hampered a great deal. However, the organization has fought the odds and secured a €6.5 million investment from the European Investment Bank (EIB) through the EIC Accelerator Programme. This investment has helped the company erect its first Modvion wooden wind tower outside Gothenberg during the lockdown. This, despite the other disruptions and hurdles. The European Commission too, while financing the company, highlighted the contribution of Modvion’s technology can make to restarting the post-COVID economy. The company, in its official press release has stated that such an honour is a seal of quality for the company and has been helpful in increasing the workforce at the company, building the trust in other potential investors and partners, and creating more turbines even amidst the lockdown.

4. Case studies on practical measures for MSMEs in getting access to markets, financing, and advanced technologies to MSMEs providing renewable energy equipment and energy efficiency products and services

4.1. European Union: Horizon 2020 Funding Programme for MSMEs

One of the biggest and most important European Union research and innovation programmes is the Horizon 2020 programme ^{[44][45]}. The programme has made a funding of nearly €80 billion available over a period of 7 years (2014-2020). This year, European Commission has pledged to invest €1 billion from the European Union Horizon 2020 programme into corona virus research and innovation. Together, along with the Programme's objectives to promote and accomplish the European Green Deal (policy initiatives by the European Commission with the aim of creating a climate neutral Europe by the year 2050), it provides the MSMEs working in the Renewable Energy and Energy Efficiency sectors to sustain through the pandemic and be the growth engines in Europe after the pandemic is over.

Some of the MSMEs have already received funding under some of the thematic areas, which has helped them in developing and innovating ways to revive the European economy in a Green Recovery mode. A few of these MSMEs working in the Renewable Energy and Energy Efficiency projects are Abora Energy (Spain), AEInnova (Spain), Energy and Meteo Systems (Germany), HPNow (Denmark), Hypermo (Finland), Modvion (Sweden), Nabrawind (Spain), Nova Innovation (United Kingdom) and Swiss Vault Systems GmbH (Switzerland). All these MSMEs have started their respective projects from the month of May after receiving the funding.

These organizations have received funding from the Commission under the Horizon 2020 programme in the range of €500k to €2 million. The projects for which they have received funding have also ranged from a simple renewable energy application such as self-erecting wind turbine towers (Nabrawind) to much complex and immediate solutions such as energy-efficient, space efficient and cost-effective data storage system for healthcare (Swiss Vault GmbH).

Moreover, out of the 12 projects that have been shortlisted for the EIC Horizon Prize (€5 million) for the "Affordable High-Tech for humanitarian Aid", 3 are related to energy efficiency and renewable energy projects. These projects are BioGas from HomeBiogas (Israel) which is a waste management involving off-grid energy creation and safe sanitation, with a minimized environmental impact, Bright by Bright Products AS (Norway) which is an affordable and recyclable phone charging combined with a solar lantern and featuring a "whitestock" (supply depot) deployable within 72 hours and PowHumLeb by the Netherlands Red Cross (Netherlands) which is a solar and wind generator backpack enabling people to safely operate their own mini power station.

Hence, it is evident that the Horizon 2020 fund has not only helped some of the MSMEs to ward off the impact of the virus on their business activities (less business involving close physical contact) but has also provided a way for the region to recover from the impact through these clean

innovation strategies. This grant, thus, provides an opportunity for other MSMEs as well to bring in a change in their business practices and align them with the immediate crisis.

4.2. European Union: European Institute of Innovation and Technology InnoEnergy PowerUp! Challenge

The InnoEnergy PowerUp! of the European Institute of Innovation and Technology (EIT) is a challenge for the for start-ups, scale-ups and SMEs from Central and Eastern Europe whose products in the fields of energy, smart technologies, mobility are solving today's problems with tomorrow's technologies ^{[46][47][48][49]}. The 2020 edition is the sixth edition of the challenge. Part of the hand-holding support and guidance was given during the period of March to May. The final funds would be disbursed in June.

One of the attractions of the challenge is the main prize of €50,000 and an opportunity to develop the business on a global scale. This year, the competition was virtual due to the threat of COVID-19 and the social distancing measures in place in the area. The challenge is open for the ideas in 6 implementation areas – Energy for circular economy, Smart Technology, Energy Storage, Energy from Renewable Sources, Energy Efficiency, and Mobility and PV.

All these start-ups and MSMEs have proposed varied projects in the mentioned verticals. An additional benefit of this challenge is the continued support and guidance provided to the MSMEs in terms of building their ideas through boot camp workshops. Here, the ideas are prepared for the next stages by recognized European Business Leaders.

This challenge too, helped the MSMEs ward off the pandemic crisis. The Governments in these countries help the selected MSMEs to develop the ideas further. These funds have helped them solve the problem of cash crunch during the COVID lockdown. The solutions have ranged from creating network of ultra-fast power stations for electric cars to developing new type of material that can generate energy through vibrations and use it instead of batteries.

These MSMEs can thus, as is evident, be at the forefront in terms of innovation to drive the European recovery post COVID in a Green and Sustainable manner.

4.3. European Union: support for MSMEs from the clean energy sector by the European Investment Bank

This programme is aimed on support for MSMEs, especially from the clean energy sector, to recover from the unexpected shock that has been the COVID-19 pandemic ^{[50][51][52][53][54]}. The programme has also sought to increase innovation in the sector and align the future of Europe with the United Nations Sustainable Development Goals (SDGs), European Green Deal, Green Recovery from COVID-19 and the Horizon 2020 vision.

Some of the major steps that were taken under this programme are:

- The European Investment Bank (EIB) and Banco Sabadell's initiative to provide €576 million to finance MSMEs and Mid-caps in Spain – A major part of the agreement includes a commitment to direct the investments to promoting clean tech. Projects including renewable energy, energy efficiency, refurbishing of commercial buildings to reduce energy use, and those involving use of low-emissions commercial vehicles and agricultural

equipment. Estimates indicate that this fund would support over 1,400 companies involving 79,000 people.

- EIB and DLL's (wholly owned subsidiary of Rabobank) initiative to provide up to €400 million to finance investments in MSMEs in Italy and Spain – Two of the most affected economies in Europe due to the COVID-19 pandemic have been Spain and Italy, and hence, it is imperative that the MSMEs operating in these countries receive special attention in terms of funding from different sources. As a part of this effort, EIB joined forces with DLL, to facilitate an investment of €400 million to the SMEs in these countries. Organizations operating in the Renewable and Energy Efficiency sectors would be a major beneficiary as the funds are aimed to provide a Green and Sustainable recovery pathway to Europe's economy. (Press Release on 10 June 2020)
- €10 million support to MSMEs in Bosnia and Herzegovina – EIB has partnered with the Raiffeisen Leasing to provide for €10 million support for the local MSMEs in B&H. The priority areas have been Youth Employment, Environment Protection, Healthcare and Education. Thus, this funding would help the MSMEs working in the area of Renewable Energy and Energy Efficiency in fighting off the economic slowdown and retain the workforce in their organizations. (Press Release on 23 April 2020)

Some other initiatives by the EIB to aid the affected enterprises have been a €3.4 billion investment towards COVID-19 health and business resilience, energy, transport and education. This includes investments in renewable energy and energy efficiency projects, and to the most impacted enterprises in the sector. (Press Release on 15 May 2020)

EIB support (amounting to €18 million) to 66 small scale, independent photo-voltaic plants in Poland through Energy Solar Projekty sp.z o.o (a subsidiary company of the Energy and Infrastructure SME Fund), is another example of the institution coming to the aid of the SMEs operating in the Energy sector. (Press Release on 27 May 2020)

4.4. Italy: Life Material Match Making Platform

Life Material Match Making Platform (M3P) is an online platform that matches the demand and supply between companies offering waste stream and requesting materials ^[37]. It emphasizes on the industrial waste and the technology necessary to make them fit to be reused as secondary raw materials. The information is collected and catalogued in a dedicated database and allows users to identify a “match” between supply and demand of materials.

The M3P Platform is used by more than 350 companies in 8 European Union states/regions. Agreements with other several organizations have been signed to exploit M3P Platform in other regions/sectors.

Centrocot's Board of Directors has approved a business plan for the next 3 years 2020-2022 with the objective of supporting innovation on MSMEs.

A similar kind of program post COVID crisis can help connect MSMEs nationally and internationally and be mutually beneficial to both the seller and buyer.

4.5. Poland: Internationalization of Wielkopolska's MSMEs

This project aims to tackle the issue of Wielkopolska's MSMEs internationalization by organizing regional stands at international trade/investment fairs and promotion of regional brands ^[38].

The following steps were taken under the project:

- Economic promotion - MSME participated in international trade fairs organized outside European markets to strengthen Wielkopolska's image of attractive economic partner.
- Investment promotion - Wielkopolska's investment sites, real estates and projects were promoted. The region's great economic potential and well developed transport infrastructure, rich scientific and research facilities, qualified staff and stable development conditions were highlighted. An Electronic Database of Investment Areas of the Wielkopolska Region (eBOI) is maintained.
- Wielkopolska Brand building - A brand building exercise using the image and promotion campaign at international events was used to promote the Wielkopolska brand.

Post the COVID crisis, this practice might be helpful for regions willing to promote their industries outside European market, not only in terms of economic promotion but also building the brand. The approach of "Gospodarna Wielkopolska" gathers in one project all promotional activities addressed outside Europe, enables for cooperation between regional authority, MSMEs and business environment institutions.

4.6. Ireland: Trading Online Voucher Scheme

This scheme introduces Trading Online Vouchers to incentivize MSMEs in developing online trading as their business in order to better compete in a tough environment created by COVID-19 ^[39]. The scheme utilizes the rapid growth of internet usage, adoption of mobile technologies, globalization and COVID-19 pandemic.

MSMEs are in a difficult position given their limited resource and slow adaption to changing business environment. The scheme addresses these issues through an incentivized program to introduce Irish businesses to online trading through a voucher to cover a part of their expenditure up to €2,500 in value and develop a commercial internet presence. The scheme is being administered by the Local Enterprise Offices.

Stakeholders include the Local Enterprise Offices supported by other relevant agencies. MSMEs successfully trading for a minimum of 12 months with up to 10 employees and turnover less than €2 million can get access to this scheme.

The scheme was very successful with a strong uptake in particular sectors, e.g. retail (24%), creative/manufacturing (17%), traded services (16%), professional (14%), and food (6%). Companies that availed this scheme had an 85% increase in enquiries, 40% increase in overseas enquiries, sales grew 21% and on average 1.4 jobs were created per enterprise.

This scheme provides businesses an opportunity to go online which is seen as essential for many enterprises during the current COVID-19 pandemic. The scheme also complies with European Union funding rules / De Minimus Aid, etc. which facilitates a smoother transfer.

4.7. Spain: Centr@tec Program: Advanced Innovation Services for SMEs

Castile and León is one of the largest regions in Europe where 95% of the companies are very traditional MSMEs and lack innovation ^[40]. The strategy for innovation, entrepreneurship and self-employment of Castile and León involves technological collaboration and better use of community resources to improve competitiveness. Centr@tec Program is a program used by Institute for Business Competitiveness (ICE) for the implementation of the Research & Development (R&D) regional policy in companies.

Regional Technological Centers in charge of the program's execution. These centers help the companies in planning for training actions, make diagnostics and guide MSMEs on the best way to improve their capacities and technologies in order to be more competitive, through collaboration with the regional working groups.

Centr@tec plans to achieve its goals through 5 key points: Industry 4.0, Digitization, Innovation in Processes and Design of Products/Services, Internationalization of R&D and Support for Entrepreneurs of Technological Base.

The program includes:

- Demonstrations meetings, expert workshops and training in new technologies.
- Internationalization through bilateral meetings, agreements of collaborations and participation in international R&D programmes.
- Diagnostics and formulation of implementation plans through personalized analysis of the company, action plans and finding funding sources.
- Innovative Projects Bank through analysis of innovative projects, business plan, and search for financing.

The structure of Centr@tec is such that it allows MSMEs to participate in the program in various ways and provides the opportunity to be involved in support and training that helps them develop their potential of innovation and competitiveness.

4.8. Spain: SME innovative and financing facility

This programme helps start-ups to successfully apply for Horizon 2020 (H2020) SME Instrument through information, awareness raising and technical advice and support ^[41].

The H2020 SME Instrument is an innovative and attractive financing facility that supports technology-based MSMEs to check and accelerate their growth proposals. The SME Instrument helps fast-growing companies to overcome difficulties in going from business plan to the market and offers features such as external endorsement of the business plan, a seal of excellence and the access to venture capital.

This program features:

- A workshop on the characteristics and requirements of the SME Instrument program and tips for successful application.
- A 3-hour meeting with a specialized consultant to review the project idea and assess its readiness for the SME Instrument.

- For companies whose projects are considered ready for submission, advice is provided on the preparation of the application.

The program has contributed to the high turnout of San Sebastian companies in the SME instrument and a large number of these companies have been funded. Up to March 2018, 17 companies were funded: 5 - in Phase I and 12 - in Phase II.

This program could be replicated in the other UNECE member States, as it is not based on national regulations. The program helps start-ups to review their business models and growth strategies as part of SME Instrument and enhance their management skills and choose the right advisors.

4.9. Netherlands: Business Cluster collaboration

Business clusters in the Netherlands have been active in globalizing MSMEs even before the outbreak of COVID-19 pandemic ^[42]. These clusters support thousands of MSMEs in 60 countries.

Cluster activities, such as the following, are organized every year:

- Global Investor Pitching which demonstrated the need for investors during this crisis. Several Danish clusters have also successfully hosted several large events where Danish entrepreneurs met online with international investors with positive results.
- Online International Matchmaking Events which showed that through international matchmaking, it is possible to find collaboration partners. There also has been an increased international participation in the online matchmaking events.
- International Knowledge which brings in international Chief Executive Officers (CEOs) as speakers for webinars. This helps transfer international knowledge easily to the cluster members while maintaining social distancing norms
- International Projects Meetings proved many international cluster activities are organized as projects with partners from around the world. It is easier for partners to collaborate online through video meetings.

These activities clearly show how MSMEs can stay in the business post the COVID crisis and still be profitable.

4.10. Germany: entrepreneurial crisis management of innovative start-ups during COVID-19

Startups have been relying heavily on their relational capabilities ever since the start of pandemic. They have combined available internal resources and external resources through their network like goodwill partners, support of the startup community and access to social capital.

Companies reported mismatch between the government policy and the organizations' characteristics thus are being excluded from the benefits. Thus they boosted their financial capabilities by gathering capital internally and then applied for government support.

The startups solved these new problems by identifying and pursuing new entrepreneurial opportunities and establishing new directions for their firms.

5. Guidelines to MSMEs delivering energy-efficient products and providing renewable energy equipment on access to financing, markets, and advanced technologies

5.1. Analysis of potential for use and dissemination

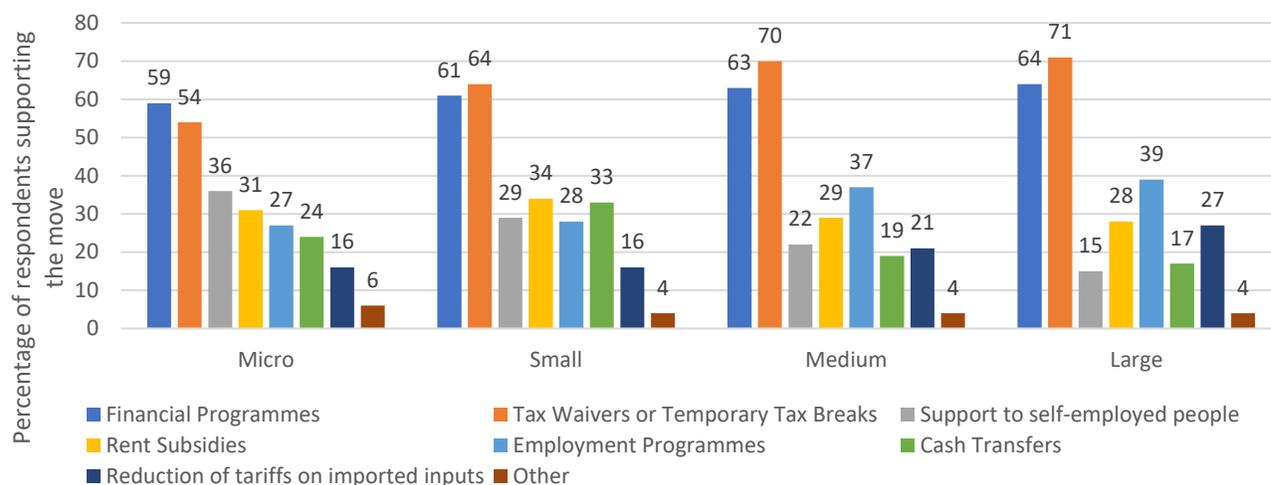
Controlling the virus whilst preserving the economies and societies will require a coordinated emergency response and an effective risk-based exit strategy for all the UNECE member States. This should include supporting MSMEs in order to ensure a safe revitalization of economic activity along with health and safety precautions at the workplace; followed by the use of flexible formulas to suspend or reduce working time in order to limit contact between people.

Countries are taking actions to help MSMEs adopt new work processes, speed up digitalization and find new markets. Policies aim to address urgent short-term challenges and strengthen the resilience of MSMEs in a more structural way and support their further growth by helping find new alternative markets, tele-working, digitization and retraining and upskilling of the workforce. MSMEs may not be able to adopt such new technologies and methods. At the same time, adopting new technologies and practices may enable them to become competitive in challenging post-crisis scenario.

Digital learning should become an everyday reality. In addition to providing equipment and developing educator skills, it is important to implement comprehensive educational concepts in a way that meets the technological, social and personal skills requirements of a digitized world. An initiative to ensure that all businesses, MSMEs, and citizens can fully benefit from e-commerce without any barriers must be implemented^[55].

Fig. 7 presents the results of the survey conducted by the ITC on understanding opinion of MSMEs on governmental financial support measures. It clearly indicates that the governments should continue providing measures of financial assistance and tax waivers, especially to MSME sector to stay relevant and continue them through to a sustainable and green recovery path.

Figure 7: Opinion of MSMEs on governmental financial support measures



As the COVID pandemic spread across the UNECE member States, many countries had travel bans, restricted movement of goods, suspended non-essential activities and imposed social distancing norms in public places and work places. To comply with these restrictions many industries had to shut down production for the period of lockdown.

Overview of measures taken by MSME's during the pandemic lockdown and regional dissemination possibilities presented in the Table 1.

Table 1. Measures taken by MSMEs during the pandemic lockdown

No	Measures taken	Western Europe	Eastern and South-Eastern Europe	Russian Federation, Central Asia and the Caucasus
1	Communication through social media or other platforms on internet	(+)	(+)	(-)
2	Increase of on-line and sales	(+)	(+)	(+)
3	Provision of value-added services	(+)	(+)	(+)
4	Fixed growth strategy	(+)	(-)	(-)
5	Accessing only easier markets	(+)	(-)	(-)
6	Raising IPO	(-)	(-)	(-)
7	Work from home	(+)	(+)	(-)

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

8	Providing paid online training services	(+)	(+)	(+)
9	Strengthening R&D portfolio	(-)	(-)	(-)
10	Applying for International funding programmes	(+)	(+)	(+)
11	Increasing focus on aligning with COVID related activities	(+)	(+)	(-)

Following background information should be taken in consideration for support of the best practice dissemination process:

- Production of companies who were heavily reliant on logistics for their operations were affected.
- Around 40% of the MSMEs were actively promoting their products on social media platforms during the period of lockdown.
- Around 40% of the MSMEs have access to from international development organizations under different programmes. These funding programmes offers grants for MSMEs, with innovative products prioritization.
- Industries not directly affected by COVID get indirectly affected by a shortage in demand from their consumers.
- Post the pandemic, companies also started prioritizing activities essential for the survival of business and offering additional value-added services.
- Companies have also introduced work from home for their employees and increasingly digitized their business. One company has also provided valuable paid training seminars during lockdown.
- Companies have also started focusing on projects related to fight against COVID. This provides additional stream of revenue and allows companies to have access to International Development Grants.
- Retrofitting for improved energy efficiency can lead to significant savings for MSMEs by reducing their energy consumption.
- Energy consumption data from unoccupied buildings can be collected when almost everyone is working from home for benchmarking.
- Associations at regional and national level have previously supported their respective members in globalization, finding vendors or new customers. This model can still be replicated at the time of pandemic.
- Companies, which are working in line with the Sustainable Development Goals (SDGs) can have additional access to funding from different International Development Organizations.

5.2. Activities for the post-pandemic recovery strategy development of MSMEs

General guidelines are prepared with the focus on enabling environment for the MSMEs to withstand the impact of COVID-19 crisis, using own company resources and potential national (and international) support.

Following Activities were elaborated as a part of the Guidelines for the MSMEs and could be used as components of the companies' post-pandemic recovery strategy actions.

- Support development and increase of participation level in various relevant on-line based platforms and databases. Various business Associations and their MSMEs could improve cooperation on creation of a common best practices and solutions database, as well as actual products and services available from the member companies. Additional capacity building and awareness raising on-line activities should become a regular part of the established platforms.
- Participation in virtual trade fairs at local and international level. Business associations and administrations (national and local level), by request from the companies, could focus on additional promotion of their member MSMEs, by organizing virtual trade fairs. MSMEs can interact with their potential customers and build strong economic relationships with consumers, using these web-based platforms, made as a stand-alone engine or as a part of any available social networks.
- Voucher scheme support. A voucher scheme can be introduced by regional governments, to incentivize MSME to develop their commercial online presence. The voucher value can be decided by the regional government.
- Collaboration programmes. Collaboration programmes could be initiated by MSMEs with technical universities and MSMEs from different industries sectors. Support could be provided through workshops and training in new technologies and agreements of collaborations. This can also be used as an opportunity to access funding by working with an established industry.
- Technical and financing advisory support activities. MSMEs should look for a programme to set up at regional or national level, where they can get advice and technical support on successful application for funds various funding and technical support.
- Trainings and capacity building. Training programmes can be setup by business associations, by request from MSMEs, where they can interact with international partners and global leaders on successful running of a business. MSMEs, which already have a successful experience of overcoming COVID-19 crisis, could be supported to share their experience using these platforms.
- Enabling access to local and international financing. MSMEs can establish communication with relevant national level and international stakeholders, to initiate capacity building consultations, or browse through available platforms of regional, national and international funding programmes. MSMEs can find their most suitable ones and connect directly to potential donors.

5.3. Guidelines for MSMEs in the UNECE Subregions

Detailed country specific COVID-19 crisis impact compensation measures are presented in Annex 1. Summary of these available measures applicable in particular UNECE Subregions, as well as guidelines for MSMEs in the UNECE member States, are presented below.

Western and Central Europe

- Extend the communication (through press releases or social media) to investors, clients, and partners by disclosure of the technical and financial status of the company after the COVID-19 crisis. This can bring confidence amongst existing and new investors and clients and invite new domestic and foreign users requiring the service.
- MSME associations across Europe could find ways to find new customers and investors in order to support their members during COVID pandemic outbreak.
- Be active on various social media platforms about their products. This will help make their product discoverable to the masses and bring in new customers.
- Find how existing products can fit different needs.
- Look at core competencies of your company and align them in such a way that it matches European Commission's vision of the future of Europe after the crisis. It would not only increase avenues for funds for these organizations but will also ensure that they see through the tough period of COVID-19 lockdown with minimal financial implications.
- If an industry is severely affected by the pandemic, they might find it easier to transition to service industry by retraining the same experienced staff. This will provide them with an additional source of revenue that can be beneficial even after pandemic.
- It is advisable for MSMEs to formulate a strong growth plan, focus their efforts on areas with strong growth potential and easier access to the market.
- MSMEs could temporally embrace the new technologies and use their existing human resources in projects where remote assistance can be provided, this will be the most cost-effective way to keep their businesses running without laying-off employees.
- It is fine to prioritize the projects to fight for the COVID-19 slowdown. The low priority projects can be put on hold for the time being. This would ensure that the MSME works only on those projects which are vital to sustain through this tough period.
- It is advisable for MSMEs with expertise in their sectors to provide online training, it can either be skill based or knowledge based and can be provided to a student or a professional for a nominal fee. The current pandemic has proved the importance of up-skilling and re-skilling. Trainings like these will keep the current employees engaged and promote the company in their sector.
- It is advisable for the MSMEs to strengthen the research activities in their organizations and showcase the same through news bulletins on their websites.
- MSMEs working in energy efficiency and renewable energy sectors can attract funds from donor agencies for their solutions working towards increased sustainability.
- MSMEs can apply for funding programmes such as Horizon2020 and InnoEnergy Powerup. These programmes have helped some MSMEs to ward off the impact of the COVID-19 crisis on their business activities (less business involving close physical contact).
- MSMEs in Western European region have access to guarantee schemes on loans. Countries like Austria, Belgium, Czechia, Denmark, Finland, France, Ireland and Italy are providing such schemes.

- MSMEs have an ability to participate in regional and national funding and liquidity support programmes. Such programmes are being offered by the Governments of Czechia, Germany, Italy, Portugal, Spain, Switzerland, Cyprus, Hungary.
- MSMEs not eligible to participate in funding programmes and affected by the pandemic are advised to use loans, subsidies and employee salary compensation. These are available in Czechia, Cyprus, Denmark, Estonia, Finland, France, Germany, Portugal, Slovakia, Switzerland and the United Kingdom.
- MSMEs can also get loans to support their businesses. Such loans are available in Croatia, Latvia, Lithuania.

South-Eastern and Eastern Europe and Turkey

- Extended communication of MSMEs (through press releases or social media) to investors, clients, and partners by disclosure of the technical and financial status of the company after the COVID-19 crisis. This can bring confidence amongst existing and new investors & clients and invite new users requiring the service from the same region and abroad.
- MSMEs should investigate how their existing products can fit different needs.
- If an industry is severely affected by the pandemic, they might find it easier to transition to service industry by retraining the same experienced staff. This will provide them with an additional source of revenue that can be beneficial even after pandemic.
- MSMEs working in energy efficiency and renewable energy sectors can attract funds from donor agencies for their solutions working towards increased sustainability.
- MSMEs could focus on a customer care approach during the pandemic and deliver additional customer satisfaction services in these testing times. This would be helpful in building customer base even beyond the pandemic. It is also essential to inform about these measures (as reduced tariffs and promotional tariffs in the case study) through social media.
- It is recommended that MSMEs apply for relevant international funding programmes, that are currently available in the region. These programmes could help MSMEs to ward off the impact of the virus on their business activities.
- It is recommended that MSMEs in Eastern and South-Eastern Europe have tax benefits. The Governments of Albania and Montenegro are providing such benefits.
- MSMEs can also get salary compensation and unemployment benefits. Such benefits are being provided by the Governments of Albania, Bosnia and Herzegovina, North Macedonia, Serbia, and Turkey.
- MSMEs can also get loans to support their businesses. Such loans are available in North Macedonia and Turkey.
- Several countries are offering support in loan repayment, and MSMEs are having access to these benefits to reduce their financial burden. These are available in North Macedonia and Turkey.

Russian Federation, Central Asia, and the Caucasus

- Extended communication of MSMEs (through press releases or social media) to investors, clients, and partners by disclosure of the technical and financial status of the company

after the COVID-19 crisis. This can bring confidence amongst existing and new investors & clients and invite new users requiring the service from the same region and abroad.

- Activities that promote globalization of their MSMEs and find new customers and investors could be supported by MSME Associations, National and International Development donors.
- MSMEs should be active on various social media platforms about their products. This will help make their product discoverable to the masses and bring in new customers.
- MSMEs should investigate how their existing products can fit different needs.
- It is recommended that MSMEs look at their core competencies and align them as much as possible with vision of the region's future after the crisis, and relevant researches of relevant International Development Organizations, that are active in the region. It would not only increase avenues for funds for these organizations but will also ensure that they see through the tough period of COVID-19 lockdown with minimal financial implications.
- If an industry is severely affected by the pandemic, they might find it easier to transition to service industry by retraining the same experienced staff. This will provide them with an additional source of revenue that can be beneficial even after pandemic.
- It is advisable for MSMEs to formulate a strong growth plan, focus their efforts on areas with strong growth potential and easier access to the market.
- MSMEs could temporarily hold implementation of new technologies and use their existing human resources in projects where remote assistance can be provided, this will be the most cost-effective way to keep their businesses running without laying-off employees.
- MSMEs working in energy efficiency and renewable energy sectors can attract funds from donor agencies for their solutions working towards increased sustainability.
- MSMEs can get access and loans to support their businesses. These funds are being provided by Governments of Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, and the Russian Federation.

Conclusions

Here are conclusions that could be drawn from the case studies covered in the report:

- Availability of various funding programmes, which have been used to financially stabilize the MSMEs or start-ups. These funding programmes are fruitful in giving financial security to the MSMEs working in renewable and energy efficiency sectors in such uncertain times. There should be more such initiatives by funding agencies to promote the vulnerable MSMEs who have lost a source of financing their businesses during the pandemic.
- Many MSMEs have adjusted already to the new normal of remote working conditions and social distancing. Thus, it is evident that to survive the pandemic, it is imperative to follow the social distancing norms while working. Work from home can be an option that can be explored more by MSMEs.
- Delaying the non-essential and non-priority projects to some future date is also a way in which the crisis could be mitigated. As the focus of the world is to fight the virus and search for technologies which help in this fight, it is obvious that some of the funding sources might be temporarily unavailable for the projects which are not relevant to this end. Thus, the MSMEs can delay such projects which do not put into jeopardy their immediate survival. The funds, which are currently available in the MSMEs, can be used to develop and implement only those projects which have a direct and immediate effect on the sustenance of the company.
- Virtual (online) activities for MSMEs become the most important now. By remaining active on social media and through blog posts on the website, the MSMEs can tap into the investors and customers even amidst social distancing norms. These blog posts or activities that the organization does over social media or the internet, also instils confidence amongst the current and potential investors and customers. It is also a means of keeping the MSMEs relevant during these times.
- Companies could start to provide classes and skill-based sessions to students and professionals worldwide during the pandemic at a nominal fee. These sessions are primarily based on the sustainable energy knowledge dissemination. This is also a way to counter the threat of becoming irrelevant in such difficult times.
- Some of MSMEs have repackaged their products and have branded themselves as a health-tech start-up amidst the pandemic. This is one more option for companies to get funds for their operations. It is also possible, instead of full rebranding, to put out products aimed on fighting off the pandemic apart from their regular products.

Recommendations

Recommendations are formulated based on the analysis of Governments' activities aimed on enabling secure development environment through appropriate policies and legislation for MSMEs (Annex 1), affected by COVID-19 crisis, to encourage delivery of energy-efficient products and provision of renewable energy equipment

Recommendations to governments for developing policy guidelines

After going through various policy measures and reports by different organizations, agencies, bodies who have been directly working MSMEs, we recommend the following actions for governments in the UNECE member States. The governments can tailor the recommendations to their local needs.

Policy Measures to avoid economic fallout

- Temporary tax waivers on all transactions done by MSMEs' at national, regional or local level. This would free the MSMEs from any tax obligations for a temporary period.
- Temporary tax breaks to reduce the amount of taxes to be paid by MSMEs. Changes can also be made to tax system to benefit MSMEs.
- National financial programmes to support MSMEs through loans, credit guarantees on loans, and relaxation of laws on loan repayment.

Policy Measures to avoid immediate start-up failure

- Offer payment delays, wage subsidies, line of credit and guarantee free loans to MSME start-ups.
- Support direct payments for MSMEs to improve cashflow and reduce delays in payments.
- Stimulate mutual assistance/solidarity in the MSME community.

Policy Measures to avoid workforce layoffs

- Offer employee development programmes (e.g., for digitalization).
- Support temporal downsizing (e.g., through wage subsidies).
- Provide financial support to laid-off workforce.
- Formulate policies to avoid situations when businesses receive financial support while downsizing workforce.

Policy Measures to support new businesses

- Secure future innovations through mid-or long-term policy measures linked to larger policy objectives (e.g., sustainability and/or digital transformation).
- Lay foundations for post-crisis recovery (e.g., incentivize investors to provide additional growth capital).
- Nurture knowledge diversity and entrepreneurial culture in the ecosystem.
- Boost positive business climate for consumption and innovation.
- Decrease specific barriers for MSMEs starting up through specific support (e.g., consider future growth trajectories instead of past revenues).

Policy Measures to mitigate disparities arising from initial policy measures:

- Provide information and support services addressing the specific challenges of businesses (e.g., hotlines).
- Fast track the process of providing financial assistance by partnering with major banks/institutions.

Recommendations to governments for establishing financial incentives schemes

Following recommendations were prepared for the governments for establishing financial incentives schemes for MSMEs:

- Increased support for entrepreneurs and MSMEs is required in order to maintain sustainable development track for companies as well as presentation of available solutions, which could help to withstand the impact of COVID-19 crisis. Governments should prepare a clear guidance for companies on the available support provided at the local and national levels, such as how to access the different financial instruments, whom to contact for questions, who are the national bodies involved in funds disbursement, what is the role of national banks and what are their obligations, etc.
- Governments should use public procurement procedures for targeted support of MSMEs. Funds, that are normally used to support new companies, could be temporally redirected to MSMEs and entrepreneurs, which have had to close their business, to facilitate quick re-start.
- Governments should provide funding support through grants and low- or no-interest loans to the MSMEs working on low carbon technologies in the clean energy sector to facilitate green economic recovery. It can be difficult for companies to initiate clean energy transition as they have to maintain other expenses. A proposed European climate policy can support businesses, and particularly MSMEs, to transition into zero carbon production through a European Decarbonization Fund. Compensation should be provided to MSMEs for increase in incremental costs through reduction in energy taxes or tax rates on sustainable investments (e.g. circular economy, renewable energy, energy efficiency, etc.).
- Governments could establish a specialized clean energy financial institution to enable MSMEs as a driving force to clean and green economic recovery. Governments should establish a one-stop shop for MSMEs to get advice on how to deal with the crisis and to receive practical information on financing and other means to mitigate the impact of COVID-19 crisis, such as best practices to adapt their business models.
- Governments could provide urgent financial help to MSMEs on liquidity issues through existing grants and schemes. Other measures such as postponement of tax deadlines for MSMEs, delay in the repayment of government-guaranteed loans, maintaining government-based investments in MSMEs, and introducing a moratorium on social contributions could be adopted.
- Governments could pool their resources to attract more private investors. Governments could use an example of a pan-European Guarantee Fund, managed by the European Investment Bank (EIB) aimed to generate additional funds targeted for MSMEs impacted by the COVID-19 crisis.

- To address a significant reduction in tax revenue, which could last for several years, governments may ensure that their tax systems are adapted to become more supportive of growth by reducing taxation on both labour (including social contributions) and capital, including corporate tax, which can be particularly damaging to employment. Tax systems may be digitalized and simplified, and double taxation could be removed particularly in the area of Value Added Tax (VAT). This would make investment and trade more economically viable. Fiscal incentives (like tax credit) for investors in companies' capital could be encouraged.

References

1. <http://www.oecd.org/coronavirus/policy-responses/corporate-sector-vulnerabilities-during-the-covid-19-outbreak-a6e670ea/>
2. <http://www.oecd.org/coronavirus/policy-responses/coronavirus-covid-19-sme-policy-responses-04440101/>
3. <https://www.clustercollaboration.eu/achievements/spain-learnings-and-opportunities-covid-19-crisis>
4. <http://www.oecd.org/coronavirus/policy-responses/coronavirus-covid-19-sme-policy-responses-04440101/#section-d1e167>
5. <https://www.oecd-ilibrary.org/sites/0d1d1e2e-en/index.html?itemId=/content/publication/0d1d1e2e-en>
6. <https://www.intracen.org/uploadedFiles/intracenorg/Content/Publications/ITCSMECO2020.pdf>
7. INSEE (National Institute of Statistics and Economic Studies), 2020, <https://www.insee.fr>
8. <https://www.oecd-ilibrary.org/sites/fe40a82a-en/index.html?itemId=/content/component/fe40a82a-en>
9. OBR (Office for Budget Responsibility), 2020, <https://obr.uk>
10. INSEE (National Institute of Statistics and Economic Studies), 2020
11. IFO (Institute for Economic Research), 2020
12. Banca d'Italia, 2020
13. Battistini and Stoevsky, 2020
14. Bank of Estonia, 2020
15. A view on the COVID impact on and support measures for SMEs, SME United, 2020
16. Startups in times of crisis - A rapid response to COVID-19 pandemic, Journal of Business Venturing Insights, Kuckertz, et al., 2020
17. <https://www.oecd-ilibrary.org/sites/0d1d1e2e-en/index.html?itemId=/content/publication/0d1d1e2e-en>
18. <https://www.interregeurope.eu/policylearning/good-practices/item/1769/energy-efficiency-retrofitting-in-public-social-housing-in-andalusia/>
19. <https://www.energylivenews.com/2020/05/28/energy-management-during-covid-19/>
20. <https://www.interregeurope.eu/policylearning/good-practices/item/2040/funding-for-improving-resource-efficiency-in-smes/>
21. <https://www.swissvault.io/>
22. <https://cordis.europa.eu/project/id/946845>

23. <https://www.weforum.org/agenda/2019/06/the-eu-wants-to-create-10-million-smart-lampposts/>
24. <http://www.oecd.org/coronavirus/policy-responses/coronavirus-covid-19-sme-policy-responses-04440101/>
25. <https://www.azelio.com/investors/press-releases/2020/azelio-business-update---continued-progress-and-increased-capital-requirements-due-to-covid-19/>
26. <https://erea.be/blog/veilige-totaaloplossingen-in-tijden-van-corona-b102.html>
27. <https://www.linkedin.com/company/erea-energy-engineering>
28. <https://news.cision.com/ewpg-holding-ab--publ-/r/eco-wave-power-enters-concession-agreement-with-apdl-to-enable-the-construction-of-an-up-to-20mw-wav,c3092835>
29. Eco Wave Power, Press release, <https://www.ecowavepower.com/investor-relations/prs/>
30. <https://www.hubhub.com/sk/coworkers-vs-crisis-5-eva-almasiova-from-fuergy-4/>
31. <https://fuergy.com/en>
32. <https://www.crunchbase.com/organization/polylabs>
33. <http://www.polylabs.eu/en/>
34. <http://www.kki.lv/?lang=en&id=75>
35. http://www.modvion.com/wp-content/uploads/2020/06/200615_Modvion-Awarded-Multimillion-Euro-EU-Grant-for-Wooden-Wind-Turbine-Towers_EN.pdf
36. <http://www.modvion.com/>
37. <https://www.interregeurope.eu/policylearning/good-practices/item/2296/life-m3p-platform-material-match-making-platform/>
38. <https://www.interregeurope.eu/policylearning/good-practices/item/1155/internationalisation-of-wielkopolska-s-smes-key-project-within-regional-operational-programme/>
39. <https://www.interregeurope.eu/policylearning/good-practices/item/2146/trading-online-voucher-scheme/>
40. <https://www.interregeurope.eu/policylearning/good-practices/item/1154/centrattec-program-advanced-innovation-services-for-sme-s/>
41. <https://www.interregeurope.eu/policylearning/good-practices/item/1091/sme-instrument-donostia-inn/>
42. <https://www.clustercollaboration.eu/achievements/denmark-online-session-digital-globalisation-danish-smes>
43. <https://www.pwc.co.uk/premium/covid-19/uk-economic-update-covid-19.pdf>

44. European Commission (19 June 2020). Affordable High-Tech for Humanitarian Aid. Retrieved from European Commission: https://ec.europa.eu/research/eic/index.cfm?pg=prizes_aid
45. European Commission (2020). What is Horizon 2020? Retrieved from European Commission: <https://ec.europa.eu/programmes/horizon2020/en/what-horizon-2020>
46. EIT (30 April 2020). Country Finals Week #1. Retrieved from PowerUp! InnoEnergy: <https://powerup.innoenergy.com/blog/PowerUp!%20Country%20Finals%20week%20%231>
47. EIT (15 May 2020). Country Finals Week #2. Retrieved from PowerUp! InnoEnergy: <https://powerup.innoenergy.com/blog/Best%20startups%20of%20Bulgaria,%20Hungary,%20Latvia%20and%20Estonia%20have%20been%20chosen>
48. EIT (20 May 2020). Country Finals Week #3. Retrieved from PowerUp! InnoEnergy: <https://powerup.innoenergy.com/blog/POWERUP!%20COUNTRY%20FINAL%20WEEK%20%233>
49. EIT (29 May 2020). Country Finals Week #4. Retrieved from PowerUp! InnoEnergy: <https://powerup.innoenergy.com/blog/PowerUp!%20Country%20Finals%20Week%204>
50. European Investment Bank (23 April 2020). Bosnia and Herzegovina: SMEs to benefit from EUR 10 million loan EIB signed with Raiffeisen Leasing in B&H. Retrieved from eib.org: <https://www.eib.org/en/press/all/2020-104-smes-in-bosnia-and-herzegovina-to-benefit-from-eur-10-million-loan-eib-signed-with-raiffeisen-leasing-in-bh3>
51. European Investment Bank (15 May 2020). EIB backs EUR 3.4 billion COVID-19 health and business resilience, energy, transport and education investment. Retrieved from eib.org: <https://www.eib.org/en/press/all/2020-113-eib-backs-eur-3-4-billion-covid-19-health-and-business-resilience-energy-transport-and-education-investment>
52. European Investment Bank (10 June 2020). EIB joins forces with DLL to provide up to €400 million to finance the investments of SMEs in Spain and Italy. Retrieved from eib.org: <https://www.eib.org/en/press/all/2020-145-eib-joins-forces-with-dll-to-provide-up-to-eur400-million-to-finance-the-investments-of-smes-in-spain-and-italy>
53. European Investment Bank (27 May 2020). Poland: First EIB support for solar energy project. Retrieved from eib.org: <https://www.eib.org/en/press/all/2020-127-first-eib-support-for-solar-energy-project-in-poland>
54. European Investment Bank (16 June 2020). Spain: EIB Group and Banco Sabadell provide €576 million to finance SMEs and mid-caps. Retrieved from eib.org: <https://www.eib.org/en/press/all/2020-151-eib-group-and-banco-sabadell-provide-eur576-million-to-finance-smes-and-mid-caps>
55. BusinessEurope proposals for a European economic recovery plan – BusinessEurope (20 April 2020)
56. SME United's position paper on the future EU climate policy (SME United, May 2020)
57. <https://www.euractiv.com/topics/business europe/>

58. <https://www.interregeurope.eu/policylearning/good-practices/item/834/technopol-program-lower-austria/>
59. Peter Kurz, Lord Mayor of Mannheim, Germany, and PES Group member at <https://pes.cor.europa.eu/covid-19-progressive-cities-and-regions-share-solidarity-projects>
60. <https://www.debevoise.com/insights/publications/2020/03/covid19-so-far-state-sponsored-help-for>
61. <https://www.interregeurope.eu/policylearning/good-practices/item/794/european-network-for-early-warning-and-for-support-to-enterprises-and-second-starters/>
62. https://www.eib.org/attachments/pj/access_to_finance_study_on_bioeconomy_en.pdf
63. <https://www.digitaleurope.org/resources/digitaleuropes-covid-19-response-recommendations/>
64. <https://www.debevoise.com/insights/publications/2020/03/covid19-so-far-state-sponsored-help-for>
65. Government and institution measures in response to COVID-19, Update 12, pp. 6-8 (KPMG, 06 April 2020)
66. <http://www.oecd.org/coronavirus/policy-responses/coronavirus-covid-19-sme-policy-responses-04440101/#section-d1e7081>
67. COVID-19 CE Measures_V11 – Deloitte (27 May 2020)
68. COVID-19 Summary of Government Financial Support Europe and Middle East_V8 – Squire Patton Boggs (4 June 2020)
69. <http://www.amcham.cz/news/government-measures-supporting-business>
70. <https://www.mpo.cz/en/guidepost/for-the-media/press-releases/interest-free-funding-for-entrepreneurs-affected-by-coronavirus-infection-has-been-approved-by-the-government--253418/>
71. <https://www.czechinvest.org/en/COVID-INFO/Support-programs-for-businesses/Covid-Technologies-program>
72. Government and institution measures in response to COVID-19, Update 12, pp. 22-24 (KPMG, 06 April 2020)
73. Government and institution measures in response to COVID-19, Update 12, pp. 26-29 (KPMG, 06 April 2020)
74. Government and institution measures in response to COVID-19, Update 12, pp. 30-44 (KPMG, 06 April 2020)
75. <https://home.kpmg/xx/en/home/insights/2020/04/germany-government-and-institution-measures-in-response-to-covid.html>
76. COVID-19 CE Measures_V11 – Page 42-44, Deloitte (27 May 2020)

77. COVID-19 CE Measures_V11 – Page 45-47, Deloitte (27 May 2020)
78. COVID-19 Summary of Government Financial Support Europe and Middle East_V8 – Squire Patton Boggs (4 June 2020)
79. <https://pes.cor.europa.eu/covid-19-progressive-cities-and-regions-share-solidarity-projects>
80. <https://www.worldbank.org/en/data/interactive/2020/04/14/map-of-sme-support-measures-in-response-to-covid-19>
81. <https://www.msiglobal.org/newsandknowledge/malta-measures-to-support-business-during-covid-19/>
82. COVID-19 Summary of Government Financial Support Europe and Middle East_V8 – Squire Patton Boggs (4 June 2020)
83. Fernando Medina, Mayor of Lisbon, Portugal, and PES Group member (<https://pes.cor.europa.eu/covid-19-progressive-cities-and-regions-share-solidarity-projects>)
84. <https://home.kpmg/xx/en/home/insights/2020/04/portugal-government-and-institution-measures-in-response-to-covid.html>
85. COVID-19, A panoramic view of measures to protect the clean energy sector around the world, Bird & Bird (May 2020)
86. Emiliano García-Page, President of Castilla-La Mancha region, Spain, and PES Group member (<https://pes.cor.europa.eu/covid-19-progressive-cities-and-regions-share-solidarity-projects>)
87. Sandra Gómez López, Deputy Mayor of Valencia, Spain (<https://pes.cor.europa.eu/covid-19-progressive-cities-and-regions-share-solidarity-projects>)
88. COVID-19 CE Measures_V11 –pp. 78-80, Deloitte (27 May 2020)
89. COVID-19, A panoramic view of measures to protect the clean energy sector around the world, Bird & Bird (May 2020)
90. <https://www.debevoise.com/insights/publications/2020/03/covid19-so-far-state-sponsored-help-for>
91. Government and institution measures in response to COVID-19, Update 12, p. 5 (KPMG, 06 April 2020)
92. <https://home.kpmg/xx/en/home/insights/2020/04/belarus-government-and-institution-measures-in-response-to-covid.html>
93. <https://www.worldbank.org/en/data/interactive/2020/04/14/map-of-sme-support-measures-in-response-to-covid-19>
94. Government and institution measures in response to COVID-19, Update 12, p. 17 (KPMG, 06 April 2020)
95. <https://www.hbor.hr/en/tema/esif-growth-and-expansion-loans/>

96. <https://home.kpmg/xx/en/home/insights/2020/04/cyprus-government-and-institution-measures-in-response-to-covid.html>
97. <https://www.worldbank.org/en/data/interactive/2020/04/14/map-of-sme-support-measures-in-response-to-covid-19>
98. <https://www.worldbank.org/en/data/interactive/2020/04/14/map-of-sme-support-measures-in-response-to-covid-19>
99. <https://home.kpmg/xx/en/home/insights/2020/04/latvia-government-and-institution-measures-in-response-to-covid.html>
100. <https://www.worldbank.org/en/data/interactive/2020/04/14/map-of-sme-support-measures-in-response-to-covid-19>
101. COVID-19 CE Measures_V11 – pp. 50-51, Deloitte (27 May 2020)
102. <https://home.kpmg/xx/en/home/insights/2020/04/montenegro-government-and-institution-measures-in-response-to-covid.html>
103. <https://www.worldbank.org/en/data/interactive/2020/04/14/map-of-sme-support-measures-in-response-to-covid-19>
104. <https://home.kpmg/xx/en/home/insights/2020/04/north-macedonia-government-and-institution-measures-in-response-to-covid.html>
105. <https://home.kpmg/xx/en/home/insights/2020/04/moldova-tax-developments-in-response-to-covid-19.html>
106. <https://home.kpmg/xx/en/home/insights/2020/04/moldova-government-and-institution-measures-in-response-to-covid.html>
107. COVID-19 CE Measures_V11 – pp. 64-68, Deloitte (27 May 2020)
108. <https://www.worldbank.org/en/data/interactive/2020/04/14/map-of-sme-support-measures-in-response-to-covid-19>
109. <https://home.kpmg/xx/en/home/insights/2020/04/serbia-government-and-institution-measures-in-response-to-covid.html>
110. Source: <https://home.kpmg/xx/en/home/insights/2020/04/slovakia-government-and-institution-measures-in-response-to-covid.html>
111. <https://www.lexology.com/library/detail.aspx?g=5be3b4fa-1857-47f0-ae1d-4d56c3dd9bc2>
112. COVID-19 CE Measures_V11 – pp. 74-75, Deloitte (27 May 2020)
113. <https://www.worldbank.org/en/data/interactive/2020/04/14/map-of-sme-support-measures-in-response-to-covid-19>
114. <https://www.worldbank.org/en/data/interactive/2020/04/14/map-of-sme-support-measures-in-response-to-covid-19>

115. <https://home.kpmg/xx/en/home/insights/2020/04/azerbaijan-government-and-institution-measures-in-response-to-covid.html>
116. <https://home.kpmg/xx/en/home/insights/2020/04/georgia-tax-developments-in-response-to-covid-19.html>
117. https://dataviz.worldbank.org/views/SME-COVID19/Overview?:embed=y&:isGuestRedirectFromVizportal=y&:display_count=n&:showAppBanner=false&:origin=viz_share_link&:showVizHome=n
118. <https://home.kpmg/xx/en/home/insights/2020/04/kazakhstan-government-and-institution-measures-in-response-to-covid.html>
119. <https://home.kpmg/xx/en/home/insights/2020/04/kyrgyzstan-government-and-institution-measures-in-response-to-covid.html>
120. <https://home.kpmg/xx/en/home/insights/2020/04/kyrgyzstan-tax-developments-in-response-to-covid-19.html>
121. <https://home.kpmg/xx/en/home/insights/2020/04/russia-government-and-institution-measures-in-response-to-covid.html>
122. https://dataviz.worldbank.org/views/SME-COVID19/Overview?:embed=y&:isGuestRedirectFromVizportal=y&:display_count=n&:showAppBanner=false&:origin=viz_share_link&:showVizHome=n
123. <https://home.kpmg/us/en/home/insights/2020/04/tnf-uzbekistan-tax-relief-measures.html>

Annex 1. Measures taken by selected countries from the UNECE region to support MSMEs during COVID-19 crisis

European Union

No	Measures Taken	Responsible Agency	Benefits
1.	Measures to support MSME	1. European Investment Fund (EIF) 2. European Fund for Strategic Investments (EFSI)	€1 billion was made available in a European Union budget guarantee to the European Investment Fund (EIF) via the European Fund for Strategic Investments (EFSI). The EIF will then provide liquidity and guarantees to banks, mobilizing €8 billion in working capital financing.
2.	Mobilization of €40 billion by EIB	European Investment Bank (EIB)	Additionally, the EIB has proposed to mobilize another €40 billion of financing: €20 billion of financing dedicated guarantee schemes to banks based on existing programmes for immediate deployment; €10 billion of financing dedicated liquidity lines to banks to ensure additional working capital support for MSMEs and mid-caps; €10 billion support dedicated asset-backed securities (ABS) purchasing programmes to allow banks to transfer risk on portfolios of MSME loans.
3.	A €37 billion investment package	-	A €37 billion investment package funded by relinquishing the Commission's obligation to request refunding of unspent pre-financing for European structural and investment funds currently held by Member States to direct €25 billion will be used to support the Member States. Funds will be deployed directly by the Member States ^[64] .

Western and Central Europe

No	Measures Taken	Responsible Agency	Benefits
<p>Austria Austria has taken various measures funded by the COVID-19 Crisis Management Funds ^[65]. "Digital Team Austria" initiative consisted of companies in the digitization industry that has offered digital services to MSMEs free of charge for the first 3 months ^[66].</p>			
1.	New guarantees are being provided for MSMEs worth €10 million up to 80% of the loan amount or €2.5 million for 5 years. These guarantees have a onetime processing fee starting at 0.25 % of the amount to be financed and a guarantee fee, starting at 0.3% p.a. (variable to risk) of outstanding liability.	Austria Wirtschafts-service	Provides guarantees for bridging financing to bridge the liquidity of MSMEs in industry and commerce, as well as people or companies who are self-employed.
<p>Belgium Belgium is offering state guarantees on certain loans and the existing guarantees have been extended to includes companies that were affected by the COVID 19 pandemic.</p>			
1.	Extension of MSME guarantees in the Flanders region	-	The existing MSME guarantees have been extended to include companies that were impacted by the ongoing COVID-19 crisis. These guarantees include bridge loan guarantee for existing non-bank debts up to 12 months, low-interest subordinated loans for startups and scale-ups, lowered one-off premium, guarantees for bank debts under existing credit facilities and investment credits ^[67] .

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

№	Measures Taken	Responsible Agency	Benefits
2.	Federal Guarantee Scheme (applies automatically and is in force currently)		<p>The federal state will provide a guarantee of €50 billion on certain loans issued by financial institutions in Belgium.</p> <p>Losses suffered will be apportioned between the federal state and the financial sector:</p> <ul style="list-style-type: none"> - First loss of 3% will be supported by the financial sector - Losses between 3% and 5% will be shared equally between the financial sector and the federal state. - For losses exceeding 5%, the federal state will bear 80% of the loss. <p>All new loans with a maximum term of 1 year (unless extended) must be entered between 1 April 2020 and 30 September 2020 (unless extended). These guarantees do not include re-financings, draw-downs under agreements entered before 1 April 2020, financings that cannot contractually be used for Belgian activities of the borrower and agreements that specifically exclude the benefit of the guarantee ^[68].</p>
3.	Belgium has opened up existing financial instruments for MSMEs – such as MSME growth subsidy [66].	-	Supports firms to find alternative markets, particularly where supply chains are impacted.

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

№	Measures Taken	Responsible Agency	Benefits
<p>Croatia Croatia has introduced moratorium, loan and interest schemes through various agencies for MSMEs ^[94].</p>			
1.	<p>The government has increased allocation for the "ESIF micro loans" for working capital for MSMEs and the maximum guarantee rate for European Structural and Investment Funds (ESIF) guarantees has been increased from 65% to 80%.</p>	<p>Croatian Agency for SMEs, Innovation and Investment (HAMAG-BICRO)</p>	<p>Funds can be approved for investments in tangible and intangible assets as well as the transfer of ownership rights, whereas up to 30% of loan amount can be earmarked for the financing of working capital related to the respective investment.^[95]</p>
2.	<p>A new financial instrument "COVID-19 loans" has been introduced for working capital for MSMEs. COVID-19 loans introduced by the Croatian Bank for Reconstruction and Development (HBOR).</p>	<p>Croatian Agency for SMEs, Innovation and Investment (HAMAG-BICRO)</p>	<p>It offers small working capital loans to a maximum of €100,000, with an interest rate of 0.25%. The grace period, if repayment is more than 2 years, is up to 12 months, and the total repayment period is up to 5 years. The collateral requirement is only to a debenture. These loans are targeted at lower risk clients to finance working capital up to €2 million (with a minimum of €187,500). HBOR lends 50% of the loan amount to a commercial bank with zero-percent interest rate, while the other 50% is assumed by the commercial banks. The total repayment period is minimum 1 year, maximum 3 years.</p>
3.	<p>A moratorium on obligations to banks has been introduced for a period of 3 months, during which banks will not apply enforcement measures. The moratorium is shared by HBOR.</p>	<p>Croatian Bank for Reconstruction and Development (HBOR)</p>	<p>Prevents MSMEs from being forced to pay for their loans for 3 months. Liquidity loans and export guarantees have also available.</p>

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

No	Measures Taken	Responsible Agency	Benefits
4.	Guarantee instrument from HAMAG-BICRO that can be utilized to cover 50-80% of the total loan amount, while the rest of the collateral will be decided by the commercial bank	Croatian Agency for SMEs, Innovation and Investment (HAMAG-BICRO)	The indicative initial credit potential (HBOR's and commercial banks in total) is close to €800 million.
5.	Interest rates on investment loans with 30% share of working capital have been reduced to 0.1-0.5%.	Croatian Bank for Reconstruction and Development (HBOR)	Reduced interest rates will MSMEs receive cheaper loans.
Cyprus			
Cyprus is providing subsidies, loans and deference of loan instalment payment for MSMEs ^[96] .			
1.	Small Business Support Scheme has been established	Government of Cyprus	The scheme will provide a subsidy of 70% on employee salaries.
2.	All performing business and public loans (capital and interest) will be frozen for 9 months.	Government of Cyprus	-
3.	State guarantee on business loans	Government of Cyprus	A state guarantee of €2 billion for businesses has been declared. Any losses from these loans will be covered up to 70% by the government and 30% by the banks.
4.	No loan instalment or interest collection		Collection of all loan instalments and interests will be suspended subject to borrower submitting a written request to this end and no default amounts to have existed, on the relevant loans, over 30 days past due as at 29 February 2020.

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

№	Measures Taken	Responsible Agency	Benefits
<p>Czechia Czechia is providing various loan and subsidy programmes for MSMEs. It is also providing guarantees on commercial loans. The Czech government has decided to provide state guarantee to MSMEs through the Czech-Moravian Guarantee and Development Bank on loans from commercial banks totaling CZK 600 billion ^[69]. The Czech Republic has launched an emergency package for Czech exporters and other support to exporters.^[66]</p>			
1.	<p>The COVID Loan programme will provide support in the form of soft loans in the amount of CZK 500,000 up to CZK 15 million with zero interest rate. Loans are granted up to 90% of eligible expenditure with a maturity of 2 years, including the possibility of deferred repayment for up to 12 months. Government is planning on interest free financing for COVID-19 loan for MSMEs affected by COVID-19. ^[70]</p>	Czech Government	<p>Applicants for the COVID Loan can benefit if their contractual performance have been delayed, suspended or cancelled due to measures taken to prevent the spread of coronavirus infection.</p> <p>The loan may be used for acquisition of small tangible or intangible assets, the acquisition and financing of inventories or for other operating expenses and expenditures. There are no processing and granting fees associated with the of the loan or early repayment.</p>
2.	<p>Subsidies Program – “Technologie COVID”^[71] Applicable for projects that focus on production of medical supplies or anything related to the fight against COVID-19.</p>	Ministry of Industry and Trade (MIT)	<p>Under this programme, subsidies would be provided to businesses to adopt new technologies (e.g. online retailing) and continue their business despite restrictive measures.</p> <p>Individual projects may also receive subsidy from CZK 250,000 to CZK 200 million. These funds can be used only to alter technology or prepare for production of medical supplies, or to implement software to produce medical supplies or adopt other measures related to fight against COVID-19</p>

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

No	Measures Taken	Responsible Agency	Benefits
3.	<p>“The Country for the future” ^[71] This is public competition for technological solutions for fight against the COVID-19 pandemic. The programme has extensive requirements applicable to the application for grant which can be found online.</p>	Czech Government	Successful applicants will receive funds for costs of invention and introduction of the technology into the real world.
<p>Denmark Denmark is providing guarantees on loans for MSMEs and salary compensations for employees of start-ups ^[72].</p>			
1.	A loan guarantee is being provided to cover losses directly relating to COVID 19 on 70% of new corporate loans that are being issued.	Government of Denmark	The loan amounts to DKK 1 billion in losses in Denmark and is intended for MSMEs that are operating at a loss of 50% or more.
2.	Salary compensation for employees of start-ups	Government of Denmark	A compensation of up to 75 % of the employee's salary (not more than DKK 23,000 per month per employee) can be availed in start-ups.
3.	The Danish Export Credit Fund (EKF), a state agency in Denmark, will increase its liquidity for MSMEs. ^[66]	Danish Export Credit Fund (EKF)	An increase guarantees will assist some 250 MSMEs in continuous export business.

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

№	Measures Taken	Responsible Agency	Benefits
<p>Estonia Estonia has taken measures to improve market liquidity and support MSMEs in certain sectors ^[97]. There are benefits introduced by the Estonian Government to support employers in sectors which are currently hit the hardest by the COVID 19 crisis in order to avoid/postpone redundancies and cover partial salaries.</p>			
1.	Liquidity measures	Estonian Government	Liquidity release amounting to €73 million by the government.
<p>Finland Finland has taken measures to reduce negative financial effects due to the pandemic and is also providing grants, guarantees and subsidies for MSMEs ^[73]. Other Finnish institutions are also providing support for MSMEs. Commercial Banks provide grant instalment free periods for MSMEs up to 12 months and/or increase credit limits on case by approach.</p>			
1.	Reduced solvency and liquidity requirements for institutions under it and other credit institutions	1. European Central Bank 2. Finnish Financial Supervisory Authority (FIN-FSA)	1. Increase Finish credit institutions lending capacity by €30 billion. 2. Support banks' credit loss buffers and lending to corporations in order to mitigate adverse financial effects due to the outbreak.
2.	MSME guarantee for limited liability enterprises operating for more than 3 years is being extended to include COVID 19 immediate cash needs.	-	The guarantee is always 80% of the total facility ranging €10,000 to €120,000.

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

№	Measures Taken	Responsible Agency	Benefits
3.	Subsidies and loans for MSMEs and mid-cap companies targeted predominantly at hotel and travel industry	Business Finland	1. A subsidy of total 80% of total project expenses, capped at €10,000 at which total project cost is €12,500 for research and planning of new business operations, replacing delivery chains and reorganization of production and ways of working. A maximum 70% advance payment can be applied before/during the project and the rest is credited at project completion against accepted expense slips. 2. A subsidy of total 80% of total project expenses, capped at €10,000 at which total project cost is €12,500 for development and execution of planned development actions. A maximum 70% advance payment can be applied before/during the project and the rest is credited at project completion against accepted expense slips.
5.	ELY (Centers for Economic development, Transport and Environment) have offered development subsidies, development services and transport support for MSMEs. They have received €50 million supplementary budget to support MSMEs, similar to Business Finland.	ELY (Centers for economic development, Transport and Environment)	ELY aid can be granted to any form of enterprises that employs 1-5 employees (not self-employed, min 1 employee/not owner, working 30 h/week) and have been financially affected by virus outbreak. The subsidies can be applied for: research and planning of new business operations. The project size may be in total €10,000 and ELYs share 80% of accepted expense slip; development and execution of these planned development actions. Max €100,000 and ELYs share 80%. As change to ordinary terms, due to COVID 19 in both forms of subsidy a 70% advance can be paid at project acceptance.

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

№	Measures Taken	Responsible Agency	Benefits
6.	Finnish Industry Investment Ltd. (TESI) is providing private equity type financing for Finish MSME companies who have strong growth outlook and market potential (up to 50 employees and must be profitable before crisis and have feasible outlook after crisis).	Finnish Industry Investment Ltd. (TESI)	Follow on equity investments are being offered into portfolio companies and the investments range from €1 million to €10 million. Targets are domestic employer with min €10 million in sales and must be profitable before crisis and feasible outlook after crisis.
<p>France</p> <p>France is providing various guarantee schemes, financing options and other services for MSMEs affected by the pandemic ^[74]. The industry associations have supported MSMEs during the crisis through a toolkit on teleworking and advice to companies ^[66].</p>			
1.	Guarantee Fund "Reinforcement of the Treasury" intended for Very Small Enterprises (VSEs), MSMEs and mid-cap companies	Bpi France	Guarantee up to 90% liquidity enhancement loans from 2-7 years. Long- and medium-term loans, movable and immovable leases, financial leases etc. can be guaranteed. Term for 2-7 years (can be extended up to 15 years max. for loans with a security interest in real estate asset or in the case of sale and leaseback of real estate). Up to €5 million for MSMEs and €30 million for European Institute of Innovation and Technology (EITs) can be guaranteed. Elimination period has been reduced to 6 months.
2.	Guarantee Fund "Confirmed Line of Credit" Intended for MSMEs and mid-caps and is renewable only once.	Bpi France	Up to 90 % guarantee on confirmed credit lines for a period of 12-18 months. Renewal of confirmed ST lines of credit (overdrafts, overdraft facilities, discounts, daily etc.) can be guaranteed. Can be used for financing the business operating cycle. Guarantee equal to the duration of the CT line (up to €5 million for MSMEs and up to €3 million for mid-cap companies).

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

№	Measures Taken	Responsible Agency	Benefits
3.	Mid Term Financing: provision of asset loans intended for VSEs, MSMEs and mid-cap companies with at least 12 months of balance sheets	Bpi France	Can be used for one-off cash requirements and an exceptional increase in working capital requirement, linked to economic situation. €50,000 to 5 million for MSMEs and up to 30million for midcap companies can be provided. Time: between 3-5 years, of which 6-12 months of deferred depreciation. Provision of unsecured loans on assets of the company or its manager.
4.	Mid Term Financing: ready to bounce loans intended for VSEs, MSMEs and midcaps. Being provided in partnership with the regions and is co-financed	Bpi France	Allows financing a cash requirement related to cyclical difficulty, a temporary fragile situation or a working capital requirement that does not allow normal operating condition. Financing ceiling: €10,000 to 300,000. Term: 7 years, including 2 years of deferred capital amortization.
5.	Increase in the maximum outstanding amount of secured receivables	Bpi France	For factoring companies currently benefitting from agreements for the benefit of MSMEs, it has been proposed to increase the maximum outstanding amount of secured receivables from €200,000 to 500,000 and allow the release of security deposit.

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

№	Measures Taken	Responsible Agency	Benefits
6.	Export Guarantees and pre financing through Bpi Assurance Export	Bpi Assurance Export	For MSMEs Bpifrance Export Insurance will now cover for the duration of COVID 19 pandemic, its policyholders (credit institution) up to 90% of issued and declared guarantee commitments (export guarantee insurance) or pre-financing setup (pre-financing guarantee) compared to 80% previously. Companies applying for export pre financing guarantee will now have 6 months (compared to 4 months previously) for the bank to set up the underlying pre financing credit as from the notification by Bpifrance Assurance Export of the granting of its guarantee. For issuing institutions, this will reduce the risk of when issuing guarantees or setting up pre-financing credits, as well as provide addition time to setup pre-financing credits facilitating the granting of such financing to the companies.
7.	Credit Mediation	1. Bank of France 2. Government of France	Credit Mediation is being provided to company of any size and in any sector experiencing financing difficulties with its banking partners or that is suffering the consequences of a reduction in guarantees from a credit insurer.
8.	Deference of payment of rents	French Insurance Federation (FFA)	The members FFA of have undertaken deference of the payment of rents for MSMEs and VSEs belonging to one of the affected sectors whose activity is interrupted pursuant to the decree of 15 March 2020. These include auditoriums, conference, meeting, show or multipurpose rooms; sales shops or shopping centers; Restaurants and pubs; dance halls and game rooms; libraries, documentation center; Exhibition halls; covered spot establishments; museums.

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

No	Measures Taken	Responsible Agency	Benefits
9.	Solidarity Fund €2bn for small businesses (3 months)	-	MSMEs having turnover less than €1million, having lost 70% of their turnover between March 2019 and March 2020 will be paid an additional aid by the region and these companies will be eligible for an flat rate aid of €2,000 if they employ at least 1 employee are unable to pay their debts within 30 days and have been refused cash loan by their bank. From 1 April, all companies concerned will be able to make a simple declaration on tax website - impots.gouv.fr - to receive aids up to €1,500 and since 15 April, the companies experiencing the most difficulties will be able to obtain, on a case by case basis from the region an additional aid of €2,000.

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

№	Measures Taken	Responsible Agency	Benefits
<p>Germany Germany is providing easier loans for its MSMEs, with increased grace periods and no guarantee or collateral required [75].</p>			
1.	KfW Quick Loans for MSMEs	KfW Bank	<p>Provided that the company has made a profit in the sum of the years 2017-2019 or in 2019, if it has only been on the market for a shorter period a "fast loan" must be granted with the following key points:</p> <ul style="list-style-type: none"> - The loan is available to medium-sized enterprises with more than 10 employees that have been active on the market at least since 1 January 2019. - The loan volume per company is up to 25% of the total turnover in 2019, a maximum of €800,000 for companies with more than 50 employees, a maximum of €500,000 for companies with up to 50 employees. - The company must not have been in difficulty on 31 December 2019 and must be in an orderly financial situation at that date. - On request, up to 2 grace years at the beginning is provided to reduce the short-term burden. - The bank receives a 100% indemnity from KfW, secured by a guarantee from the Federal Government. - The loan is approved without further credit risk assessment by the bank or KfW. Collateral is not provided and loan is approved quickly. <p>The term of the loan has been extended from 5 up to 6 years, and even up to 10 years for loans of up to €800,000 and the assumption of a positive forecast for the continuation of operations is based on the assumption that the companies had sound financial circumstances as on 31 December 2019.</p>

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

No	Measures Taken	Responsible Agency	Benefits
2.	Germany has set up an Economy Stabilisation Fund (Wirtschafts-stabilisierungsfonds) ^[66]		It aims to ring-fence businesses seen as of critical importance for the German economy as a whole.
Hungary Hungary has allowed moratorium on loan repayment ^[98] .			
1.	Loan repayment moratorium	National Bank of Hungary	The central bank imposed a moratorium on repayments on loans extended under its massive Funding for Growth Scheme that had provided MSMEs with cheap loans.
2.	Loan repayment moratorium	Hungarian Government	A loan repayment moratorium (both principal and interest) has been established for both private individuals and companies until the end of the year. Individuals and company loan payments has been stopped until December 2020 and short-term company loans will get automatically elongated until 30 June 2020.
Ireland Ireland is providing guarantee schemes for its MSMEs ^[76] . Local Enterprise Offices in Ireland are providing vouchers worth between €2,500 and €10,000 with match funding for innovation, productivity and business continuity preparedness ^[66] .			
1.	Credit Guarantee Scheme	Government of Ireland	MSME loans of up to €1 million would be support loans for periods of up to 7 years.
2.	COVID-19 Credit Guarantee Scheme	Government of Ireland	€2 billion has been allocated to support lending to MSMEs for terms ranging from 3 months to 6 years, below market interest rates.

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

No	Measures Taken	Responsible Agency	Benefits
<p>Italy Italy has introduced public guarantees and support for its innovative start-ups and MSMEs. It is also allowing suspension of loan repayment for MSMEs. The Italian export credit agency, Servizi Assicurativi del Commercio Estero (SACE) has announced a €4 billion package to help MSMEs address cash flow needs and diversify export markets. In addition, the Italian Agency for the promotion of business internationalization, Italian Trade Promotion Agency (ICE1) has absorbed the costs already incurred by companies for participation in fairs and events ^[66].</p>			
1.	Suspensions of loans repayment for MSME ^[77]	Italian Government Italian Banking Association	Italian MSMEs affected by the consequences of COVID-19 can have their loan repayments suspended until 30 September 2020 on outstanding bank loans as at 17 March 2020. Italian bank cannot revoke credit facilities until 30 September 2020.
2.	Public guarantees for loans to MSME (up to 499 employees) ^[77]	Italian Government Italian Banking Association	Until 31 December 2020, the state will grant free guarantees through the guarantee fund for MSME, covering the 90% of loans up to €5 million and duration up to 72 months. The guarantee would cover the 100% of loans up to €25,000, under certain conditions. The amount of the guaranteed loan shall not exceed (i) 25% of the turnover achieved in 2019 (ii) 200% the employment costs borne in 2019 (iii) the expected costs for investments in the following 12-18 months.
3.	Support for innovative start-ups ^[78]	Italian Government Italian Banking Association	Additional resources of €100 million for the year 2020 were allocated to refinance loans already granted to innovative start-ups. A fund of €10 million was established to grant innovative start-ups non-repayable contributions to be used to purchase services provided by incubators, accelerators, innovation hubs and business angels. A fund aimed at sustaining venture capital was provided with additional €200 million for the year 2020 to support investments in innovative start-up and innovative MSME share capital.

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

No	Measures Taken	Responsible Agency	Benefits
4.	Support to MSME	-	At the territory level an agreement was made between 14 municipalities of the South East Milan area to build a portal for MSMEs that aims at giving support in consultation to micro and small businesses in the areas affected by the recent COVID-19 pandemic ^[79] .
5.	The Ministry of Innovation and Digitalisations launched an initiative “Digital Solidarity” ^[66]	-	This includes a portal for MSMEs to access free of costs digital services from large private sector companies regarding smart/tele-working, video conferencing, access to mobile data, cloud computing etc.
Latvia			
Latvia has introduced measure to improve market liquidity and is also providing loans, guarantees and reduced interest rates ^{[99][100]} . Fintech initiatives are being developed to support MSME finance in the context of the crisis ^[66] .			
1.	Liquidity measures	Latvian Government	Liquidity release amounting to €118 million by the government.
2.	Loans, guarantees and reduced interest rates	National Development Finance Institution of Latvia (ALTUM)	ALTUM will provide loan guarantees and loans for crisis solutions to businesses affected by the COVID-19 crisis. Interest rates on loans for tourism sector businesses will be cut by 50% for MSMEs.
Lithuania			
Lithuania is taking measures to help MSMEs maintain liquidity and loans for paying bills ^[101] .			
1.	Loans to pay bills	Lithuanian Government	MSMEs can apply for loans to pay bills to suppliers who could not be paid on account of suspended activities.
2.	Loans for liquidity funding	Lithuanian Government	MSMEs affected by COVID-19 can apply for loans to maintain liquidity funding within 1 day.
Malta			
Government of Malta has introduced liquidity measures and a tax and insurance deferral of payment scheme.			
1.	Liquidity measures	Government of Malta	Liquidity release in the amounting to €9 million by the government. ^[80]

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

No	Measures Taken	Responsible Agency	Benefits
2.	Deferral of payment scheme in respect of Value Added Tax (VAT), provisional tax and national insurance contributions on salaries	Government of Malta	A 2-month deferral of payment scheme has been introduced in respect of Value Added Tax (VAT), provisional tax and national insurance contributions on salaries which fall due in March and April 2020. These deferrals are expected to improve liquidity by €700 million. It is applicable to businesses which have experienced a significant downturn in turnover. ^[81]
<p>Poland Polish government is providing repayable grants to companies affected by the pandemic ^[82].</p>			
1.	Repayable subvention (advanced payable)	Polish Government	Repayable subvention (advanced payable) depending on (i) value of sales of the enterprise in 2019 and (ii) decrease in sales due to COVID-19, not exceeding PLN 3.5 million per enterprise. 75% may be forgiven after 12 months: (i) 25% provided that enterprise continues activity, (ii) 25% depending on loss on activity and (iii) 25% provided that the enterprise maintained average employment for period of 12 months. Remaining can be paid back in 24 months For commercial activity not for acquisitions; up to 25% for repayment of debt (not for intra-group payments).
<p>Portugal Portugal is providing financial and consultancy support for its MSMEs.</p>			
1.	Creation of a support team of specialists in banking and finance, consulting, communication, legal, etc. ^[83]	Portuguese Government	This team will ensure provision of information on all existing support for MSMEs, as well as consultancy to mitigate the effects of the crisis and promote economic recovery.
2.	A marketplace is being created for MSMEs ^[83]	Portuguese Government	It will combine the needs of companies, institutions and municipalities with the skills and offers of the entrepreneurial ecosystem in Lisbon.

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

No	Measures Taken	Responsible Agency	Benefits
3.	€200 million in loans to support MSMEs ^[84]	Portuguese Government	The government announced it was allocating €200 million in loans to support MSMEs. A credit line to support treasury to companies affected by the outbreak, in the initial amount of €100 million. The package includes measures to support liquidity, but also to support of wages.
4.	€400 million in loans to support start-ups ^[84]	Portuguese Government	€400 million in loans to support MSMEs. Launch of a credit line to support treasury, in the initial amount of €80 million. Including measures to support liquidity and temporary layoff. Businesses will be able to withhold interest and capital payments on bank loans for 6 months. State grants mutual guarantee of 90%.
Romania Romanian government has waived off contract penalties for the duration of emergency and is also providing credit guarantee ^[107] .			
1.	Contract penalties not due for the duration of state emergency	Romanian Government	The penalties stipulated for delays in the execution of contracts are not due for the duration of the state of emergency by MSMEs that have totally or partially interrupted their activity and that hold the emergency situation certificate.
2.	Credit guarantee	Romanian Government	The Romanian State will provide guarantees covering up to 80% of the principal amounts borrowed in the form of one or more credits for the realization of investments or credit lines for working capital granted by credit institutions for MSMEs. The maximum cumulative value of grant has been capped at RON 10 million, and there is also a sub-ceiling of RON 5 million for the credit lines for working capital (but cannot exceed the average of the expenses related to the working capital of the last 2 fiscal years) and finally, RON 10 million for investment loans.

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

No	Measures Taken	Responsible Agency	Benefits
<p>Slovakia Slovak government is taking steps for improving liquidity and is also providing financial support to MSMEs through various schemes. Mortgage payments have been postponed by banks by 9 months.</p>			
1.	Liquidity measures	Slovak Government	Liquidity release in the amounting to €527 million. ^[110]
2.	Subsidy programme being provided to employers who closed or restricted their business	-	Subsidies will be provided to employers who closed or restricted their business operations due to the decision of the PHA (Public Health Authority of Slovak Republic) amount to 80% of average monthly salary up to €1,100 /month/employee (to whom the employer is unable to allocate work). ^[110]
3.	Allowance to employers for keeping a job	Slovak Government	Allowance will be provided to employers for keeping a job (financed by European Social Fund (ESF) and the state budget), though the employers must maintain the work position beyond quarantine. ^[111]
4.	Short-term interest-free loans	1. EXIMBANKA (Export-Import Bank) 2. Slovak Guarantee and Development Bank (SZRB)	Short-term interest-free loans will be granted for companies (mainly MSMEs) via EXIMBANKA (Export-Import Bank) and the Slovak Guarantee and Development Bank (SZRB) to overcome the lockdown period. ^[111]
<p>Slovenia Slovenia will be introducing portfolio guarantees. Various steps are being taken to help MSMEs hit by the pandemic^[112]. Slovenia has offered aid for internationalization and measures to diversify export- and import markets.^[66]</p>			
1.	Preparation for introduction of portfolio guarantees	Slovenska izvozna in razvojna banka, d.d., Ljubljana (SID)	Portfolio guarantees under European Cohesion Policy Funds that can be used by participating banks and savings banks to finance MSMEs and their day to day operations.

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

№	Measures Taken	Responsible Agency	Benefits
2.	Measures to help MSME	The Ministry of Economic Development and Technology The Slovenian Enterprise Fund	The Ministry of Economic Development and Technology and the Slovenian Enterprise Fund are currently working on measures to help MSMEs with a total indicative funds of €115 million. The money can be used for a variety of purposes, from new quick liquidity loans by the Slovenian Enterprise Fund, aimed at eliminating the liquidity crashes of MSMEs, sole proprietorships and cooperatives due to the COVID-19 and existing guarantees for bank credit protection, prioritized for new investments and by adjusting also for financing reverse funds to manage the effects of virus.
<p>Spain Spain is providing aids to facilitate utility payments and financial and closure support for its MSMEs. Spain has offered €2 billion as part of its additional loan guarantee programme in guarantees to exporting companies. Measures to help digitize MSMEs have also been taken up to facilitate teleworking and prevent external (outside the European Union) takeovers of Spanish firms in strategic sectors.^[66]</p>			
1.	Aid to facilitate payment of utility bills	Iberdrola (Spanish Energy Utility company) Naturgy (Natural Gas and Electrical energy utilities market)	Aid to facilitate payment of electricity, gas and other energy services bills of its clients including MSMEs by splitting invoices up to 12 months. ^[52] It will postpone the electricity and gas bills of MSMEs that will be issued during the second semester of the year. ^[85]

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

No	Measures Taken	Responsible Agency	Benefits
2.	Financial aid for MSMEs in Castile-La Mancha	Regional Government of Castile-La Mancha	<p>Since the beginning of April, the Regional Government has coordinated a financial aid mechanism of €15 Million, aimed at MSMEs and the self-employed of Castile-La Mancha, to back credit operations of up to €300,000. It has also designed a plan of more than €220 million for economic recovery post COVID-19 crisis. The plan will feature measures such as the creation of a €25 million non-refundable financial aid line aimed at MSMEs and the self-employed resuming their activity immediately after the lockdown was lifted while maintaining their employees.^[86]</p>
3.	'Re Activa València' liquidity measures	-	<p>'Re Activa València' is a series of liquidity measures designed for MSMEs to compensate for closure or losses and targeted towards maintaining employment. Under this payment of municipal taxes has also been delayed. An assistance and coordination service has been launched to ease the access to the administration's benefits, as well as a financial control system about the effects of the crisis.^[87]</p>

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

No	Measures Taken	Responsible Agency	Benefits
<p>Switzerland Switzerland has introduced loans and guarantees for certain MSMEs ^[88]. Swiss Government has offered compensation for reduced exports promotion activities of CHF 4.5 million. ^[66]</p>			
1	<p>COVID-19 loans for MSMEs that: are established / incorporated prior to 1 March 2020; have an annual turnover lower than CHF 500 million; have no ongoing debt collection liquidation proceedings; have significant negative impact on the turnover due to the COVID-19 pandemic; do not benefit from federal financial support measures introduced in the areas of culture or sport.</p>	<p>Swiss Government</p>	<p>The Swiss Government has introduced government-guaranteed loans from Swiss banks as an interim measure for Swiss MSMEs to help alleviate liquidity problems due to COVID-19. An expected CHF 40bn in financing will be provided to MSMEs. MSMEs can apply for loans up to 10 % of their annual turnover, up to a maximum of CHF 2 million. For demands of up to CHF 500,000 will be guaranteed by the Swiss Government and will carry no interest rate. Demands in excess of CHF 500,000 will be guaranteed 85 % by the Swiss Government and the primary bank provider will bear the risk for the remaining 15%. The annual interest rate is currently 0.5 % and standard credit checks have to be imposed on the borrowing entity and this can make the approval process slower. The guarantees by the Swiss Government last for 5 business years with a possibility for extension up to 2 years and restrictions like no payments of dividends and no transfer of funds to parent-companies abroad and must be repaid within 5 business years at the latest.</p>

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

No	Measures Taken	Responsible Agency	Benefits
United Kingdom			
United Kingdom has introduced various loan schemes and employee sick pay packages.			
1.	Statutory Sick Pay (SSP) relief package	Government of the United Kingdom	It includes refund to cover up to 2 weeks' SSP per eligible employee off work due to COVID-19. The companies can reclaim expenditure for any employee who has claimed SSP because of COVID-19. This scheme covers full-time employees, part-time employees, employees on agency contracts and employees on flexible or zero-hour contracts. Employers can claim back from both the Coronavirus Job Retention Scheme and the Coronavirus Statutory Sick Pay Rebate Scheme for the same employee but not for the same period of time for an employee.
2.	Coronavirus Business Interruption Loan Scheme ^[89]	British Business Bank	Under this scheme launched on 23 March 2020, MSMEs with an annual turnover of less than £45 million can borrow up to £5 million with a government guarantee covering 80% of the loan. The loan will only be available from accredited lenders, and the first year will be interest-free.
3.	Bounce Back Loan ^[90]	British Business Bank	Allows MSMEs affected by the pandemic to receive loans of up to 25% of their annual turnover (capped at £50,000) from accredited lenders. These loans have a term of up to 6 years and benefit from a payment holiday during the first year. The Government of the United Kingdom will guarantee the amounts provided under these loans, and borrowers will not have to pay any fees or interest during the first 12 months.
4.	Increased support for MSME by the Bank of England ^[90]	Bank of England	Bank of England has promised increased support for banks lending to the real economy and will unveil new incentives for banks that increase their lending to MSMEs. In particular, it is offering a 4-year collateralized loans to cover at least 10% of real economy lending at interest rates at or very close to Bank Rate and additional funding to banks that increase lending to MSMEs.

South-Eastern and Eastern Europe and Turkey

No	Measures Taken	Responsible Agency	Benefits
Albania			
Albania is offering various tax benefits and support to entrepreneurs ^[91] .			
1.	2020 simplified income tax installment for taxpayers registered as small tax business will be postponed for 20 October (1st and 2nd Quarters) and 20 December 2020 (3rd and 4th quarters)	Albanian Government Albanian Tax Authorities	Taxpayers do not need to pay their taxes immediately and pay later when the market conditions have become more favorable.
2.	Support of a minimum salary of ALL 26,000 per month would be provided to employees working for legal entities or sole entrepreneurs registered for (Corporate Income Taxes) CIT or as small businesses and having an annual turnover not exceeding ALL 14 million during 2019. Double employed individuals shall benefit only 1 payment.	Albanian Government Albanian Tax Authorities	This measure will help employees and owners of small businesses which have been affected due to the pandemic.

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

No	Measures Taken	Responsible Agency	Benefits
Belarus			
Belarus has introduced financial measure to support business and recommendations on interest rates ^[92] . Softening of recommendations on interest rate ceilings on deposits and credits, and the associated risk assessment has also been undertaken. Recommendation to banks to restrain from increasing interest rates on restructured debt. Partially released the capital conservation buffer. The maturity of the Central Bank's refinancing loans for banks has been extended.			
1.	Financial measures to support businesses	-	Mitigation of a number of prudential requirements like softening of assets classification requirements (including looser prudential requirements on Foreign Currency (FX) loans); increasing the maximum risk standard for 1 debtor; suspension of indexation of regulatory capital of banks or other financial entities; lowering the liquidity coverage ratio; and softening credit risk requirements for systemically important borrowers when calculating the normative capital adequacy ratio.
Bosnia and Herzegovina			
1.	Unemployment benefits ^[93]	Government of Bosnia and Herzegovina	€5.5 million has been allocated for unemployment benefits for 2020 that could increase to additional €10 million to support job retention and provide unemployment benefits.
Montenegro			
Montenegro is also providing various tax relief measures ^{[102][103]} .			
1.	Tax relief measures	Tax authorities	Tax relief has been provided in Montenegro in response to the COVID-19 pandemic that includes measures for the deferral of payments of individual (personal) income tax and social security contributions.

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

No	Measures Taken	Responsible Agency	Benefits
<p>North Macedonia North Macedonia is providing financial support for salary payment and offering incentives on loans ^[104].</p>			
1.	Financial support being provided for the payment of salaries	Government of North Macedonia	Financial support will be provided for the payment of salaries of up to MKD 14,500 per employee to employers in the private sector affected by the COVID-19 crisis, for the months of April and May 2020.
2.	Interest Free Loans	Government of North Macedonia	A total of €5.5 million will be granted as interest-free loans to companies conducting business activities in the sectors most affected by COVID-19. Individual loans ranging from €3,000 to €30,000 will depend on headcount: enterprises with up to 10 employees are entitled to receive a loan up to €5,000; enterprises with 10 to 50 employees are entitled to receive up to €15,000; enterprises with 51 to 250 employees are entitled to receive up to €30,000.
3.	Extension of loan repayment period	-	Banks and savings houses are allowed to offer extension i.e. grace period for loan repayment, prolong the loan repayment for an extended period or provide lower interest rate, etc.
<p>Republic of Moldova Republic of Moldova is adopting a comprehensive fiscal package to help businesses affected by the pandemic ^[105]. The Executive Board of the National Bank of Moldova approved a decision that has allowed licensed banks to postpone or change the payment deadlines and/or the amounts of due payments on loans granted to economic agents until 30 June 2020. These changes will not have the effect of automatic classification of these loans into a tougher category than the existing one, as of the date of adoption of this decision. ^[106]</p>			
1.	A comprehensive fiscal package is being adopted targeting vulnerable business	-	Tax relief for sectors affected by state-imposed restrictions. Delayed tax payment deadlines to mid-2020. Suspending tax audits and other controls. Increased state budget allocations to the budget emergency fund and to a mortgage guarantee programme. A grant of 60% of income paid tax and compulsory state social insurance contributions to be paid by the employer.

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

No	Measures Taken	Responsible Agency	Benefits
2.	Support for economy	National Bank of Moldova (NBM)	The National Bank of Moldova (NBM) took some measures to support the economy, ease liquidity conditions, and enhance financial system resilience by decreasing the base rate applied to the main short-term monetary policy operations by 2.25 percentage points to 3.25%, decreasing the required reserve ratio in local currency by 6.5 percentage points to 34% and the required reserves ratio in freely convertible currencies was increased by 1.0 percentage point to 21%.
<p>Serbia Serbia has introduced support packages for businesses and employees and has put a 90-day moratorium on loan repayment.</p>			
1.	Moratorium on loan repayment	Serbian Central Bank	A 90-day moratorium on loan repayment by clients of commercial banks and financial leasing companies, applicable to individuals, farmers, entrepreneurs and companies are being provided. ^[108]
2.	Financial support that will be made available for employees and for business entities	Serbian Government	The government has issued a decree and subsequent guidance concerning financial support that will be made available for employees and for business entities which includes direct aid in the form of financing of employees' salaries for up to 3 months. ^[109]
3.	Governments new support package	-	The government's new package of support includes: support to large enterprises, 50% of the minimum wage to all employees whose contract has ended and cover for 3-months wages in MSMEs. ^[109]

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

No	Measures Taken	Responsible Agency	Benefits
<p>Turkey Turkey is offering working capital loans, deferral on loan payments and additional liquidity for certain enterprises ^[113].</p>			
1.	Loan payment deferral	Small and Medium Enterprises Development Organization of Turkey (KOSGEB)	The loan repayments due for the months of April, May and June have been postponed by 3 months for 136,000 MSMEs which have received loans through KOSGEB loan support package. The MSMEs will not pay any expenses in return for the deferral and KOSGEB will cover the financing costs (713 billion Turkish Lira (TL) – \$105 billion), arising from the deferral.
2.	Working capital loans	KOSGEB	New working capital loans will be offered to all firms, conditional on their preserving their current employment level, within a 25 000 TL limit, 36 months maturity, 6 months grace period and subsidized 7.5% interest rate.
3.	Craft-and-trade credit card	KOSGEB	It will be made available to all craftsmen and small traders under a 25,000 TL limit
4.	Additional liquidity to enterprises where employment was not reduced	-	Additional liquidity (as much as the next 3 months' staff expense) will be made available to enterprises paying staff salaries through public banks, under the condition that employment was not reduced.
<p>Ukraine Ukraine has introduced measures such as credit holiday and is providing support to MSMEs and entrepreneurs ^[122]. The government has suspended the requirement to pay tax on commercial real estate and land and defined COVID-19 quarantine as a force-majeure for legal contracts and suspended tax inspections of companies. Transaction registration rules have been eased for certain categories of entrepreneurs. Entrepreneurs have also been exempted from having to pay social security contributions. State-owned PrivatBank announced a “credit holiday” for MSMEs until the end of May.</p>			

Russian Federation, Central Asia and the Caucasus

No	Measures Taken	Responsible Agency	Benefits
<p>Armenia Armenia has introduced financial support for MSMEs that include loans, partial reimbursements and grants ^[114]. The Government of Armenia announced that a grant (lump sum payment) will be made available to businesses (up to 50 employees), which was to keep the wage bill and the number of employees the same as before COVID outbreak.</p>			
1.	Support package for MSMEs most affected by pandemic	1. Investor Support Center 2. Licensed banks and credit institutions	The support package will be provided MSMEs that were the most-affected in particular through loans of the Investor Support Center, and the licensed banks and credit institutions will act as servicing agents for loans.
2.	Directions to banks for softening loan terms.	Central Bank of Armenia (CBA)	The Central Bank of Armenia (CBA) instructed banks to apply individual approach to softening loan terms for companies affected by COVID in the area of tourism and services.
3.	Partial reimbursement of loans to cover salaries of workers	Ministry of Labour and Social Affairs	A total of \$50 million will be allocated to firms in the form of partial reimbursement of loans taken to cover the salaries of their workers. Ministry of Labour and Social Affairs has proposed amendment to the Labour Code to allow employees to receive compensation from employers equal to the minimal hourly rate (409 Armenian Dram (AMD) set for the minimum wage (AMD 68,000).
4.	One-time supplement for entrepreneurs	Government of Armenia	A one-time supplement will be provided to individual entrepreneurs and will be calculated based on the 10% of their IV quarter sales turnover for 2019, but not less than the minimal wage (AMD 68,000) and not more than AMD 136,000.
6.	One-time assistance for MSMEs that are obligated to use the cash registry machines	-	A one-time assistance support will be provided amounting to 10% of the turnover of goods, services and work performed during the first quarter of 2020, but not more than twice the minimum wage (AMD 68,000) for MSMEs that are obligated to use the cash registry machines. For the ones with no mandate to use the cash registry, the size of the support will be equal to the minimum wage.

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

№	Measures Taken	Responsible Agency	Benefits
<p>Azerbaijan Azerbaijan has allocated funding to combat the pandemic's adverse effects and is providing support through loans and guarantees ^[115]. The Government of Azerbaijan has extended the blanket deposit guarantee until 4 December 2020. The guarantee covers all AZN (foreign currency) deposits within a 10.5% interest rate cap. The Central Bank of Azerbaijan left the refinancing rate unchanged at 7.25% but raised the floor of the interest rate corridor (within a de facto floor system) by 125 bps to 6.75%.</p>			
1.	Allocation of Azerbaijani Manat (AZN) 2.5 billion	Government of Azerbaijan	2.5 billion AZN has been allocated from the State budget to the Cabinet of Ministers for financing measures to reduce the negative impact of COVID-19 as well as to support the subsequent fluctuations in the global energy and stock markets on the economy, macroeconomic stability, employment issues and businesses in Azerbaijan.
2.	State loan and guarantee in the support of the economy and businesses	Government of Azerbaijan	MSMEs operating in areas negatively affected by the pandemic will be issued credit-guarantee support programme for loans in the amount of 0.5 billion AZN. This programme includes: state guarantee for 60% for new loans in the amounting to 500 million AZN; subsidizing 50% of the interest on guaranteed loans from the state budget. Additionally, 50 million AZN in funds have been allocated to the Entrepreneurship Development Fund in April-May 2020. The programme will also support entrepreneurs with the existing loan portfolios in the sectors affected by COVID. The government will subsidize 10% of the interest expenses of these loans for 1 year.

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

No	Measures Taken	Responsible Agency	Benefits
<p>Georgia Georgia is providing support to industries worst hit by the pandemic by providing VAT refunds, postponing tax liability and provision of subsidies. People employed in the informal sector or self-employed persons will receive on-time assistance of 300 GEL if they provide proof of loss of income.</p>			
1.	Postponement of liability of payment of property and personal income taxes	Government of Georgia	The Government of Georgia has postponed the liability of payment of property and personal income taxes for enterprises engaged in tourism-related activities and other entities who were affected by COVID until 1 November 2020. For the obtaining the relief, taxpayers are required to submit an application to the Revenue Service of Georgia. Furthermore, no late payment interest will be assessed on deferred tax liabilities. ^[116]
2.	Bank loan interest for hotels with 4-50 rooms	Government of Georgia	Hotels with 4 to 50 rooms will receive bank loan interest rate co-financing (80% on loans in Georgian Lari (GEL) and 70% in foreign currency) during 6 months from the Government of Georgia. Within the state support programme, more than 2,000 hotels will be eligible. To benefit from this measure the following condition shall be met: loan amount should not exceed GEL 1 million, \$300,000 or €250,000 and the loan must be issued before 1 March 2020. Payments have already been deferred for 4,500 businesses.
3.	Doubled VAT refunds	Government of Georgia	To promote economic activity and liquidity management for private sector the government will double its VAT returns and instead of planned 600 million, VAT refunds will amount to GEL 1,200 million.
4.	State subsidy for retained jobs	Government of Georgia	Employers will receive state subsidies for every retained job for 6 months: 1) salaries of up to 750 GEL will be fully exempted from income tax; 2) for salaries of up to 1500 GEL, 750 GEL will be exempted from income tax.

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

No	Measures Taken	Responsible Agency	Benefits
5.	Credit portfolio with guarantees to be issued	-	Credit portfolios of GEL 2 billion will be issued with guarantees: Guarantees on new loans - 90% and on restructuring - 30%. Some changes were also made by the state to the co-financing conditions: 1) increasing the period of co-financing of loans/leasing from 24 months to 36 months; 2) changing the mechanism of interest co-financing; 3) lowering the minimum threshold for loans/leasing; 4) Increasing funding for circulating assets and 5) more types of activities will be funded.
<p>Kazakhstan Kazakhstan is providing guarantees on loans, exemption of taxes and increased support for MSME financing [117]. Preferential loans of KZT 600 billion for 1 year at 8% will be provided to support MSMEs affected by COVID. Business entities may apply for low-interest loans under the rescue package capped at KZT3 billion for MSMEs. MSMEs will be able to defer all types of taxes and other payments until 1 June 2020 ^[118].</p>			
1.	Provision of loan with guarantee	-	MSMEs have been authorized to apply for a loan of up to 1 billion Kazakhstani tenge (KZT) with a state guarantee of up to 50% and smaller enterprises can obtain loans of up to 360 million KZT with guarantees of up to 85%.
2.	Increased support of MSMEs to receive financing	Ministry of National Economy (MNE)	A programme that allows enterprises to receive financing of up to 30-50% of the size of the investment project or the declared increase in turnover has been declared. The Ministry of National Economy (MNE) has further increased support of MSMEs via the programme by increasing the maximum amount of the financing that can be obtained from 2.5 to 7 billion KZT.
3.	Concessional lending to MSMEs	National Bank Agency for Regulation and Development of Financial Markets	The National Bank in cooperation with Agency for Regulation and Development of Financial Markets has initiated concessional lending to support working capital for MSMEs'. Combined with "Economy of Common Goods" programme local entrepreneurs will receive KZT1 trillion from the government. ^[118]

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

No	Measures Taken	Responsible Agency	Benefits
4.	Exemption from personal income tax and social payments	-	MSMEs are exempt from personal income tax and social payments (social tax and insurance) for 6 months (Apr-Sep.) Sectors include but not limited to tourism, transport, IT, consulting, private education, private healthcare and other affected sectors. ^[118]
<p>Kyrgyzstan Kyrgyzstan has received funds from German KfW Bank and has introduced several measures to support businesses ^[119].</p>			
1.	Tax deferrals	Government of Kyrgyz Republic	Provision of tax deferrals as part of the Government's anti-crisis plan to support economic sectors and businesses affected by as a result of the spread of the COVID-19
2.	Support by German Development Bank KfW	-	The German Development Bank KfW agreed to provide \$30 million to ensure food security in the country and support in particular development of MSMEs.
3.	The Government of the Kyrgyz Republic decided on several fiscal measures to support businesses ^[120]		Providing deferrals and instalments on payment of amounts of taxes and social contributions arising from the introduction of the state of emergency from 25 March 2020. Extending the moratorium on inspections by state regulatory authorities until 1 January 2022. Restriction on field tax audits until 1 January 2021 (with the exception of scheduled inspections of business entities engaged in the production and turnover of excisable groups of goods; unscheduled inspections conducted in the event of reorganization, liquidation of organizations and termination of activity of an individual entrepreneur; unscheduled inspections and cross-checks carried out in case of receipt by the tax authorities of documented information indicating the facts of incorrect tax calculation by taxpayers after the end of the state of emergency. Deferral of rental payments for 3 months, from 1 April 2020. Introduction of a temporary ban on conducting bankruptcy proceedings until 1 January 2021.

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

№	Measures Taken	Responsible Agency	Benefits
<p>Russian Federation Russia is introducing various measures to help MSMEs like moratorium, preferential loans and incentives on interest rates ^[121]. Tax and social security payments have been postponed for MSMEs. MSMEs can get preferential loans and restructuring of existing debt. MSMEs in hard-hit industries can defer loan payments up to 6 months.</p>			
1.	Moratorium on insurance premium	-	Three-month moratorium has been declared for MSMEs on payments of mandatory insurance premium and leasing payments for property to the state or municipal authorities as of 1 March 2020.
2.	Incentives on interest loans for companies to continue operating	-	Six-month 0% interest loans will be provided to businesses in hard-hit industries to pay salaries to the employees. A 2% interest loans on resumption of activities to businesses in hard-hit industries or in industries requiring support to resume its activities A 5% interest loans to 'systemically important' companies (list of these companies is adopted by the Government). An 8.5% interest loans to all MSMEs.
3.	Measures for MSMEs in particular affected by the pandemic	-	<p>A 6-month delay in the payment of income tax for 2019; delay for the payment of taxes (excluding VAT, taxes paid as tax agents) for the first quarter of 2020 – for 6 months, for 2 quarter and first half – for 4 months Delay for social insurance contributions for the March-May period 2020 – for 6 months, for June-July period 2020 – for 4 months Delay for the advance payment of transportation tax, property tax, land tax for the first quarter of 2020 (no later than 30 October 2020) and second quarter of 2020 (no later than 30 December 2020) Subsidies to be received by the MSME will not be included in the tax base (profit tax) Deduction of VAT on goods (work, services) is prohibited and fixed assets acquired using subsidies do not apply to subsidies received by the MSME.</p>

Guidelines and best practices for micro-, small and medium enterprises
in delivering energy-efficient products and in providing renewable energy equipment

№	Measures Taken	Responsible Agency	Benefits
4.	Support measures by the region	Regional Governments	Each Russian region may provide the supporting measures applicable to companies of that particular region, for e.g. in Moscow key measures are: i) 8% interest loans to the priority sectors MSMEs incorporated less than 3 years ago; ii) subsidies to the MSMEs exporters, franchisees; iii) partial compensation of expenses for purchase of new equipment (MSMEs – hotels and residents of Moscow innovation cluster); iv) partial compensation (up to Ruble 700,000 until 31 December 2020) to MSMEs for promotion of their commodities and services on online markets; for payment of services of online food delivery services.
<p>Uzbekistan Uzbekistan has introduced tax reliefs for MSMEs and moratorium on bankruptcy filings ^[123]. A moratorium has been declared on initiating or declaring bankruptcy by enterprises faced with financial difficulties. Annual audits of certain taxpayers will be postponed.</p>			
1.	Tax relief for MSMEs	-	The tax relief is generally aimed at MSMEs and individual entrepreneurs. Funds received by these business entities in the form of interest free financial assistance will not be subjected to income tax.