



T.C. SANAYİ VE  
TEKNOLOJİ BAKANLIĞI

İZMİR DEVELOPMENT  
AGENCY

# 2022 WORK PROGRAM



## CONTENTS

<b>1</b>	<b>EXECUTIVE SUMMARY .....</b>	<b>6</b>
<b>2</b>	<b>INTRODUCTION .....</b>	<b>1</b>
2.1.	Establishment Process and Organizational Structure.....	1
2.2.	Corporate Fundamental Policy and Priorities .....	1
2.3.	2014-2023 İzmir Regional Plan.....	2
<b>3</b>	<b>RESULT-ORIENTED PROGRAMS.....</b>	<b>3</b>
3.1	Result-Oriented Program for Innovation and Entrepreneurship (ROPIE) .....	3
3.1.1	Objective.....	3
3.1.2	The Background and Reason for Intervention.....	3
3.1.3	Targeted Outcomes and Outputs .....	7
3.1.4	Projects and Activities .....	9
3.1.5	Program Duration and Schedule.....	17
3.1.6	Management and Coordination Regulations .....	19
3.1.7	Monitoring and Evaluation.....	19
3.2	Result-Oriented Program for Clean Energy and Clean Technologies (ROP CET) .....	20
3.2.1	Objective.....	20
3.2.2	The Background and Reason for Intervention.....	20
3.2.3	Targeted Outcomes and Outputs .....	23
3.2.4	Projects and Activities .....	26
3.2.5	Program Duration and Schedule.....	36
3.2.6	Management and Coordination Regulations .....	37
3.2.7	Monitoring and Evaluation.....	37
3.3	Result-Oriented Program for Marine Economy (ROPME) .....	39
3.3.1	Objective.....	39
3.3.2	The Background and Reason for Intervention.....	39
3.3.3	Targeted Outcomes and Outputs .....	42
3.3.4	Projects and Activities .....	44
3.3.5	Program Duration and Schedule.....	53
3.3.6	Management and Coordination Regulations .....	54
3.3.7	Monitoring and Evaluation.....	55
<b>4</b>	<b>CORPORATE DEVELOPMENT .....</b>	<b>56</b>
4.1	Activities .....	56
4.1.1	Research, Analysis and Planning: .....	57

4.1.2	Collaboration and Coordination .....	57
4.1.3	Capacity Building.....	58
4.1.4	Promotional Activities .....	58
4.1.5	Projects Related to EU and Other International Programs .....	61
4.1.6	Other Projects and Activities.....	61
<b>5</b>	<b>LOCAL DEVELOPMENT OPPORTUNITIES (LDO) .....</b>	<b>65</b>
<b>5.1</b>	<b>Objective .....</b>	<b>65</b>
<b>5.2</b>	<b>The Background and Reason for Intervention.....</b>	<b>65</b>
<b>5.3</b>	<b>Targeted Outcomes and Outputs.....</b>	<b>65</b>
<b>5.4</b>	<b>Projects and Activities .....</b>	<b>66</b>
5.4.1	Research, Analysis and Planning.....	67
5.4.2	Collaboration and Coordination .....	68
5.4.3	Agency Supports .....	68
5.4.4	Projects Related to EU and Other International Programs .....	71
<b>5.5</b>	<b>Program Duration and Schedule .....</b>	<b>71</b>
<b>5.6</b>	<b>Management and Coordination Regulations .....</b>	<b>72</b>
<b>5.7</b>	<b>Monitoring and Evaluation .....</b>	<b>72</b>
<b>6</b>	<b>CONCLUSION AND ASSESSMENTS.....</b>	<b>72</b>

## ABBREVIATIONS

EU	European Union
R&D	Research & Development
B2B	Business to Business
NSRD	National Strategy for Regional Development
WB-IFC	World Bank–International Finance Corporation
DCMS: UK	Department for Digital, Culture, Media and Sport
ROPME	Result-Oriented Program for Marine Economy
DEU	Dokuz Eylül University
DTO	Chamber of Shipping
EBİLTEM	Ege University Science and Technology Application and Research Center
EBSO	Aegean Region Chamber of Industry
IACVR	Industrial Air Conditioning, Ventilation and Refrigeration
EİB	Aegean Exporters' Associations
EXIST	Energy Exchange Istanbul
EURADA	European Association of Development Agencies
EU	Ege University
FAO	Food and Agriculture Organization of the United Nations
GPS	Guided Project Support
GVA	Gross Value Added
IMO	International Maritime Organization
İBB	İzmir Metropolitan Municipality
İESOB	İzmir Union of Chambers of Merchants and Craftsmen
IUE	İzmir University of Economics
İŞKUR	Turkish Employment Agency
ICE	İzmir Commodity Exchange
İYTE	İzmir Institute of Technology
İZBP	2014-2023 İzmir Regional Plan
İZFAŞ	İzmir Fuarcılık Hizmetleri Kültür ve Sanat Etkinlikleri A.Ş.
İZKA	İzmir Development Agency
İZTO	İzmir Chamber of Commerce
CD	Corporate Development
SME	Small and Medium-Sized Enterprise
KOSGEB	Small and Medium Enterprises Development Organization
CMU	Corporate Management Unit
BGPU	Blue Growth Policy Unit
CSA	İzmir Current Situation Analysis
OECD	Organisation for Economic Cooperation and Development
OIZ	Organized Industrial Zones
PIMU	Project Implementation and Monitoring Unit
RSA	Regional Studies Association
ROP	Results-Oriented Program
MoIT	Ministry of Industry and Technology
NGO	Nongovernmental Organization
TCI	The Competitiveness Institute
TEPAV	Economic Policy Research Foundation of Türkiye
ROP CET	Result-Oriented Program for Clean Energy and Clean Technologies

TDZ	Technological Development Zone
TİKA	Turkish Cooperation and Coordination Agency
TOBB	Union of Chambers and Commodity Exchanges of Türkiye
TTGV	Technology Development Foundation of Türkiye
TTO	Technology Transfer Office
TÜBİTAK	The Scientific and Technological Research Council of Türkiye
TURKSTAT	Turkish Statistical Institute
TWEA	Turkish Wind Energy Association
TÜRKLİM	Port Operators Association of Türkiye
MoTI	Ministry of Transportation and Infrastructure
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Program
GGPU	Green Growth Policies Unit
ISO	Investment Support Office
ROPIE	Result-Oriented Program for Innovation and Entrepreneurship
IEPU	Innovation and Entrepreneurship Policies Unit

## 1 EXECUTIVE SUMMARY

Since 2018, Development Agencies have adopted a Result-Oriented Program-based (ROP) working perspective to strengthen their institutional presence and to ensure that agencies assume an accountable image in the face of the public with concrete targets and regional performance indicators determined through a roadmap that functions as an action plan. At the core of this approach lies the aim to clarify with concrete performance indicators how, when and with what size budget the objectives and targets in central and regional policy documents (the ones that fall under the responsibility of the Agency) will be implemented.

According to the analyzes and field studies conducted as part of the preparation phase of the 2020-2022 Work Program, it has been observed that the İzmir region is under environmental pressure due to heavy industrial facilities in the North axis, agricultural activities in the Küçük Menderes basin, increasing tourism activity in the Peninsula region and intense urbanization in the central region. For this reason, it is necessary to focus on the concept of sustainability in terms of regional development. This "sustainable growth" concept has been reflected and concretized in the green and blue growth concepts. The following three Result-Oriented Programs, which have been determined as part of the approach that focuses on "sustainable production," have shaped the roadmap of the Agency for the 2021-2023 period.

1. Result-Oriented Program for Innovation and Entrepreneurship (ROPIE)
2. Result-Oriented Program for Clean Energy and Clean Technologies (ROP CET)
3. Result-Oriented Program for Marine Economy (ROP ME)

The green growth approach corresponds to the dissemination of cleaner production technologies in manufacturing and agriculture industries as part of ROP CET; while the blue growth approach corresponds to the targets for activating the region's coastal economy potential, especially in ports in İzmir, as part of ROP ME. ROPIE, on the other hand, is positioned to support these two ROPs in terms of innovation and entrepreneurship and focuses on the concepts of green-blue entrepreneurship, green-blue technology and green-blue design. The issues that are considered to be important for the region are covered under the "Local Development Opportunities (LDO)" title and functionally associated with all three ROPs.

As part of the implementation of the 2021-2023 Result-Oriented Programs, our Agency has established a comprehensive information and data infrastructure throughout 2021. In addition, it has also concluded its studies that focused on the technical infrastructure and implementation framework of the programs and activities concentrating on environment and sustainable production, which it aims to put into practice as part of its three-year work program. As of the last quarter of 2021, it has started to implement some of these activities. The Resource Efficiency Program, implemented in collaboration with UNDP and RWTH Aachen Technical University Europe 4.0 Transformation Center, has been implemented in two components: industrial symbiosis and digital transformation. The program will help build a sustainable and significant technical and institutional capacity in the region. Our Agency will implement these activities and programs by further expanding their scope throughout 2022 and continue to intervene with various financial support tools to achieve the targeted Work Program results. It will also complete its efforts for creating a perspective of "green growth and blue opportunities" in the region. This study aims to determine the region's problems in the main production and economic activity areas of the region by carrying out scientific research and analyzes on these areas, to develop solutions for these problems, and to present regional opportunities in a comprehensible way. While designing its own intervention tools and programs for these areas in the same period, the Agency aims to activate the local potential by sharing the study results with the public, thus increasing the impact and power of its activities.

With both informative activities and collaborations with relevant industrial and professional organizations in the region, our Agency will strive to fulfill its role as an accelerator, especially in terms of harmonization with the European Green Deal, and will carry out studies to implement exemplary activities. Additionally, our Agency will continue its programs and activities aiming to support innovation and entrepreneurship in green and blue growth objectives. While continuing its efforts on resource efficiency, which was the main theme of last year and the main purpose of Result-Oriented Programs, it will also implement capacity-building activities and projects by developing concrete collaborations for this year's theme, youth employment. Focusing on the real problems and needs of the region's private sector, the Agency will implement technical support programs to help these institutions institutionalize, increase their technical skills, and improve their export capacity and qualifications. While developing and implementing feasibility and survey studies to ensure that the current or potential opportunities of the region are transformed into investments, it will also continue its efforts to inform domestic and foreign investors about current investment agendas and to support them in their investment decisions. All these activities and projects aim to improve employment, production and export opportunities; increase resource efficiency in production; reduce environmental pressure through improved waste management, and to ensure sustainability in production by improving the speed and capacity of development in the region with support tools.

Due to the pandemic, there were some disruptions in the implementation of the activities planned in the 2021-2023 Program and due to the same reason, we needed to plan additional research, activities and programs. However, with its flexible and fast-acting structure, the Agency has been able to quickly and successfully implement not only the newly arising needs but also the activities already planned in the program, in parallel with the normalization process. In addition, in 2021, the Agency successfully implemented a comprehensive and large-scale transformation program in the archive and documentation management and institutionalization areas, getting one step closer to its “paperless office” target.

As a result, the Agency's main fields of activity in 2022 will be: creating a "green growth and blue opportunities" perspective and sharing it with the public in İzmir, thus providing İzmir with a perspective that will form the basis for the development of concrete solutions and projects in line with the “blue and green growth” perspective; continuing to implement the Resource Efficiency Program in parallel with industrial symbiosis and digital transformation perspectives together with the UNDP; carrying out research and analysis efforts, financial support initiatives, feasibility and survey studies, and technical support programs in line with green and blue transformation objectives; supporting and strengthening entrepreneurship and innovation in the informatics, renewable energy and creative industries in İzmir; ensuring the development of the marine and port ecosystems; and supporting the transformation of economic activities in a way that will provide higher added value for İzmir.

The Agency will continue its efforts to maintain and further intensify its mission to become an institution that offers high-quality and evidence-based scientific findings and solutions regarding the possible opportunities and risks for the region in the medium and long term.

With the implementation of the 2021-2023 Work Program in 2022, we believe that the green and blue growth approaches will bring a fresh breath and add momentum to İzmir region's development with its pioneering and exemplary works and activities that focus on sustainable production.

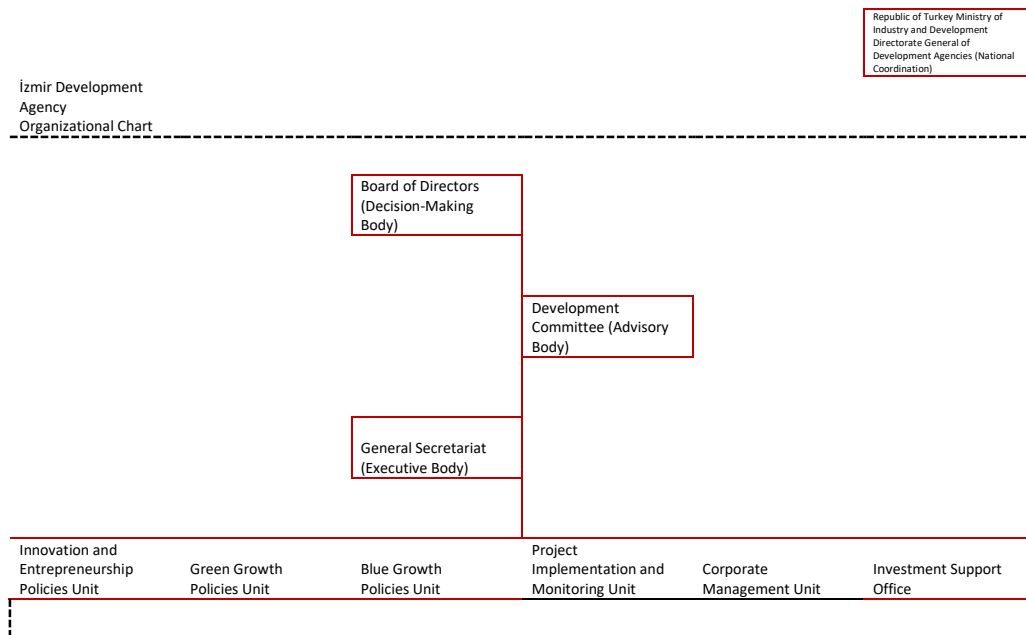
## 2 INTRODUCTION

### 2.1. Establishment Process and Organizational Structure

After the publication of the Cabinet Decree No. 2006/10550 regarding the establishment of Development Agencies in several Level 2 Regions in the Official Gazette dated July 6, 2006 and numbered 26220, the Agency was established in TR31 Level 2 region, with İzmir being the center.

The General Secretariat undertakes that Agency activities and services are carried out by the Innovation and Entrepreneurship Policies Unit (IEPU), the Green Growth Policies Unit (GGPU), the Blue Growth Policies Unit (BGPU), the Project Implementation and Monitoring Unit (PIMU), the Corporate Management Unit (CMU) and the Investment Support Unit (ISO).

Currently, a total of 36 personnel, including 1 Secretary General, 4 Working Unit Heads, 1 Investment Support Office Coordinator, 19 Specialized Personnel, 3 Support Personnel and 8 assistant staff with permanent status, work in the Agency in line with the organization chart below.



### 2.2. Corporate Fundamental Policy and Priorities

The vision of the Agency is defined as “To become an internationally recognized organization that sets an example in the field of regional policy practices with the knowledge it generates, methods it develops, as well as the original and innovative transformation programs it implements.” Its mission is “To generate information based on Green and Blue Growth approaches and to develop pioneering, original and exemplary projects for İzmir.”

#### İzmir Development Agency's Vision

- To become an internationally recognized organization that sets an example in the field of regional policy practices with the knowledge it generates, methods it develops, as well as the original and innovative transformation programs it implements.

#### İzmir Development Agency's Mission

- To generate information based on Green and Blue Growth approaches and to develop pioneering, original and exemplary projects for İzmir.



The Agency carries out all its activities in compliance with its legal duties and in line with the basic principles and values of inclusion, innovation, impartiality, transparency, reliability, solution orientation, efficiency, sustainability, scientificness, eco-sensitivity and cultural awareness, social responsibility, efficiency and accessibility.

### **2.3. 2014-2023 İzmir Regional Plan**

The vision of the 2014-2023 İzmir Regional Plan prepared under the coordination of the Agency with the active participation of key actors in İzmir has been determined as "İzmir: A Generator of Knowledge, Design and Innovation and a Center of Attraction of the Mediterranean". The three developmental axes of the Regional Plan are Strong Economy, High Quality of Life and Strong Society. The 2014-2023 İzmir Regional Plan was prepared under the coordination of the Agency with a high level of local participation and was approved with the Regional Development High Council's decree dated December 30, 2014 and numbered 2014/1.

### 3 RESULT-ORIENTED PROGRAMS

Three ROPs currently implemented by the Agency are specified below:

1. Result-Oriented Program for Innovation and Entrepreneurship (ROPIE)
2. Result-Oriented Program for Clean Energy and Clean Technologies (ROP CET)
3. Result-Oriented Program for Marine Economy (ROPME)

The details of the aforementioned ROPs are provided in respective order. The programs will continue to be implemented in 2022 in line with the program determined for the 2021-2023 period. The program for other important studies that are necessary for the region's development but do not fall under the scope of ROPs is provided in the Local Development Opportunities (LDO) section. It is anticipated that both ROP- and LDO-related efforts will provide added momentum for the development of the region and will improve the region's developmental level in the coming periods.

#### 3.1 Result-Oriented Program for Innovation and Entrepreneurship (ROPIE)

Descriptive information about this ROP implemented by the Agency is provided below. Detailed information on ROPIE can be found in the ROP Management Plan. The ROP Management Plan will be revised if new activities that may fall within the scope of this ROP are identified in the ROP monitoring and evaluation studies to be carried out in 2022.

##### 3.1.1 Objective

**General Objective:** Developing the innovation and entrepreneurship ecosystem in İzmir in a way that can provide the services needed for sustainable competition that focuses on blue and green growth

**Special Objective 1:** Developing the region's capacity to produce technology and innovation (especially ecological innovations), supporting specialization in industries of high economic potential, and strengthening the transformational infrastructure in İzmir's manufacturing industry

**Special Purpose 2:** Promoting the investment opportunities offered by İzmir for the software industry and increasing such investments

**Special Purpose 3:** Ensuring the development of hi-tech-based entrepreneurship (especially green and blue entrepreneurship) in İzmir

##### 3.1.2 The Background and Reason for Intervention

Research, development and innovation are fundamental driving forces in increasing the competitiveness of countries and thus increasing the welfare of society.

*"We are in competition with other regions of the world. We are striving to become the most productive and efficient location to do business. We are competing to become the most innovative region. We are competing to find the region where new things can be achieved with utmost ease, and where new products can be manufactured easily. This is what we compete for."*

Prof. Michael Porter of the Harvard Business School Institute for Strategy and Competitiveness brought a "regional" and "local" perspective to global competition policies, integrated global and regional competition approaches with regional development policies, and this perspective successfully combined his theoretical studies on microeconomics and macroeconomics with the practical field of the business world.

In this inclusive approach, “innovation” has been defined as the most important tool in global competition and it has been accepted that innovation and R&D are two of the most important tools in increasing the added value of production and thus strengthening companies’, regions’ and countries’ positions in a global competitive environment. The Frascati, Oslo and Canberra Guidelines created by the OECD have been made available to be used as a reference in R&D and innovation studies.

Therefore, countries allocate important resources to the development of R&D and innovation. According to OECD’s 2019 data, the countries that allocate the biggest share to R&D expenditures in the world are Israel with 4.93 percent and South Korea with 4.64 percent. Sweden, Japan and Germany also rank high in R&D expenditures with investment shares of 3.40 percent, 3.24 percent and 3.18 percent, respectively. This rate is around 2.1 percent on average in the EU, and exceeds 3 percent in the United States. As a result of its rapid development in the last 20 years, China has left the EU behind with its R&D expenditure rate of 2.24 percent. If this performance continues, China is expected to also leave the United States behind in the coming period.

The EU encourages collaboration between research teams and disciplines in countries by providing funds to develop R&D and innovation, initiates venture capital investments in startups and supports the procurement of innovative products and services by the public. Furthermore, the EU innovation agenda (European Commission<sup>1</sup>, 2018) also includes the implementation of the 2021-2027 budget, which includes R&D and education programs worth €100 billion, such as Horizon Europe; the launch of new programs to encourage venture capital investment in startups and the promotion of smart specialization strategies at the regional level. Since developments in digital technologies make research, science and innovation more open, more collaborative and more global, the EU has placed the 2030 innovation strategy on the axes of Open Innovation, Open Science and Open World (European Commission<sup>2</sup>, 2016).

In the 2020 Global Innovation Index, where the R&D expenditures of 131 countries’ public and private sectors are analyzed, the United States, China, Japan, Germany, South Korea, France, India, and the United Kingdom stand out, while Türkiye ranks 51st (Global Innovation Index Report, 2020).

Türkiye has made significant progress in recent years in increasing its R&D and innovation activities. Thus, the share of R&D expenditures in GDP, which was 0.82 percent in 2013, increased to 1.06 percent by 2019. R&D and innovation support programs have been diversified, there has been an increase in private sector R&D expenditures and the number of researchers, research infrastructures have been disseminated and Law No. 6550 on Supporting Research Infrastructures entered into force in 2014 to increase the effectiveness of these infrastructures. However, the need for the transfer of know-how and technology that enables R&D results to be transformed into economic and social benefits, and the need for the development of entrepreneurship and commercialization activities still persist (11th Development Plan).

Türkiye has a robust infrastructure and capacity with 209 universities, 1248 R&D Centers, 345 Design Centers, 88 Technological Development Zones (TDZ), 305,000 R&D personnel and 174,000 researchers. The private sector, universities and public institutions account for 64.2 percent, 29.2 percent and 6.6 percent of the total R&D investment of 225 billion TRY over the last 10 years, respectively. The share of the private sector in R&D investments increased from 37 percent in 2006 to 64.2 percent by 2019.

National strategies for the future point to the persistence of an R&D- and innovation-oriented development strategy. The 2023 Industry and Technology Strategy aims to advance the existing ecosystem in all its aspects, ranging from education to human resource planning, and from industrial zones to research infrastructures. The strategy document with the vision of “National Technology,

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<sup>1</sup> [https://ec.europa.eu/info/sites/info/files/factsheet-a-renewed-agenda-for-research-and-innovation\\_may\\_2018.pdf](https://ec.europa.eu/info/sites/info/files/factsheet-a-renewed-agenda-for-research-and-innovation_may_2018.pdf)

<sup>2</sup> <https://op.europa.eu/en/publication-detail/-/publication/3213b335-1cbc-11e6-ba9a-01aa75ed71a1>

Strong Industry” includes five main components: “High Technology and Innovation,” “Digital Transformation and Industrial Movement,” “Entrepreneurship,” “Human Capital” and “Infrastructure.” Under these components, the objectives especially related to regional-level innovation and entrepreneurship efforts include: “Determination of Technological Competencies and Sectoral Roadmaps,” “Ecosystem Perspectives and Centers of Excellence in R&D,” “Digital Transformation of the Industry,” “Regional Development,” “Employment and Branding,” “Ensuring an Effective Entrepreneurship Ecosystem,” “Policies and Practices to Strengthen Technology Suppliers and Entrepreneurs,” and “Increasing the Research and Development Capacity” (MoIT, 2019).

Regional studies have an indisputable importance for achieving national objectives. Adopting a focused approach is also critical for achieving effectiveness at the regional level. Innovation policies in İzmir began to be studied on a regional scale in 2010 and the İzmir Regional Innovation Strategy was published in 2012. In line with this strategy, significant progress has been made with the studies conducted by both our Agency and stakeholders.

With over 10 years of experience in the field of innovation and R&D policies, our Agency observes that global competition and economic growth policies have experienced significant shifts in focus in recent years in parallel with the global agenda. Currently, competition policies are shaped by an understanding that involves climate change, depletion of natural resources, environmental pollution, income inequality and social problems arising from these causes. At the foundation of this new approach lies the adoption of environmental sustainability measures to ensure the sustainability of competition, the development of business models that bring these two issues together, or the restructuring of production models by bringing these two issues together. Development and growth concepts are strongly intertwined with the environment. With the concepts of “Green Growth” and “Blue Growth,” the environment has become an integral part of the economy. R&D and innovation activities have started focusing on, particularly, increasing resource efficiency, producing green products with high added value, and developing clean technologies.

For the transition to a green economy, the OECD, which guides many countries with its Green Growth Strategies, emphasis is placed on the following principles:

- ✓ Reducing waste and energy consumption, making resources available to achieve the highest value, and increasing productivity in the economy,
- ✓ Supporting innovation opportunities to overcome environmental problems and create relevant policies,
- ✓ Creating new markets and employment opportunities to encourage the demand for green technologies, goods and services, and
- ✓ Prioritizing the promotion of green initiatives and investments (OECD, Towards Green Growth).

In general, regions adopting a sustainable development approach should improve themselves in the sub-fields of eco-innovation, green entrepreneurship and clean technologies. Green entrepreneurship includes the environmental benefit in entrepreneurship, which is an approach focused on economic gain. It emphasizes that sustainability can also be achieved while generating profits. In the eco-innovation approach, innovation is seen as the key to radical improvements in environmental practices and performance.

Eco-innovation as a basic tool for competitiveness also creates opportunities for investors and entrepreneurs. As part of the sustainable growth objective, facilitating solutions, design needs, and measures that need to be taken for every process in the value chain create new business areas. These business areas not only require a broad perspective covering all processes from raw material supply to recycling, and even redefining the need for consumption, but also bring about multi-actor processes that require the articulation of individual actions to collaborations, and local networks to global ones.

In terms of contributing to the sustainability of the planet, the products and even technologies produced are now beneficial to the whole world and the global society, thus facilitating the "common" solution development processes of the stakeholders, and making the habit of open innovation and open science more widespread. While innovation was the driving force of competition in the past, now sustainable competition has become the driving force of eco-innovation and green entrepreneurship. Tools of sustainable production such as clean production, eco-efficiency, resource efficiency, energy efficiency, green purchasing and industrial symbiosis require the production of special solutions through R&D, product development and innovation. This leads to an increase in green investments and employment opportunities, thus contributing in a holistic way to sustainable regional development and to green growth in economic, social and environmental terms.

Having worked for the sustainable development of İzmir since its foundation, our Agency has adopted green growth and blue growth perspectives as the main tools for the development of İzmir in its 2021 Work Program and has designed its result-oriented programs to serve this purpose. The Result-Oriented Program for Innovation and Entrepreneurship aims to make progress in technology, innovation, entrepreneurship and clustering to serve the green growth and blue growth perspectives in line with the İzmir Regional Plan's "Strong Economy" objective. Efforts to reinforce İzmir's innovation and entrepreneurship ecosystem will be handled in line with the blue and green economic perspectives in a way that will serve the goal of improving sustainable development in the region.

İzmir innovation ecosystem has achieved significant development and diversification in the last 10 years in terms of both results and stakeholder outcomes. For instance, in 2010, there was only one operational technology development zone in the İzmir ecosystem but now this number has increased to four. According to the İzmir Innovation Ecosystem Monitoring Report, there were 34 R&D centers in İzmir in 2016, a number which has increased to 88 as of 2020. A similar increase was observed in the number of technology transfer offices, which act like an interface between universities and the rest of the ecosystem. The increase in the number of technology transfer offices (TTOs) and technological development zones (TDZs) has helped the establishment of more technology-based companies with the potential to produce high value-added goods and services and has enabled more projects and inventions.

As of 2020, there are nine universities and 9,190 researchers in the region, with 42 scientific publications and 11 TÜBİTAK ARDEB project applications per 100 researchers. A total of 381 companies operate in technological development zones, 80 of which are companies established by academics. We have eight patent applications per 1000 researchers. The regional R&D, innovation and entrepreneurship potential should be addressed together with sectoral specialization to improve the region's performance, especially in patenting and commercialization (İZKA, 2020).

With ROPIE, the sectoral specialization processes and ecosystem development activities in İzmir have been designed in a way that can provide the services needed for blue growth and green growth perspectives and sustainable competition. It has also been designed to take benefit and derive strength from these notions. The general aim is to increase the ecosystem's innovative capability. However, the main requirement is enabling the development of this ecosystem as an incubator that produces clean technologies and provides solutions to İzmir's needs. One of the aims is making İzmir a national center in eco-innovation, green & blue entrepreneurship and clean technologies, and an exporter of innovation that produces global solutions.

The skills and willingness of ecosystem stakeholders in İzmir are rapidly developing. Our agency carries out many studies in collaboration with national and international stakeholders to raise awareness and ensure the dissemination of tools. The AGORADA+ 2017 event held in İzmir in collaboration with EURADA has been one of the international activities enabling the discussion of the concepts of eco-efficiency and industry 4.0 together. In various open innovation events focusing on environmental issues or renewable energy, such as hackathons and ideathons organized in the region by our Agency and other stakeholders, we gather together entrepreneurs, experts, public institutions and academics. The

increasing prevalence of these events, where local solutions are produced and innovative ideas can be introduced to investors, helps raise awareness on the subject. The Greentech İzmir program, which helped green technology startups meet with their first customers and investors, and the Bluetech İzmir program, which started in 2020 in the field of blue technologies with the experience derived from Greentech, help the ecosystem get stronger in these themes and encourage private companies to implement similar projects. The key role that eco-innovation and green entrepreneurship will play in the sustainable development of İzmir is embraced by all stakeholders of the region. The tendency of stakeholders to create common solutions supports the development of the ecosystem in a way that open innovation and open science can easily be produced.

ROPIE will help focus on eco-innovation and green/blue entrepreneurship and clean technologies while the efforts to further develop İzmir's innovation and entrepreneurship ecosystem continue. In this way, we aim to produce the necessary tools to achieve the targets under the other two ROPs, to improve the resource efficiency required for sustainable competition and to reduce the environmental impacts.

### Preliminary Risk Assessment

It has been observed that the biggest risk in the implementation of the ROP by the Agency will be the decreasing number of investments in related areas in Türkiye and the possibility that technology development in these areas may lose importance. However, We can say that for these issues, which are among the objectives and policies of the 11th Development Plan, the likelihood for the realization of these risks is low. Another important risk is that the main stakeholders in the innovation and entrepreneurship ecosystem may not embrace the relevant issues. In order for this program to be successful, it is necessary to develop a regional ecosystem with innovation, entrepreneurship and clustering studies. For the management of the above-mentioned risks, it is important to employ the ROP Steering Committee as a participation tool and to carry out the activities with participatory mechanisms as part of a communication effort to ensure that the stakeholders in the regional innovation ecosystem embrace the issue.

### 3.1.3 Targeted Outcomes and Outputs

The outcomes aimed to be achieved as part of the mentioned ROP are included in the following Key Performance Indicators and Output Performance Indicators tables.

Key Performance Indicators					
No.	Indicator Name	Unit	Target	Source of Verification	Number of Relevant Special Purpose(s)
1	Number of Companies Operating in Technological Development Zones (TDZ)	Number	450	TDZs	1 and 3
2	Number of Institutional Actor - Startup Collaborations Established in İzmir	Number	10	TDZs	1 and 3
3	Number of Collaborations Established Through "Start in İzmir" Platform	Number	10	TDZs	1, 2 and 3
4	The Ratio of the Number of Companies Applying for TEYDEB Supports to Total Firms in the Manufacturing Industry	Percent	2	TURKSTAT, TÜBİTAK	1 and 3
5	Number of Concluded Investments	Number	6	Agency Data	1, 2 and 3
6	Number of Green Entrepreneurship Startups Established in İzmir	Number	5	Agency Data	1, 2 and 3

Key Performance Indicators					
No.	Indicator Name	Unit	Target	Source of Verification	Number of Relevant Special Purpose(s)
7	Number of Companies Benefiting from Newly Established Innovation and Entrepreneurship Infrastructures in İzmir	Number	50	Agency Data	1, 2 and 3

Output Performance Indicators					
No.	Output Indicator	Unit	Target		Source of Verification
			2022	Total	
1	Number of Entrepreneurship Activities Organized	Number	2	6	Agency Reports, Web Page
2	Number of Participants in Entrepreneurship Activities	Number	100	400	Agency Reports, Web Page
3	Number of Startups Supported in Commercialization Processes	Number	10	30	Agency Reports
4	Number of Promotional Materials (Infographics, Animations, Videos etc.) Prepared to Promote Investments in the Software Industry	Number	12	36	Agency Reports, Web Page
5	Number of Open Innovation Events Organized	Number	2	4	Agency Reports
6	Number of Participants in Open Innovation Events	Person	50	200	Agency Reports
7	Number of Startup Acceleration Programs Organized	Number	3	6	Agency Reports, Web Page
8	Number of Participating Companies in Startup Acceleration Programs	Number	15	45	Agency Reports, Web Page
9	Number of Infrastructures Established for Innovation and Entrepreneurship Purposes	Number	1	3	Agency Reports, Web Page
10	Number of Domestic and International Investment Promotion Activities for the Software Industry	Number	2	6	Agency Reports, Web Page
11	Number of Companies Reached in Domestic and International Investment Promotion Activities for the Software Industry	Number	50	150	Agency Reports, Web Page
12	Number of Companies with Ongoing Contact After Domestic and International Investment Promotion Activities for the Software Industry	Number	5	15	Agency Reports, Web Page

Output Performance Indicators					
No.	Output Indicator	Unit	Target		Source of Verification
			2022	Total	
13	Number of Activities for Improving the Investment Environment in the Software Industry	Number	2	6	Agency Reports, Web Page
14	Number of High-Tech Meetings Held	Number	3	10	Agency Reports, Web Page
15	Number of Technology Supplier Companies Provided with Training Support	Number	15	30	Agency Reports, Web Page
16	Number of Technology Supplier Startups Provided with Mentoring Support	Number	10	20	Agency Reports, Web Page
17	Number of Companies Provided with Export Operations Support	Number	10	10	Agency Reports, Web Page
18	Number of Companies Provided with Management Consultancy Support	Number	10	10	Agency Reports, Web Page
19	Number of Companies Provided with Lean Production Support	Number	10	10	Agency Reports, Web Page
20	Number of Institutions Provided with Digital Transformation Support	Number	10	10	Agency Reports, Web Page

### 3.1.4 Projects and Activities

The programs, projects and activities to be carried out as part of the related ROP are included in the "ROP Components" table below.

ROP Components Table						
WBS Code	Component Name	Type	Method	Responsible Institution	Responsible Unit	Special Purpose(s)
1	Research and Analysis Studies for Supporting Innovation and Entrepreneurship Activities	Activity	Research, Analysis and Planning	İZKA	IEPU	1
2	Theme-Based Innovation and Entrepreneurship Activities	Activity	Collaboration and Coordination	İZKA	IEPU	3
3	Esports Literacy Training Program	Activity	Collaboration and Coordination	İZKA	IEPU	3
4	Greentech İzmir – Green Technology Meeting	Activity	Collaboration and Coordination	İZKA	IEPU	3
5	Bluetech İzmir – Blue Entrepreneurship Acceleration Camp	Activity	Collaboration and Coordination	İZKA	IEPU	3



ROP Components Table						
WBS Code	Component Name	Type	Method	Responsible Institution	Responsible Unit	Special Purpose(s)
6	Supplier Meeting/Acceleration Camp for Digital Transformation Processes	Activity	Collaboration and Coordination	İZKA	IEPU	1
7	Promoting İzmir's Entrepreneurship Ecosystem	Activity	Collaboration and Coordination	İZKA	IEPU	2 and 3
8	Activities to Increase the Economic Value of İzmir's Manufacturing Industry	Activity	Capacity Building	İZKA	IEPU	1
9	Management Consultancy Activities	Activity	Capacity Building	İZKA	IEPU	1
10	Activities to Increase Supplier Capacity for Digital Transformation Processes	Activity	Capacity Building	İZKA	IEPU	1
11	Participation in ROP-Based Activities Organized by Stakeholders and Other Related Studies	Activity	Capacity Building	İZKA	IEPU	1, 2 and 3
12	Investment Promotion Materials for the Software Industry	Activity	Promotion and Investment Support	İZKA	ISO	2
13	Domestic and International Investment Promotion Activities for the Software Industry	Activity	Promotion and Investment Support	İZKA	ISO	2
14	Improving the Investment Environment in the Software Industry	Activity	Promotion and Investment Support	İZKA	ISO	2
15	Project Support Guided by İzmir Entrepreneurship and Innovation Center (İzQ)	Project	Guided Project	İZKA	IEPU, PIMU	1
16	TEKNOTEST Guided Project	Project	Guided Project	İZKA	IEPU, PIMU	1 and 2
17	Guided Project Support for Gaming Software Workshop	Project	Guided Project	İZKA	IEPU, PIMU	1 and 3
18	İzmir Regional Venture Capital	Sub-Program	Call for Project Proposal	İZKA	IEPU, ISO	1 and 3
19	Exporters Technical Support Program	Activity	Executing Financial Support	İZKA	IEPU, PIMU	1
20	Management Consultancy Technical Support Program	Activity	Executing Financial Support	İZKA	IEPU, PIMU	1

ROP Components Table						
WBS Code	Component Name	Type	Method	Responsible Institution	Responsible Unit	Special Purpose(s)
21	Lean Production Technical Support Program	Activity	Executing Financial Support	İZKA	IEPU, PIMU	1
22	Digital Transformation and Clean Production Financial Support Program	Activity	Call for Project Proposal	İZKA	IEPU, PIMU	1
23	Financial Support Program Execution Activities	Activity	Executing Financial Support	İZKA	IEPU, PIMU	1
24	İzmir Technology Base	Activity	Public Investment Project	İYTE	IEPU, ISO	1 and 2

#### 3.1.4.1 Research, Analysis and Planning

As part of this ROP, the Agency plans to carry out the following research and analyses in addition to its existing studies.

##### **Research and Analysis Studies for Supporting Innovation and Entrepreneurship Activities:**

In İzmir, there is a need for evaluating innovation- and entrepreneurship-based issues together with industry representatives and researchers in line with recent technological developments. In 2022, research & analyses and feasibility reports will be prepared to increase the city's high-tech capacity and to realize İzmir's potential.

#### 3.1.4.2 Collaboration and Coordination

All activities within the scope of this ROP will be carried out in collaboration with different stakeholders and in coordination with relevant stakeholders in the region. However, since these issues are also included under other headings, they are not included here. Other activities that fall under the scope of collaboration and coordination are summarized below.

**Theme-Based Innovation and Entrepreneurship Activities:** Studies will be conducted to coordinate green and blue growth-oriented innovation and entrepreneurship activities in İzmir and to improve the ecosystem for entrepreneurs producing advanced technology in İzmir.

As part of these activities, the concepts of green entrepreneurship, green design and eco-innovation will be prioritized in all related studies to increase the contribution of universities and businesses to sustainable development. Related important activities, successful examples, support programs, organizations and networks at both the national and international levels will be followed. İzmir's capacity will be improved and high-quality meetings and events will be organized in accordance with the needs of the region. Analysis, strategy and feasibility studies needed for the development of the region's information infrastructure will be carried out. Capacity-building studies will be performed in areas such as patenting, commercialization, incorporation, and the protection of intellectual and property rights. Acceleration camps on advanced technologies and key focus areas will be organized to encourage technology entrepreneurship, and training programs will be organized to increase employment in innovative sectors.

Collaboration with relevant regional and national institutions and organizations such as techno-parks, technology transfer offices (TTOs), umbrella organizations and centers will be developed in all studies to be carried out. Large-scale projects (Technology Base, model factory, innovation center, etc.) for technology production, innovation and entrepreneurship infrastructure carried out by our Ministry will be followed and coordination will be ensured at the necessary points.

The main studies planned to be carried out in 2022 as part of Theme-Based Innovation and Entrepreneurship Activities are given below.

**High-Tech Meetings:** During the year, semi-annual webinars will be organized to raise awareness about the technical requirements and economic outputs of the prominent cutting-edge technologies.

**Tech İzmir:** İzmir has become a center of attraction for telecommuters and digital immigrants, especially after the pandemic. To make these people a part of the regional economy and to connect them with industries (especially the creative industries) that can create a cross-impact, Tech İzmir will be organized with the support of institutions and organizations from İzmir and the contribution of universities. As part of the event, key actors such as national and international investment networks, world-renowned technology leaders and global companies will come together in İzmir, thus strengthening İzmir's entrepreneurship ecosystem in terms of commercialization and investment appeal.

**Monitoring Innovation Indicators:** In 2022 and 2023, we will continue data collection, reporting and dissemination work in line with the İzmir Innovation Monitoring System, just as we did in 2021. Projects and activities in the region on R&D, innovation, clustering, entrepreneurship, technology and design will be monitored.

**Green and Blue Growth-Themed Open Innovation Events:** Acceleration camps will be organized for entrepreneurs operating in the green and blue growth field that have products that have not yet reached the prototype stage.

**Esports Literacy Training Program:** Esports is defined as video games that are played on a professional level. The esports industry has many players and followers all over the world and is growing rapidly in parallel with the gaming industry. Being the most popular sport in our country after football, esports is especially practiced by young people. However, it is apparent that we do not have a sufficient mechanism to train licensed esports people. Subsequently, a project has been designed to train licensed esportspeople in the İzmir region in collaboration with stakeholders specialized in regional and national esports. The project, which started in the third quarter of 2021, is expected to be completed in the first quarter of 2022.

**Greentech İzmir – Green Technology Meeting:** In 2018, 2019, 2020 and 2021, the “GreenTech İzmir – A Meeting Program for Startups and Corporations” was designed and organized by the Agency to eliminate the lack of communication between the startups and corporate companies in İzmir. The connections established with these programs have been planned to have a positive impact on both parties through different channels. For technology startups, corporations are an important source of experience, market awareness, customer and supplier network and know-how. Whereas, technology startups can be a source of innovation for corporations. The scope of the study was expanded by the addition of academic entrepreneurship in 2020 and agriculture components in 2021. This scope will also be reinforced in 2022. When necessary, collaboration will be established with relevant institutions and organizations such as TÜBİTAK, KOSGEB, GCIP, Technoparks, TTOs, and Incubation Centers.

**Bluetech İzmir – Blue Entrepreneurship Acceleration Camp:** In this event, the concepts of blue entrepreneurship and blue innovation are discussed as a joint output of the main activities of the “Result-Oriented Program for Marine Economy” (ROPME) and the “Result-Oriented Program for

Innovation and Entrepreneurship” (ROPIE) covering the 2021-2023 period. As part of "Bluetech İzmir," an accelerator program will be implemented that brings together corporate actors with startups that operate in the field of blue growth with their innovative products and services. The camp will especially focus on eco-friendly maritime technologies; innovative ship and marine structures; sensor, automation and tracking technologies; advanced manufacturing; security; marine power generation technologies; shipyards; ports; and marinas.

**Supplier Meeting & Acceleration Camp for Digital Transformation Processes:** As part of the digital transformation component of the İzmir Resource Efficiency Program, studies were carried out to determine the digital transformation maturity level of İzmir's manufacturing industry. As a result of the studies, it has been determined that for a successful transformation process, it is very important for industrial companies to receive the right service and for this, to reach technology companies that focus mainly on digital transformation processes. For this reason, the accelerator program will bring together corporate actors with companies/startups providing services for digital transformation processes such as cloud computing, artificial intelligence, big data analysis, IoT, and cybersecurity.

**Promoting İzmir's Entrepreneurship Ecosystem:** As part of the promotion of the İzmir Entrepreneurship Ecosystem under the corporate identity of "Start in İzmir," promotional materials such as websites, brochures, roll-ups, spider stands etc. will be prepared, relevant social media accounts will be managed and any necessary software will be procured.

In 2021, a platform was created on the "Start in İzmir" website where startups and small technology companies can register to collect information, thus contributing to regional venture capital. The corporate identity of “Start in İzmir” will be highlighted in the activities within this Work Program to further develop this platform and improve interaction among members. Necessary efforts will be made to make İzmir more reputable in international entrepreneurship platforms such as Startup Genome and Startup Blink. Through these works to be carried out throughout 2022 and 2023, we aim to make İzmir's entrepreneurship ecosystem more well known in terms of the opportunities it offers and to further develop the entrepreneurial environment in the region.

### **3.1.4.3 Capacity Building**

All projects within the scope of this ROP include activities that are aimed at increasing the capacity of not only the stakeholders in İzmir, but also the Agency. However, since these issues are also included under other headings, they are not included here. Other activities that fall under the scope of capacity building are summarized below.

**Activities to Increase the Economic Value of İzmir's Manufacturing Industry:** In today's world, digitalization and export stand out as important factors for creating economic value in the manufacturing industry by increasing competitiveness. Digital transformation offers new opportunities for companies to achieve more efficient, effective and sustainable economic success in an increasingly dynamic market. In parallel with the İzmir Resource Efficiency Program, it is necessary to increase companies' awareness and consciousness on digital transformation and to ensure it is addressed strategically at the company level. For this purpose, activities will be organized in various industries to increase the capacity in areas such as digital transformation principles and methods, and the design and implementation of digitalization strategies.

**Management Consultancy Activities:** With the borders between countries disappearing with each passing day, globalization has created a fierce competitive environment for businesses not only nationally, but also internationally. To survive in this challenging competitive environment, businesses

need to continuously improve themselves and increase their ability to adapt to change with strong financial and institutional structures. In a competitive environment, businesses face problems especially in terms of professional management, strong capital structure, institutionalization, access to finance and a qualified labor force, R&D and innovation, branding, access to markets, sustainable production and making use of the advantages of information and communication technologies. Management consultancy activities aim to help companies improve their capacity in the face of such problems and to provide the support they need. As part of this activity, after identifying and evaluating the needs that will help companies grow and gain competitive power, feasibility, planning and capacity building studies will be carried out. Activities will be implemented in collaboration with relevant institutions.

**Activities to Increase Supplier Capacity for Digital Transformation Processes:** Technology companies that offer services to industrial companies in digital transformation processes are of great importance for a successful transformation. As a result of the studies carried out as part of the İzmir Resource Efficiency Program, it was observed that technology suppliers have limited capacities and thus offer limited services. The aim is to enable technology suppliers to provide digital transformation services in different areas, to increase their capacities and to increase the number of startups serving in these areas. To this end, what companies need to grow and expand their service areas and networks will be identified. In addition, planning and capacity building studies will be carried out, and activities such as training and workshops will be carried out in collaboration with relevant institutions.

**Participation in ROP-Based Activities Organized by Stakeholders and Other Related Studies:** Both regional and national institutions and organizations carry out a number of studies and organize activities to support the Agency and the region in accordance with the objectives and priorities indicated in the ROP. Participation will be ensured in these activities and studies that are in line with the result-oriented program priorities. Relevant studies on the international, national and regional levels will be followed, the results will be disseminated in the region, and the information obtained from this follow-up will be taken into account for the improvement and revision of the ROP when necessary. In line with the objectives and priorities of the ROP, joint workshops, meetings, events and training programs will be organized in collaboration with relevant stakeholders to contribute to the content and objectives of the ROP.

#### **3.1.4.4 Promotion and Investment Support**

In line with the aforementioned ROP, definitions of various activities to be carried out for the promotion, support and development of the investment environment in the region are as follows.

**Investment Promotion Materials for the Software Industry:** Materials such as infographics, animations, videos and news for digital media channels will be created and updated throughout 2022 to promote the investment opportunities that İzmir offers for the software sector.

**Domestic and International Investment Promotion Activities for the Software Industry:** To ensure that companies consider İzmir as an investment location, promotion events will be organized in the target countries and in Istanbul and Ankara to introduce the investment opportunities that İzmir offers for companies operating in the software industry and planning new investments. Participation in such sectoral events will also be ensured. In 2022, only national activities will be carried out, and new activities will be planned in the following years for international events.

**Improving the Investment Environment in the Software Industry:** In accordance with the priorities specified in the İzmir Software Industry Investment Promotion Strategy prepared by our

Agency in 2019, training programs and networking events will be organized to improve the competitiveness of the industry and increase its contribution to İzmir's economy. In addition, the "Young Minds, New Ideas" event will be organized to boost the interaction of software companies with universities and new graduates in İzmir and to encourage the employment of local software developers. This event will also contribute to the "Youth Employment" objective, which has been determined as development agencies' common theme for 2022 and 2023 by the MoIT.

#### **3.1.4.5 Agency Supports**

**2020 Project Support Guided by İzmir Entrepreneurship and Innovation Center (İzQ):** It is planned to establish an Entrepreneurship and Commercialization Center in İzmir with guided project support to facilitate and accelerate the process of transforming creative and innovative business ideas of entrepreneurs into successful businesses. This center is planned to provide mentoring and consultancy services to entrepreneurs as well as enabling the transformation of entrepreneurial business ideas into business models. Collaboration with İzmir Chamber of Commerce and regional universities will be continued for the center, which will focus on developing collaborations and coordination among local, national and international actors in the entrepreneurship ecosystem. The center's structure, the services it will provide and its estimated budget have been determined with the feasibility report of İZTO as part of the Agency's Feasibility Support for 2018. The project came to the implementation stage after the approval of the MoIT in 2020 and the support contract for the project was signed. The project is expected to be completed and put into service in the first quarter of 2022.

**2017 İzmir Scientific Research, Application, Test and System Development Laboratories (İZMİR TEKNOTEST) Guided Project:** Studies for the implementation of the İZMİR TEKNOTEST project are currently being carried out by the İzmir University of Economics. This project aims to establish a scientific research, application, test and system development laboratory for electrical and electronics industry in the region and to ensure its accreditation. Thanks to the project, private sector organizations that wish to design, manufacture and export electrical, electronic and electromechanical devices will be able to have the necessary tests done in İzmir to obtain the CE certificate, which is mandatory for both domestic sales and exports. The support contract for the project was signed on October 25, 2018 and the construction and installation of the center have been completed. The project is planned to be completed with the full accreditation of the center in the first quarter of 2022.

**Guided Project Support for Gaming Software Workshop:** It is observed that software companies that develop games are concentrated in İzmir. Considering that the gaming industry has the potential to create companies that can grow quickly and create high economic value, interviews have been conducted with existing and potential investor companies, and the needs of the industry have been identified.

We have determined that a center in İzmir where entrepreneurs who newly entered the industry can develop games and conduct tests will create significant value both for the development sectoral human resources and the commercialization of existing initiatives. With the guided project support, we aim to establish a game software workshop in the city center, which will be equipped with the most basic hardware and physical conditions needed for the game industry. The feasibility study for project activities and budget was completed in 2021. The project is expected to be completed in 2022 after the approval of the MoIT.

**İzmir Regional Venture Capital:** The MoIT continues its efforts to establish a regional venture capital fund, which will also include development agencies. In this context, following the conclusion of related studies, our Agency plans to contribute to the regional venture capital fund and ensure that this fund is used in our region in line with the determined principles. Detailed analysis and field studies needed for regional venture capital studies were carried out in 2020. Sectors in İzmir that can rapidly gain momentum with the support of venture capital have been determined. Our agency is ready for implementation in 2022.

**Exporters Technical Support Program:** Export is one of the main pillars of development. In İzmir, which has an important place in our country in terms of exports, various studies are being carried out to further improve its export potential. In this context, a support program will be designed and implemented to help especially small and medium-sized companies operating in sectors with great importance in regional exports potential improve their export capacities. This program will help these companies in creating digital transformation strategies, improve their R&D/design skills and e-export applications.

**Management Consultancy Technical Support Program:** This program will include capacity-building activities targeted at management consulting services. Additionally, innovative support programs will be designed and implemented to improve the capacity and competencies of companies and management consultancy service providers, in line with global competition. Furthermore, additional studies will be carried out to ensure that companies benefit more effectively from related management consultancy opportunities and services, such as public offerings, technology and innovation management, digitalization, professional management, company mergers, and e-commerce.

**Lean Production Technical Support Program:** Lean production is a combination of concepts, systems and techniques that aim to refine and simplify the product and service creation process to perfect the value offered and thus increase the profitability of the company. To increase the competitive edge and profitability of the companies in İzmir, a technical support program will be designed and implemented to increase the level of awareness and to provide the support that companies need in the lean transformation process.

**Digital Transformation and Clean Production Financial Support Program:** Our Agency carries out studies for the private sector in İzmir with the aim of providing a holistic transformation in human factors, business processes and technology to offer more effective and efficient services in line with the opportunities offered by the developing information and communication technologies together with changing social needs. Another one of our studies for the private sector focuses on supporting companies in reducing their environmental impact in line with İzmir's green growth targets. A support program for non-profit organizations will be carried out to increase the impact of these efforts targeted at the private sector, and to support regional institutions that clearly need these investments.

It is essential that non-profit organizations such as public institutions, local governments, organized industrial zones, free zones and cooperatives operating in İzmir adapt to the digital transformation process to improve the efficiency and quality of their services, and especially of public services. These organizations also need to reduce the environmental impact through cleaner production practices in İzmir, where the environmental load is gradually increasing. For this purpose and as part of its 2022 plans, our Agency will carry out a program to support the preparation of digital transformation strategies and roadmaps of the institutions in our region, the creation of the necessary infrastructure for the digitalization of services, the dissemination of technology-based applications, and the reduction of carbon and water footprints.

**Financial Support Program Execution Activities:** As part of this ROP, application guides and promotional documents will be prepared regarding the calls for proposals for projects and alternative financial support applications. Subsequently, calls for proposals will be announced and information meetings will be held on the preparation and submission of project proposals. In addition to the training sessions to be provided, consultancy services will be procured to provide technical assistance to potential applicants. Activities will be carried out regarding the selection and training of technical specialists who will participate in the evaluation of projects in terms of technical and financial quality. Assessment committees will be formed on a program basis to conduct the necessary checks on the assessments carried out by independent assessors, to formulate and report opinions, and to suggest the list of projects deemed eligible for financial support. As part of the programs, study-feasibility analyses, research and technical opinions may be requested before the evaluation and implementation phase. Preview visits will also be organized as part of the projects. Where necessary, organizations related to programs and projects will be held or participation will be ensured in the existing events, and technical support service will be procured.

#### **3.1.4.6 Major Public Investments**

Pursuant to a decree published in the Official Gazette dated July 10, 2021, an area of 180,000 square meters on the campus of İzmir Institute of Technology has been allocated to be used for the İzmir Technology Base, which will host national and global companies producing advanced technology. Planned to function as an Informatics Valley, this area is expected to make a great contribution to the education, science, technology, innovation and entrepreneurship ecosystem. The ROP will be revised if another suitable activity is identified in the ROP evaluations to be conducted throughout 2022.

#### **3.1.4.7 Projects Related to EU and Other International Programs**

As part of this ROP, no activities are planned under this heading for 2022. However, the ROP will be revised if a suitable activity is identified in the ROP evaluations to be conducted throughout 2022.

#### **3.1.4.8 Other Projects and Activities**

As part of this ROP, no activities are planned under this heading for 2022. However, the ROP will be revised if a suitable activity is identified in the ROP evaluations to be conducted throughout 2022.

#### **3.1.5 Program Duration and Schedule**

The duration of the ROP is five years, from 2021 to 2025. Key activities of the ROP will be concluded within the first three years. In the final two years, activities that were initiated but not concluded within the first three years, such as activities carried out under financial support programs or outsourced projects will continue. No new financial support will be implemented as part of the ROP in the final two years.

<b>ROP Scheduling Table</b>				
<b>WBS Code</b>	<b>Component Name</b>	<b>Duration</b>	<b>Start Period (Year/Quarter)</b>	<b>End Period (Year/Quarter)</b>
1	Research and Analyses for Supporting Innovation and Entrepreneurship Activities	36 months	2021/1	2023/4
2	Theme-Based Innovation and Entrepreneurship Activities	36 months	2021/1	2023/4



ROP Scheduling Table				
WBS Code	Component Name	Duration	Start Period (Year/Quarter)	End Period (Year/Quarter)
3	Esports Literacy Training Program	12 months	2021/3	2022/4
4	Greentech İzmir – Green Technology Meeting	36 months	2021/1	2023/4
5	Bluetech İzmir – Blue Entrepreneurship Acceleration Camp	24 months	2021/4	2023/4
6	Supplier Meeting & Acceleration Camp for Digital Transformation	12 months	2022/1	2023/4
7	Promoting İzmir's Entrepreneurship Ecosystem	36 months	2021/1	2023/4
8	Activities to Increase the Economic Value of İzmir's Manufacturing Industry	24 months	2022/1	2023/4
9	Management Consultancy Activities	12 months	2022/1	2022/4
10	Activities to Increase Supplier Capacity for Digital Transformation Processes	24 months	2022/1	2023/4
11	Participation in ROP-Based Activities Organized by Stakeholders and Other Related Studies	36 months	2021/1	2023/4
12	Investment Promotion Materials for the Software Industry	36 months	2021/1	2023/4
13	Domestic and International Investment Promotion Activities for the Software Industry	36 months	2021/1	2023/4
14	Improving the Investment Environment in the Software Industry	36 months	2021/1	2023/4
15	Project Support Guided by İzmir Entrepreneurship and Innovation Center (İzQ)	12 months	2020/4	2022/1
16	TEKNOTEST Guided Project	24 months	2018/4	2022/1
17	Guided Project Support for Gaming Software Workshop	24 months	2021/1	2022/4
18	İzmir Regional Venture Capital	36 months	2021/1	2023/4
19	Exporters Technical Support Program	12 months	2022/1	2022/4
20	Management Consultancy Support Program	12 months	2022/1	2022/4
21	Lean Production Technical Support Program	12 months	2022/1	2022/4
22	Digital Transformation and Clean Production Financial Support Program	24 months	2022/2	2023/4
23	Financial Support Program Execution Activities	36 months	2021/1	2023/4
24	İzmir Technology Base	36 months	2021/1	2023/4

### **3.1.6 Management and Coordination Regulations**

The working units in the Agency are ROP-based structures to ensure the effective management of ROPs and thematic specialization required by the ROP. In this regard, the implementation of the ROP will be carried out by the Innovation and Entrepreneurship Policies Unit (IEPU). Different units responsible for the ROP components are included in the components table above. The Project Implementation and Monitoring Unit will be responsible for the monitoring and evaluation of the sub-programs and guided projects to be carried out as part of the ROP.

In-agency coordination and follow-up of the ROP will be carried out by the ROP Management Task Group consisting of the Secretary General and Unit Heads. Coordinated management of the ROP process will be ensured with monthly meetings to be held by the ROP Management Task Group. The head of the relevant unit will nominate a Component Officer on the basis of expertise for activities included the ROP. Necessary follow-up will be carried out by the ROP Management Task Group in the light of the detailed work schedule to be created by the Component Officer.

The general progress of the program will be monitored by the Agency's Board of Directors. To address and solve any potential problems, the opinions and suggestions of the institutions and organizations that cooperate as part of the ROP can be obtained in line with the request of the Board.

### **3.1.7 Monitoring and Evaluation**

The monitoring and evaluation of ROP works will be carried out in line with the above-mentioned management structure. In regular meetings, the current status of the ROP will be monitored, risks will be evaluated and necessary corrective measures will be taken.

The Project Implementation and Monitoring Unit will be responsible for the monitoring and evaluation of the sub-programs and guided projects to be carried out by the Agency as part of the ROP. The outputs of the activities to be carried out by the Agency as part of the ROP will be evaluated by IEPU. The activities to be carried out by other institutions as part of the ROP will be monitored by the members of the ROP Management Task Group.

The IEPU, ISO and PIMU will be responsible for the preparation of the Periodic Progress Reports that will be compiled every six months for the ROPs, and for the preparation of the conclusion reports to be compiled at the end of the third and fifth years for the ROP. At the end of the 7th year of the ROP, an impact analysis will be carried out by the ROP Management Task Group.

### 3.2 Result-Oriented Program for Clean Energy and Clean Technologies (ROP CET)

Descriptive information about this ROP CET is provided below. Detailed information on ROP CET can be found in the ROP Management Plan. The ROP Management Plan will be revised if new activities that may fall within the scope of this ROP are identified in the ROP monitoring and evaluation studies carried out in 2022.

#### 3.2.1 Objective

**General Objective:** Dissemination of sustainable production and clean energy practices for İzmir to grow in a competitive and inclusive way by protecting its natural resources

**Special Objective 1:** Development of clean energy cluster to strengthen domestic equipment production and vocational training capacity

**Special Purpose 2:** Promoting the investment opportunities offered by İzmir for the clean energy and clean technology industries, and increasing such investments

**Special Objective 3:** Improving sustainable production capacity in İzmir, especially in the manufacturing and agriculture industries

#### 3.2.2 The Background and Reason for Intervention

In recent years, it has been proven by scientific data that problems such as global climate change, population growth, decrease in natural resources, and increasing environmental pollution threaten the future of the world. Moreover, the COVID-19 pandemic has been posing an additional threat to humanity since the beginning of 2020. Socio-ecological transformation emerges as an opportunity in economies to cope with these threats, which have been aggravated by rapid technological developments and changes in consumer behavior. For many countries, the socio-ecological transformation has become a compulsory path for sustainable and high-quality growth.

At this point, the concept of green growth has emerged as a growth model for the initiation of this transformation. The concept of green growth, which emerged for the first time in 2005 as "environment-oriented sustainable economic growth," is accepted as a new and competitive growth strategy, especially for developing countries. The Organization for Economic Cooperation and Development (OECD) defines green growth as "a system in which environmental factors and natural resources continue to ensure the welfare and well-being of people, while the economy develops taking these issues into account" (OECD, 2011).

The circular economy model, which focuses on the conservation of resources, increasing the durability of products, sustainable production and consumption practices, eco-design and recycling, is seen as an important tool for the transition to green growth. In this model, ensuring that raw materials and products remain in the system for a longer duration and minimizing waste production is essential.

Green growth is considered an important tool in terms of combating climate change and environmental threats, as well as maintaining the balance between environmental protection and economic growth. It is estimated that green growth will create new job opportunities with sustainable production practices, changing consumption habits, energy efficiency and use of clean energy, thus increasing employment and income levels. It is expected that research and development expenditures in the field of clean production and clean energy will further increase; new investments with high environmental performance will accelerate; opportunities for clean production and clean energy investments will increase; applications for eco-efficiency will increase in many areas such as resource and energy efficiency equipment, energy storage units, electric vehicles, smart cities, green buildings, recycling technologies etc.

The United Nations Conference on Trade and Development (UNCTAD), operating under the United Nations General Assembly, published a Trade and Development Report in 2019 titled “Financing a New Global Green Deal.” The report draws attention to the need to seize the opportunities related to new technologies and to make substantial investments in clean energy, transportation and food systems in order to solve problems such as the destabilization of the global economic system, increasing debts, uncertainty, the polarization of income and aggravating unemployment conditions. Many expert sources state that we will reach a point of no return by 2030 if the economic trends and the rate of environmental degradation continue this way. The solutions put forward by national and international institutions and platforms indicate the need to increase investments in green technologies and green jobs with a sense of shared responsibility, and to accelerate green transformation for more inclusive and sustainable growth. The targets of green transformation or green growth encompass the following areas of action: promoting the use of clean energy, ensuring integrated resource efficiency/eco-efficiency in production, adopting clean production practices, developing green technologies, promoting responsible consumption habits and implementing inclusive policies (UNCTAD, 2019).

Today, climate change and environmental degradation have become an existential threat to the entire world. To overcome these problems, the European Union has put forward a new growth strategy to transform itself into a modern, resource-efficient, and competitive economy. Objectives within this strategy include:

- Eliminating greenhouse gas emissions by 2050
- Resource-independent economic growth
- Leaving no one and no region behind

The European Green Deal, announced at the end of 2019, is a plan put forward by the European Union to ensure a sustainable economy. It aims to transform climatic and environmental problems into opportunities and to implement this transformation in a fair and inclusive way to ensure sustainability. The Green Deal objectives will have a global impact that is not limited to the European Union region. To this end, a new international trade system and division of labor is being planned in addition to the fight against climate change.

Our country will also be affected by the opportunities and risks brought by this new growth strategy. In this context, the biggest opportunity will be the support that will be provided by the European Union to neighboring countries. The biggest risk is that companies in Türkiye, whose most important trade partner is the European Union and whose exports are mostly based on carbon-based industries, may face additional costs due to the Carbon Border Adjustment Mechanism (CBAM). This may cause them to lose their competitive power and even leave the European Union supply chains entirely. Pursuant the CBAM, carbon tax/pricing is applied to imported products and raw materials (if not previously applied by the exporting country) to protect the competitive advantage of European Union companies. Energy-intensive industries will especially be affected by this regulation.

In recent years, policies to combat climate change have gained momentum in the international trade arena. The Green Deal Action Plan, which aims to ensure our country's adaptation to these policies and functions as a roadmap to increase our competitive power in exports, was published on July 16, 2021. The Green Deal Action Plan aims to support our country's transition to a sustainable and resource-efficient economy in line with this change and transformation in international trade and economy, and also in accordance with its own development goals. In this regard, the action plan aims to contribute to the preservation and improvement of our competitiveness in exports, and to the deepening of our country's integration with the EU, which has been initiated thanks to the Customs

Union. The action plan has been prepared to ensure a timely adaptation to the above-mentioned transformation process and especially to the comprehensive changes envisaged by the European Green Deal announced by the EU, our most important trade partner, and to turn future risks into opportunities. The action plan consists of a total of 32 goals and 81 actions under nine main headings. The action plan is also of great importance in terms of strengthening our country's integration into global supply chains and attracting green investments to our country.

Ensuring that the income and employment created by green investments are generally located in the place of investment offers important opportunities and effective tools for the sustainable and high-quality growth of İzmir. In light of these opportunities and to adapt to climate change and prevent its effects, the Agency carries out important activities in the fields of clean energy and sustainable production transformation in the agriculture and manufacturing industries. In line with sustainable development principles, İZBP is aware of its responsibility to protect the life quality of future generations by increasing resource usage awareness, responsibility and efficiency and ensuring that the existing resources of İzmir are utilized in the most effective way. In a period when the new agenda is expected to be shaped by the new global division of labor, climate change, energy problems and innovation economies, the Agency has focused on “sustainability,” which is one of the main themes of the national and global agenda.

The Agency, together with İZBP, designs and conducts its activities in line with many large-scale plans and strategies. The UN’s Sustainable Development Goals are the most fundamental document regarding sustainable development in a global context.

#### SUSTAINABLE DEVELOPMENT GOALS

1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS	SUSTAINABLE DEVELOPMENT GOALS

The 11th Development Plan that entered into force in 2019 consists of various goals and areas of action focusing on sustainable development in parallel with the Sustainable Development Goals. Protection of natural resources and sustainability are covered by the Main Objectives and Principles of the plan:

*"Individual and social qualifications and competence levels will be increased by making the best use of demographic opportunities. With the regulations related to social security, it will be ensured that intergenerational equity and sustainability are taken as a basis in the use of natural resources."*

The areas that are planned to be intervened in through the ROPCET are expected to contribute to the plan objectives specified under the headings of Stable and Strong Economy, Competitive Production and Efficient, Qualified People, Strong Society, Livable Cities and Sustainable Environment:

In the National Strategy for Regional Development, İzmir is defined as a metropolitan city and İzmir's ability to compete with other metropolises on a global scale and its international impact are aimed to be improved. For this purpose, it is aimed to focus metropolitan economies on industries using advanced technology, specialized services and social and cultural sectors; to improve the industrial and technological infrastructures of metropolitan cities and sub-centers; to focus on excellence in universities, R&D centers and intellectual institutions; and to strengthen social harmony by supporting urban infrastructure and urban culture.

Considering that İzmir lacks sufficient water resources; has many maritime, coastal and agricultural areas that need to be protected; and that the Gediz, Küçük Menderes and Büyük Menderes basins, which are under various environmental threats, offer great agricultural potential and a touristic value, we can say that this issue is of critical importance for the region. İzmir is also the biggest producer of hazardous wastes in Türkiye as a result of the presence of polluting industries in the region. It produces one fourth of all hazardous waste in Türkiye on its own. In this context, the Agency has identified the use of clean energy and the production of related technologies, energy and resource efficiency, water management, solid waste and hazardous waste recovery and disposal, sustainable agriculture and biodiversity conservation, and the development of clean production technologies and applications as the main focus areas during the transition to green growth in the region.

The investment environment and competitiveness in İzmir should be strengthened by supporting the city's high potential in agricultural and industrial production, clean energy and clean technologies with clustering, entrepreneurship, investment promotion and sustainable production activities. The targets within the scope of this program are included in all three development axes of the İzmir 2014-2023 Regional Plan.

#### **Preliminary Risk Assessment**

It has been observed that the biggest risk in the implementation of the ROP by the Agency will be the cessation of investments in related areas in Türkiye and the possibility that technology development in these areas may lose importance. However, we can say that for these issues, which have been identified as critical intervention areas for priority transformation programs in our development plans, the likelihood of the realization of this risk is weak.

Another risk with a possible high impact is the difficulty that may be experienced by local stakeholders in adopting these areas. It is possible for the educated population of İzmir to prioritize these issues. In addition, although it is seen that local stakeholders attach importance to the significance of the issues and environmental investments, awareness and support for these areas can be increased through awareness-raising works to be conducted on this subject.

#### **3.2.3 Targeted Outcomes and Outputs**

The outcomes aimed to be achieved as part of the mentioned ROP are included in the following Key Performance Indicators and Output Performance Indicators tables.

<b>Key Performance Indicators</b>					
<b>No.</b>	<b>Indicator Name</b>	<b>Unit</b>	<b>Target</b>	<b>Source of Verification</b>	<b>Number of Relevant Special Purpose(s)</b>
1	Number of Clusters Developed	Number	1	Agency Data	1
2	Number of Cluster Member Companies	Number	30	Agency Data	1
3	Number of New Companies Producing Clean Energy and Clean Technology Equipment in İzmir	Number	10	Industry Analysis	1

Key Performance Indicators					
No.	Indicator Name	Unit	Target	Source of Verification	Number of Relevant Special Purpose(s)
4	Increase in Clean Energy and Clean Technology Equipment Exports by Cluster Companies	Percent	10	Industry Analysis	1
5	Number of New Employees Created in the Field of Clean Energy and Clean Technology in İzmir	Number	600	Agency Data	1 and 2
6	The Industrial Symbiosis Model Applied	Number	1	Agency Data	3
7	Number of Investment Zones Initiating Industrial Symbiosis Actions	Number	3	Agency Data	3
8	Number of Collaborations Implemented Under Resource Efficiency Program	Number	10	Agency Data	3
9	Number of New Companies Starting Using Sustainable Production Methods	Number	20	Agency Data	3
10	Number of Vocational Education Institutions Established in the Field of Clean Energy and Clean Technology in İzmir	Number	1	Data from Provincial Directorate of National Education	1 and 2
11	Resource Efficiency Center	Number	1	Agency Data	1, 2 and 3
12	İzmir Agricultural Technologies Center	Number	1	Agency Data	3
13	Licensed Warehouse	Number	1	Agency Data	3
14	Wind Energy Meteorology and Environmental Test Analysis Center (RÜZMER)	Number	1	Agency Data	3

Output Performance Indicators					
No.	Output Indicator	Unit	Target		Source of Verification
			2022	Total	
1	Number of Perspective Documents	Number	1	1	Agency Reports
2	Number of Action Plans (In Line With the Green Transformation and Blue Opportunities Perspective)	Number	1	1	Agency Reports
3	Number of Meetings Held for the Promotion of Sustainable Production Practices	Number	4	12	Agency Reports
4	Number of Industrial Businesses That Received Training	Number	5	10	Agency's Annual Report
5	Number of Industrial Business Employees That Received Training	Number	20	50	Agency's Annual Report

Output Performance Indicators					
No.	Output Indicator	Unit	Target		Source of Verification
			2022	Total	
6	Number of Cooperatives and Irrigation Unions That Received Training	Number	5	10	Agency's Annual Report
7	Number of Cooperative and Irrigation Union Members That Received Training	Number	20	50	Agency's Annual Report
8	Number of Employees in the Resource Efficiency Program	Number	4	10	Agency's Annual Report
9	Number of Domestic and International Investment Promotion Activities for the Clean Energy Industry	Number	5	15	Agency Reports, Web Page
10	Number of Companies Reached at Domestic and International Investment Promotion Activities for the Clean Energy Industry	Number	100	300	Agency Reports, Web Page
11	Number of Companies with Ongoing Contact After Domestic and International Investment Promotion Activities for the Clean Energy Industry	Number	10	30	Agency Reports, Web Page
12	Number of Events Organized for the Improvement of İzmir's Investment Environment for the Clean Energy Industry	Number	2	6	Agency Reports, Web Page
13	Number Participants in Events Organized for the Improvement of İzmir's Investment Environment for the Clean Energy Industry	Number	500	1500	Agency Reports, Web Page
14	Number of Value Chain and Cluster Analyses for the Clean Energy Industry	Number	1	1	"BEST For Energy" Project Data
15	Number of Companies Interviewed and Analyzed for Clustering	Number	100	100	"BEST For Energy" Project Data
16	Number of Focus Group Meetings Held for Clustering	Number	4	10	"BEST For Energy" Project Data
17	Number of Participants at Focus Group Meetings Held for Clustering	Number	200	500	"BEST For Energy" Project Data
18	Number of International and National Demand Analyses	Number	1	1	"BEST For Energy" Project Data
19	Number of Development Strategies and Action Plans for the Clean Energy Industry	Number	1	1	"BEST For Energy" Project Data
20	Number of Clean Energy Cluster Management Plans	Number	1	1	"BEST For Energy" Project Data
21	Number of Sectoral Competition Evaluation Reports	Number	1	1	"BEST For Energy" Project Data
22	Number of People Receiving Consultancy and Training in Businesses	Number	500	1450	"BEST For Energy" Project Data



Output Performance Indicators					
No.	Output Indicator	Unit	Target		Source of Verification
			2022	Total	
23	Number of Companies That Received Consultancy and Training	Number	150	250	"BEST For Energy" Project Data
24	Number of Business to Business (B2B) Events Organized	Number	2	4	"BEST For Energy" Project Data
25	Number of Companies That Participated in B2B Events	Number	60	120	"BEST For Energy" Project Data
26	Number of International Conferences Organized	Number	0	1	"BEST For Energy" Project Data
27	Number of Participants at International Conferences	Number	0	400	"BEST For Energy" Project Data
28	Number of Trainer Programs Created	Number	1	1	"İzmir-NIC" Project Data
29	Number of TTO, TDZ and R&D Personnel Who Received Training	Number	15	15	"İzmir-NIC" Project Data
30	Number of Accelerator Programs Created for Startups	Number	0	1	"İzmir-NIC" Project Data
31	Number of Startups That Participated in the Accelerator Program	Number	0	30	"İzmir-NIC" Project Data
32	Number of Training Sessions Organized Under the Accelerator Program	Number	0	6	"İzmir-NIC" Project Data
33	Number of Participants in Training Programs	Number	0	300	"İzmir-NIC" Project Data
34	Number of Sectoral Trade Fairs Held in İzmir	Number	1	2	İZFAŞ Data
35	Number of Clean Energy Vocational High Schools Established in İzmir	Number	0	1	Data from Provincial Directorate of National Education
36	Number of Enterprises Provided with Financial Support	Number	15	50	Agency Reports
37	Number of Enterprises Provided with Technical Support	Number	30	50	Agency Reports
38	Number of Feasibility Reports Prepared for Businesses	Number	2	6	Agency Reports
39	Number of Promotional Materials (Infographics, Animations, Videos, News etc.) Prepared to Promote Investments Clean Energy Industry	Number	12	36	Agency Reports, Web Page

### 3.2.4 Projects and Activities

The projects and activities to be carried out as part of the related ROP are included in the table below.

ROP Components Table						
WBS Code	Component Name	Type	Method	Responsible Institution	Responsible Unit	Special Purpose(s)
1	Preparation of Action Plans for the Implementation of the "Green Transformation and Blue Opportunities" Perspective Document in İzmir	Activity	Research, Analysis and Planning	İZKA	GGPU, BGPU	1, 2 and 3
2	İzmir Resource Efficiency Program (İREP)	Activity	Collaboration and Coordination	İZKA UNDP, EBSO	GGPU, IEPU	1, 2 and 3
3	Works for the Dissemination of Resource Efficiency and Sustainable Production Practices	Activity	Capacity Building	İZKA	GGPU	1, 2 and 3
4	Domestic and International Investment Promotion Activities for the Clean Energy Industry	Activity	Promotion and Investment Support	İZKA	ISO	1 and 2
5	Investment Promotion Materials for the Clean Energy Industry	Activity	Promotion and Investment Support	İZKA	ISO	2
6	Organizations for the Development of İzmir's Investment Environment for the Clean Energy Industry	Activity	Promotion and Investment Support	İZKA, Related Stakeholders	ISO	1 and 2
7	Following Up the Activities of Affiliated National and International Clean Energy Network Institutions	Activity	Promotion and Investment Support	İZKA	ISO	1 and 2
8	Improving the Investment Environment in the Clean Energy Industry	Activity	Promotion and Investment Support	İZKA	ISO	2
9	"BEST For Energy" Project	Project	Outsourced Project	İZKA	ISO, GGPU	1 and 2
10	İzmir-NIC Project	Project	Stakeholder Project	İYTE, İZKA	ISO, GGPU	1, 2 and 3
11	Clean Energy Vocational High School Project	Activity	Public Investment Project	Provincial Directorate of National Education	GGPU, ISO	1 and 2
12	Green and Blue Transformation Support Program	Sub-Program	Financial Support	İZKA	GGPU, IEPU, BGPU, PIMU	1, 2 and 3
13	İzmir Agricultural Technologies Center Guided Project Support	Project	Guided Project Support	İZKA	GGPU, PIMU	3
14	Guided Project Support for Establishing Licensed Warehouses for the Cotton Producers in Aydın and İzmir	Project	Guided Project Support	İZKA	GGPU, PIMU	3

ROP Components Table						
WBS Code	Component Name	Type	Method	Responsible Institution	Responsible Unit	Special Purpose(s)
15	Wind Energy Meteorology and Environmental Test Analysis Center (RÜZMER) Guided Project Support	Project	Guided Project Support	İZKA	ISO, PIMU	3
16	2021 Technical Support Program for the Olive Oil Industry	Project	Technical Support	İZKA	GGPU, PIMU	3
17	2022 Technical Support Program for the Milk and Dairy Products Industry	Project	Technical Support	İZKA	GGPU, PIMU	3
18	2022 Technical Support Program for Compliance with the Green Deal	Project	Technical Support	İZKA	GGPU, PIMU	3
19	Financial Support Program Execution Activities	Activity	Executing Financial Support	İZKA	GGPU, PIMU	1, 2 and 3
20	Participation in ROP-Based Activities Organized by Stakeholders and Other Related Studies	Activity	Capacity Building	İZKA	GGPU	1, 2 and 3

### 3.2.4.1 Research, Analysis and Planning

As part of this ROP, the Agency plans to carry out the following research and analyses in addition to its existing studies.

**Preparation of Action Plans for the Implementation of the "Green Transformation and Blue Opportunities" Perspective Document in İzmir:** As a result of the studies carried out by our Agency over the past years, green growth and blue growth tools that can be used for ensuring sustainable development in İzmir have been determined. The development of the region through green growth and blue growth tools requires a social, economic and institutional transformation.

Studies on the Green Transformation and Blue Opportunities Perspective Document for İzmir started in 2021 in order to create a comprehensive analysis and roadmap for the transformation of İzmir in terms of green and blue growth perspectives. An approach that starts from the macro level and goes towards the sectoral and sub-sectoral levels has been adopted in the preparation of the perspective document. The current problems in İzmir's economy, İzmir's production structure, natural resource reserves and institutional capacities have been reviewed, and it has been determined that transformation will have the highest impact on "waste, water and energy" areas. In the subsequent phase, detailed analyzes and field studies were carried out from a sectoral and spatial perspective, and intervention options were put forward.

In the coming stages of the study, the intervention options will be prioritized and structured into action plans, and implementation tools will be designed for intervention. In this regard, collaborations will be developed with relevant organizations; in addition to analysis and research activities, training,

information, coordination and awareness studies will be carried to involve the stakeholders in the region and to create a regional capacity that will reinforce the transformation; and relevant national and international activities will be followed.

#### **3.2.4.2 Collaboration and Coordination**

All activities within the scope of this ROP will be carried out in collaboration with different stakeholders and in coordination with relevant stakeholders in the region. Activities that fall under the scope of collaboration and coordination are summarized below.

**İzmir Resource Efficiency Program (İREP):** Our Agency's and regional stakeholders' previous joint efforts on resource efficiency, industrial symbiosis and digital transformation have been handled as part of an operational program that will cover the 2021-2024 period. Thus, the region's existing capacity in these areas will be improved and a Resource Efficiency (Sustainable Production) Center will be established as part of the Program.

The İREP has been designed to include two components:

- a) As for the Industrial Symbiosis component, an industrial symbiosis model specific to İzmir will be implemented in collaboration with the UNDP and with the participation of relevant stakeholders, especially the OIZs in the region. The prepared project document was approved by the Ministry of Foreign Affairs and related activities started in the second quarter of 2021. The activities that started with a needs analysis and the creation of a governance model will continue by supporting the R&D dimension and the development of the legal framework. In addition, at least two industrial symbiosis applications will be implemented as part of this component.
- b) Efforts under the Digital Transformation component started in 2021 in collaboration with EBSO and RWTH Aachen University's Europe 4.0 Transformation Center. The activities, which started with the analysis and development of the digitalization levels of the companies in the region, will continue with efforts to increase the regional capacity in this regard.

These two components will be carried out simultaneously for the implementation of the Resource Efficiency Center, which will serve the İzmir industry in the fields of industrial symbiosis and digital transformation, and organizational and business model proposals will be developed according to the different functions of the Center.

The Resource Efficiency Center will provide technical support and consultancy for the development and dissemination of sustainable production and digital transformation practices in all industries in the region, especially in the manufacturing and agriculture industries, and will guide these activities. The Center will incorporate laboratory infrastructure and equipment that are not currently available in the region and offer them for common use. It will operate within an organizational structure that conducts local, regional, national and international collaborations in all its functions, and will also host awareness-raising and training activities. In addition, it will be designed in a way that will bring the relevant people together with the information and financial resources needed for the identification and solution of requirements and problems.

#### **3.2.4.3 Capacity Building**

All projects within the scope of this ROP include activities that are aimed at increasing the capacity of not only the stakeholders in İzmir, but also the Agency. However, since these issues are also

included under other headings, they are not included here. Other activities that fall under the scope of capacity building are summarized below.

**Works for the Dissemination of Resource Efficiency and Sustainable Production Practices:**

The following studies are planned to be carried out in 2022 in collaboration with the relevant institutions: emphasizing the importance of resource efficiency and sustainable production tools in terms of quality growth, competitiveness and protection of natural resources and increasing awareness on these issues; arranging face-to-face or remote training programs, conferences and seminars for the dissemination of practices such as industrial symbiosis, eco-efficiency, recycling and waste management; conducting workshops to identify potential problems and solutions related to the TETSOP components in relevant industries; ensuring the preparation of necessary research and feasibility studies by using service procurement; and creating sectoral meetings and publications where relevant stakeholders come together to share experience and collaborate. These studies will be carried out to complement the Green Transformation and Blue Opportunities Perspective Document and the Resource Efficiency Program and will continue to be implemented in this way after 2022.

**Participation in ROP-Based Activities Organized by Stakeholders and Other Related Studies:** Regional, national and international institutions and organizations carry out a number of studies and organize activities to support the Agency and the region in accordance with the objectives and priorities indicated in the ROP. In this context, our Agency monitors and contributes to the works of various boards and committees such as the EBSO Environment Working Group, İzmir Sustainable Urban Development Network Board, İzmir Provincial Water Management Coordination Board, Küçük Menderes Basin Management Committee, Circular Economy Working Group and Circlean Project Key Stakeholder Group. Events and studies in compliance with the priorities in the Result-Oriented Program, as well as at the international, national and regional development levels will be followed, the results will be disseminated in the region, and the information obtained from this follow-up will be taken into account for the improvement and revision of the ROP when necessary. In line with the objectives and priorities of the ROP, joint workshops, meetings, events and training programs will be organized in collaboration with relevant stakeholders to contribute to the content and objectives of the ROP.

#### **3.2.4.4 Promotion and Investment Support**

The list and definitions of the trade fair and investment promotion tour activities to support the investment environment in the region in line with the ROP are given below.

**Domestic and International Investment Promotion Activities for the Clean Energy Industry:** To ensure that companies consider İzmir as an investment location, promotion events will be organized in the target countries and international markets to introduce the investment opportunities that İzmir offers for companies operating in the clean energy industry and planning new investments. Participation in such sectoral events will also be ensured.

Target countries determined for these activities are Denmark, Germany, China and Spain. Planned activities are described below.

The WindEurope fair is the largest event in Europe attended by leading companies in the wind power industry. In this fair, promotional activities will be carried out, especially in the field of wind turbine equipment production, a part of the clean energy industry, which is one of the target industries included in the Agency's investment promotion strategy. The Agency will participate in this event and will share information about İzmir and its investment environment with the participants. In addition, B2B meetings will be held with the participating companies to promote clean energy investments in İzmir. Participation in the WindEurope fair will be ensured in 2022 and 2023.

Organized in recent years by the Global Wind Energy Council (GWEC), the most important wind energy organization in the world, The Global Offshore Wind Summit is the most important event related

to the rapidly developing offshore wind energy industry. In this fair, promotional activities will be carried out, especially in the field of wind turbine equipment production, a part of the clean energy industry, which is one of the target industries included in the Agency's investment promotion strategy. The Agency will participate in this event and will share information about İzmir and its investment environment with the participants. In addition, B2B meetings will be held with the participating companies to promote clean energy investments in İzmir. Participation in the Global Offshore Wind Summit will be ensured in 2022 and 2023.

**Investment Promotion Materials for the Clean Energy Industry:** Materials such as infographics, animations, videos and news for digital media channels will be created and updated throughout the year to promote the investment opportunities that İzmir offers for the clean energy industry.

**Organizations for the Development of İzmir's Investment Environment for the Clean Energy Industry:** Different events will be organized during the year to bring together the stakeholders operating in the industry, to create new collaborations, to discuss the latest developments and to attract investors to İzmir. In this context, collaboration will be established with the Turkish Wind Energy Association (TÜREB) to organize the 2022 Turkish Wind Energy Congress (TÜREK) in İzmir (in İzmir in even-number years, and in Ankara in odd-number years). In addition, efforts will be made for WindEurope's international regional event to be held in İzmir in 2023.

**Following Up the Activities of Affiliated National and International Clean Energy Network Institutions:** As part of its investment promotion and other activities for the clean energy industry, the Agency will become a member of national and international network organizations to enable close communication and collaboration with relevant international stakeholders, especially investors.

In this regard, TÜREB, which was established by the Ministry of Energy and Natural Resources upon the decree of the Council of Ministers in 1992, is the strongest nongovernmental organization in Türkiye in the area of wind energy, and the Agency is a member of it. TÜREB, which is an official member of WindEurope and the Global Wind Energy Council (GWEC), aims to realize Türkiye's wind energy potential and thus contribute to the country's economy. For the development of the industry, our Agency will carry out joint works with TÜREB, such as TÜREK and Turkish Wind Energy Statistics Report.

In this context, the Agency will also become a member of WindEurope. WindEurope is the most significant European umbrella organization in the wind energy industry, with 400 members from 35 countries, including public and private sectors, NGOs and research organizations. It carries out activities for determining wind energy policies, conducting communication activities on this subject, carrying out analyses and research, organizing training programs for members, and arranging sectoral fairs and events.

In this regard, it is planned to make the Agency a member of WindEurope, represent the wind energy equipment production industry in İzmir within the union as an umbrella organization, promote the capacity of İzmir in this industry at an international level and ensure that all companies in İzmir benefit from the opportunities offered by the union. The network and communication that the Agency will establish within the Union during the ROP period can be transferred to the cluster organization to be developed as part of the "BEST For Energy" project in the long run.

**Improving the Investment Environment in Clean Energy Industry:** Sectoral training programs, research studies and activities will be carried out to improve the competitiveness of the clean energy industry and to increase its contribution to İzmir's economy.

While planning these activities, the findings of the analysis and strategy documents prepared for our Agency's BEST For Energy Project will be used. Efforts to expand the positive results of the Agency's activities in the wind energy industry to other areas of clean energy such as solar power, biomass, geothermal power and hydrogen will continue.

The planned training programs will also contribute to the "Youth Employment" objective, which has been determined as development agencies' common theme for 2022 and 2023 by the MoIT.

In this context, it will be ensured that the Çandarlı Port, the construction of which is still ongoing, assumes an "export port" function for wind energy equipment and an "installation port" function for offshore wind power plants. The product sizes in the wind energy equipment production industry, which provides a comparative advantage for İzmir, are quite large and are growing further with new technologies, such as offshore wind plants. In terms of logistics, it is becoming increasingly difficult for these products to enter the city. Additionally, ports that do not have sufficient hinterland storage areas cannot provide the appropriate logistics infrastructure for these products. Thanks to its highway connections and its wide hinterland, the Çandarlı Port offers an important logistic potential for the companies in the industry, which are mainly located in the north of İzmir. In addition, Çandarlı Port's function as a transfer and installation port for offshore wind farms, which are expected to become globally widespread, will provide an important competitive advantage for both the industry and the port itself, and in this sense, it will be a first in Türkiye and in the Mediterranean basin. This activity will be carried out in coordination with research and analysis activities in the Maritime Economy ROP.

### **3.2.4.5 Agency Supports**

**Financial Support Program Execution Activities:** As part of this ROP, application guides and promotional documents will be prepared regarding the calls for proposals for projects, alternative financial support programs and guided project, financial or feasibility supports. Subsequently, the financial support programs will be announced and information meetings will be held on the preparation and submission of project proposals. In addition to the training sessions to be provided, consultancy services will be procured to provide technical assistance to potential applicants. Activities will be carried out regarding the selection and training of independent assessors/external experts who will participate in the evaluation of projects in terms of technical and financial quality. Assessment committees will be formed on a program basis to conduct the necessary checks on the assessments carried out by independent assessors/external experts, to formulate opinions, to report these, and to suggest the list of projects deemed eligible for financial support. As part of the programs, feasibility analyses, research and technical opinions may be requested before the evaluation and implementation phase. Preview visits will also be organized as part of the projects. Where necessary, organizations related to programs and projects will be held or participation will be ensured in the existing events, and technical support services, field study-analysis, and consultancy services will be procured.

**Green and Blue Transformation Support Program:** The goal of the Green and Blue Transformation Program is to reduce the environmental pressure faced by the TR31 İzmir Region. To this end, it aims to implement pioneering, original and exemplary projects in the field of sustainable production techniques to help entrepreneurs and manufacturers internalize an approach that considers future generations while using natural resources. The priorities of the program are set out below for each applicant group:

- a) Entrepreneurs: Development and localization of sustainable production techniques aiming to use less resources in the manufacturing, agriculture and services industries,

b) Manufacturers: Expanding the use of sustainable manufacturing techniques that aims at resource efficiency in the manufacturing and agriculture industries; inclusion of companies in the supply and value chain at the medium-high or high technology level, primarily for clean energy and clean technologies; and producing high value-added products or changing industries for the production of a new product,

This support program aims to implement strategies and examples of good practice within the scope of the ROP and to provide the region with the necessary financial support for the targeted transformations in the agriculture, manufacturing and services industries. The Program, which was announced in the last quarter of 2021, will continue being implemented in 2022.

**İzmir Agricultural Technologies Center Guided Project Support:** Guided project preparation studies were carried out in 2021 to combine the agricultural production and innovation capacity of İzmir, to establish an agricultural technologies center that will help the region become an R&D base for agricultural technologies and to ensure the sustainable development of the agricultural industry through integration with technological developments. It is planned that the infrastructure of İzmir Agricultural Technologies Center (ITTM) will be capable of identifying the problems in the field, producing the necessary technological solutions, providing training and consultancy services, developing agricultural entrepreneurship and application competencies, and accommodating experimental production areas. The contract for the guided project was signed at the end of 2021, and other works necessary for the implementation of the project will continue in 2022.

**Guided Project Support for Establishing Licensed Warehouses for the Cotton Producers in Aydın and İzmir:** In collaboration with the South Aegean Development Agency (GEKA), we aim to contribute to the economic development of the region by establishing a functional and licensed warehouse with a modern infrastructure, where cotton producers and businesses operating in the agricultural industry in the Söke district of Aydın, and in TR32 (Denizli, Aydın and Muğla) and TR31 (İzmir) regions can store their products. The contract for the guided project was signed at the end of 2021, and other works necessary for the implementation of the project will continue in 2022.

**Wind Energy Meteorology and Environmental Test Analysis Center (RÜZMER) Guided Project Support:** The Wind Energy Meteorology and Environmental Test Analysis Center (RÜZMER) Guided Project aims to establish a test and analysis center that can serve every layer of the rapidly developing wind energy industry. The Center aims to serve wind energy facilities, the investments of which have already been completed or are at the initial stage, and to meet the test and analysis needs of domestic manufacturers from a single source. During the establishment phase, the center will also benefit from the infrastructure and expertise of the İzmir Institute of Technology (İYTE). The testing and analysis facilities of the center have been designed by the joint work of faculty members in different fields of expertise, taking into account the needs of all companies located in Türkiye. The first aim of the center is to meet the urgent needs of the companies in Türkiye and then expand in line with the needs and in coordination with the industry to become a key support and solution point that can offer international services in the long term.

**2021 Technical Support Program for the Olive Oil Industry:** The implementation of the technical support program announced in the last quarter of 2021 will continue in 2022. The program aims to provide consultancy to olive oil and pomace manufacturers on clean production techniques to reduce the environmental pressure caused by olive oil production in the Küçük Menderes Basin. The Technical Support Program will be repeated in 2022 if needed.



**2022 Technical Support Program for the Milk and Dairy Products Industry:** The aim of the program is to provide consultancy to local actors in İzmir for their works that are important in terms of production sustainability, but have difficulties at the preparation and implementation stages due to the lack of institutional capacity. In this regard, it is planned to provide consultancy on clean production techniques for milk and dairy products producers, especially in the Küçük Menderes Basin.

**2022 Technical Support Program for Compliance with the Green Deal:** The Green Deal targets declared by the EU will not be limited to the EU, but will have a global impact. Our country will also be affected by the opportunities and risks brought by this new growth strategy. As a region, we need to be ready for substantial revisions in line with the future rules and regulations for the reduction of carbon emissions caused by products manufactured in Türkiye and exported to the EU, the use of environmentally friendly production techniques, and carbon footprint measurement and traceability. The purpose of the "Technical Support Program for Compliance with the Green Deal " is to support our exporting companies in adapting to the EU Green Deal and the Carbon Border Adjustment Mechanism. As part of the program, the companies in the selected industries will be evaluated for their compliance with the Green Deal, their carbon footprint and carbon emission costs will be calculated and suggestions will be developed to reduce them.

#### **3.2.4.6 Major Public Investments**

**Clean Energy Vocational High School Project:** The Cezeri Green Technology Vocational and Technical Anatolian High School, which was established in collaboration with the Ministry of Energy and Natural Resources, the Ministry of National Education and the UNDP has been a model for the vocational high schools in this field. Similar vocational high schools are planned to be established in other cities. This project aims to establish a vocational high school that will provide vocational education in line with the sectoral framework defined in this ROP and to fulfill the needs of the İzmir labor market.

#### **3.2.4.7 Projects Related to EU and Other International Programs**

**"BEST for Energy" Project:** Our Agency's "BEST for Energy" (Boosting Effective and Sustainable Transformation for Energy) project was qualified for receiving sponsorship under the "Manufacturing Industry" category in the second term (IPA II) of the Competitive Sectors Program conducted by the MoIT. The budget of the project, which started in June 2020, is approximately €2.89 million. The project, which is carried out in partnership with the Association of Energy Industrialists and Businessmen (ENSİA), will be completed in 36 months. The project aims to support the companies that manufacture equipment and environmental technologies for the clean energy industry in İzmir, thus increasing their global competitive power.

The "BEST for Energy" project will focus on the value chain and cluster analysis, development strategy & action plan preparation, cluster promotion and internationalization activities for the purpose of developing a cluster that will cover clean energy equipment, production of clean technologies and the related services industry. The tasks to be conducted in line with these focus points are listed below:

- 1- Preparing A Development Strategy and Action Plan for Clean Energy and Clean Technology Cluster
  - Preparation of the Cluster Map
    - Regional Value Chain and Cluster Analysis for Clean Energy and Clean Technology Industry

- In-Depth Industry Capability Analysis
  - Benchmark Study
  - National and International Demand Survey
- Preparation of Sustainable Development Plan and Action Plan
  - Strategy Development
    - International Benchmark Cluster Visits
    - Workshops and themed focus group meetings
    - Creation of basic and supportive sectoral strategies
    - Sectoral Information Meeting
  - Preparation of an Action Plan
    - Focus group meetings and interviews
    - Development of an Action Plan and the Related Management Plan
    - Sectoral Information Meeting
- 2- Clean Energy and Clean Technology Cluster Promotion and Internationalization Efforts
  - Capacity Building Studies for Cluster SMEs and the Cluster Organization
    - Analysis study for capacity building
    - Study for Evaluation of Competitiveness
    - Provision of consultancy and training services
    - Staff training sessions for the cluster organization
    - Organization of Study Visits
  - Cluster Promotion Works
    - Portal design and implementation
    - Preparation of a Promotion Kit
  - B2B Meetings
  - International Conference

### 3.2.4.8 Other Projects and Activities

Collaboration and interaction between institutions and between projects play a critical role in achieving the goals stated in the ROP. As part of this ROP, the Agency may guide the works to be carried out by other stakeholders in the region. In the first stage, these activities have been determined as follows. However, the ROP will be revised if an important new project or activity is identified in the ROP evaluations carried out in 2022.

**The İzmir-NIC Project:** Teknopark İzmir's İzmir-NIC (Network and Innovation Center) project was qualified for receiving sponsorship under the "Manufacturing Industry" category in the second term (IPA II) of the Competitive Sectors Program conducted by the MoIT. The budget of the project, which started in 2020, is approximately €3 million. The project, which will be carried out under the collaboration of İzmir Institute of Technology (İYTE) and the Association of Software Industrialists (YASAD), will continue for 36 months. The project aims to contribute to SMEs, startups and entrepreneurs operating in the clean energy and information & communication technologies industries in the İzmir region in transforming their technologies into final products, and also commercializing and internationalizing them.

The İzmir-NIC project has been prepared in compliance with the "BEST For Energy" project with the technical contribution of our Agency. Teknopark İzmir and our Agency will act in coordination during the execution of the project activities.

### 3.2.5 Program Duration and Schedule

The duration of the ROP is five years, from 2021 to 2025. Key activities of the ROP will be concluded within the first three years. In the final two years, activities that were initiated but not concluded within the first three years, such as activities carried out under financial support programs or outsourced projects will continue. No new financial support will be implemented as part of the ROP in the final two years.

ROP Scheduling Table				
WBS Code	Component Name	Duration	Start Period (Year/Quarter)	End Period (Year/Quarter)
1	Preparation of Action Plans for the Implementation of the "Green Transformation and Blue Opportunities" Perspective Document in İzmir	12 months	2022/1	2022/4
2	İzmir Resource Efficiency Program (İREP)	48 months	2021/1	2024/4
3	Works for the Dissemination of Resource Efficiency and Sustainable Production Practices	36 months	2021/1	2023/4
4	Domestic and International Investment Promotion Activities for the Clean Energy Industry	36 months	2021/1	2023/4
5	Investment Promotion Materials for the Clean Energy Industry	36 months	2021/1	2023/4
6	Organizations for the Development of İzmir's Investment Environment for the Clean Energy Industry	36 months	2021/1	2023/4
7	Following Up the Activities of Affiliated National and International Clean Energy Network Institutions	36 months	2021/1	2023/4
8	Improving the Investment Environment in the Clean Energy Industry	36 months	2021/1	2023/4
9	"BEST For Energy" Project	33 months	2021/1	2023/3
10	İzmir-NIC Project	36 months	2021/1	2023/4
11	Clean Energy Vocational High School Project	36 months	2021/1	2023/4
12	Green and Blue Transformation Support Program	36 months	2021/1	2023/4
13	İzmir Agricultural Technologies Center Guided Project Support	36 months	2021/1	2023/4

ROP Scheduling Table				
WBS Code	Component Name	Duration	Start Period (Year/Quarter)	End Period (Year/Quarter)
14	Guided Project Support for Establishing Licensed Warehouses for the Cotton Producers in Aydın and İzmir	33 months	2021/2	2023/4
15	Wind Energy Meteorology and Environmental Test Analysis Center (RÜZMER) Guided Project Support	30 months	2021/4	2023/4
16	2021 Technical Support Program for the Olive Oil Industry	12 months	2021/4	2022/3
17	2022 Technical Support Program for the Milk and Dairy Products Industry	12 months	2022/1	2022/4
18	2022 Technical Support Program for Compliance with the Green Deal	12 months	2022/1	2022/4
19	Financial Support Program Execution Activities	36 months	2021/1	2023/4
20	Participation in ROP-Based Activities Organized by Stakeholders and Other Related Studies	36 months	2021/1	2023/4

### 3.2.6 Management and Coordination Regulations

The working units in the Agency are ROP-based structures to ensure the effective management of ROPs and thematic specialization required by the ROP. In this context, the implementation of the ROP will be carried out by the Green Growth Policy Unit (GGPU) and the Investment Support Office (ISO). Different units responsible for the ROP components are included in the components table above. The Project Implementation and Monitoring Unit will be responsible for the monitoring and evaluation of the sub-programs and guided projects to be carried out as part of the ROP.

In-agency coordination and follow-up of the ROP will be carried out by the ROP Management Task Group consisting of the Secretary General and Unit Heads. Coordinated management of the ROP process will be ensured with monthly meetings to be held by the ROP Management Task Group. The head of the relevant unit will nominate a Component Officer on the basis of expertise for activities included the ROP. Necessary follow-up will be carried out by the ROP Management Task Group in the light of the detailed work schedule to be created by the Component Officer.

The general progress of the program will be monitored by the Agency's Board of Directors. To address and solve any potential problems, the opinions and suggestions of the institutions and organizations that cooperate as part of the ROP can be obtained in line with the request of the Board.

### 3.2.7 Monitoring and Evaluation

The monitoring and evaluation of ROP works will be carried out in line with the above-mentioned management structure. In regular meetings, the current status of the ROP will be monitored, risks will be evaluated and necessary corrective measures will be taken.

The Project Implementation and Monitoring Unit (PIMU) will be responsible for the monitoring and evaluation of the sub-programs and guided projects to be carried out by the Agency as part of the ROP. The outputs of the activities to be carried out by the Agency as part of the ROP will be evaluated by the related unit. The activities to be carried out by other institutions as part of the ROP will be monitored by the members of the ROP Management Task Group.

The GGPU will be responsible for the preparation of the Periodic Progress Reports that will be compiled every six months for the ROPs, and for the preparation of the conclusion reports to be compiled at the end of the third and fifth years for the ROP. At the end of the 7th year of the ROP, an impact analysis will be carried out by the ROP Management Task Group.

### 3.3 Result-Oriented Program for Marine Economy (ROPME)

Descriptive information about this ROP, implemented by the Agency since 2020, is provided below. Detailed information on ROPME can be found in the ROP Management Plan. The ROP Management Plan will be revised if new activities that may fall within the scope of this ROP are identified in the ROP monitoring and evaluation studies carried out in 2022.

#### 3.3.1 Objective

**General Objective:** Development of maritime and coastal economy in İzmir in line with blue growth principles

**Special Objective 1:** Improving the potential and competitive power of blue economy industries in İzmir

**Special Objective 2:** Development of maritime transport and port services in İzmir

**Special Objective 3:** Identification and evaluation of blue energy sources and supporting the production of blue energy equipment in İzmir

**Special Objective 4:** Development of design- and creativity-oriented economic activities and coastal tourism in İzmir

#### 3.3.2 The Background and Reason for Intervention

The concept of the “blue economy” aims to ensure economic growth, social inclusion and protection over the seas and oceans. The blue economy concept is a next-generation development paradigm that offers coordinated actions that support “marine life” within the framework of the “Sustainable Development Goals” of the United Nations, and thus ensures the sustainable management and protection of oceans and seas for current and future generations. It also significantly reduces environmental risks and ecological shortages, proposes sustainable options to utilize the potential of the coastlines, and thus aims to increase positive externalities. This paradigm provides an inclusive model that extends the social and economic value set by not approaching seas and oceans merely as a mechanism for economic growth. Blue economy aims not only to achieve economic growth but also to support the conservation and development of intangible “blue” resources on coastlines to help mitigate the devastating effects of traditional lifestyles, carbon emissions and climate change. The traditional sectors of the blue growth approach are maritime transport, port services, shipbuilding and repair, ship recycling, fishing, and coastal tourism. Developing sectors of blue growth are defined as blue energy (wave energy, offshore wind power), biotechnology, aquaculture (underwater life), and marine mining. Although the seas and oceans are positioned as the main source of economic value generation and innovation in all these sectors, ensuring their protection and continuity constitutes the integral elements of the approach.

The Result-Oriented Program for Marine Economy (ROPME) focuses specifically on the maritime transport and ports component of the blue growth approach during the three-year results-oriented planning period. The following issues were addressed in a holistic way as part of the ROP: Utilizing the blue energy potential for offshore wind energy, supporting the production of wind energy equipment, increasing coastal tourism and tourism-oriented economic diversity on the coastlines, ensuring sustainable development of the region's fisheries and aquaculture industry, and strengthening the added value of the region through the design of the region's product profile.

Blue economy industries play a key role in İzmir's urban economy. The blue economy accounts for an economic size of approximately \$2.1 billion in İzmir. According to 2019 official records, a total of 881 enterprises operate in industries directly related to the blue economy. A total of 14,428 people are employed in these blue economy-related enterprises. The Regional Input-Output Analysis for İzmir, which was updated by our Agency in 2021, offers striking results in line with these data, regarding the place of blue economy in the region. For example, İzmir makes the highest contribution to Türkiye's

sectoral production and added value through maritime transport and the port services industry, with a share of 28 percent. The second industry, in which İzmir has the highest share in Türkiye's sectoral export volume is "fishing, operation of fish production and breeding farms and related services," with a share of 27 percent. In this sense, the ROPME aims to draw attention to the economic value of the seas and sea-related sectors for our country and region, while aiming to manage the marine and coastal ecosystems in a sustainable way and to protect them from pollution in line with the UN Sustainable Development Goal 14, "Life Below Water".

More than 90 percent of the global freight is transported via maritime trade. The total freight volume, which reached 11.5 billion tons in 2017, is expected to exceed 14 billion tons in 2030 and 16 billion tons in 2050. The ascending rate of globalization in trade and the growth in ship sizes and transport capacities increases this freight volume even further. While the largest ship capacity was around 7,000 TEUs 20 years ago, this figure reached 14,000 TEUs in 2009 and exceeded 23,000 TEUs by 2020 (23,964 TEUs). The fact that this trend is accompanied by new trade routes and an increasing demand for container exports reinforces the idea that maritime transport will continue to be the dominant transportation method in the future. We know that port cities have had a relatively higher competitive advantage in their historical development and today we still see that this feature provides important advantages to cities. The Global Cities 2035 report prepared by Oxford Economics shows that by 2035, of the top 10 cities that will rank among the world's largest urban economies, seven will be port cities. ROPME has been designed considering that the maritime transport and port services industry, which is the most dominant blue economy industry in İzmir, will be a critical economic factor in the growth perspective of the city.

İzmir, the largest city in the Aegean Region in terms of population and foreign trade, has been a port city for 5,000 years. When considered together with the coastal interaction and coastal areas, the Aegean Region has 22 different ports. With 16 ports, the TR31 İzmir region has advantages in terms of sea transportation and ports. Seventy-five percent of İzmir's export volume, which exceeds \$12 billion, is shipped via maritime transport. As of 2020, İzmir ports handled a total of 80 million tons of cargo, thus serving 16 percent of our country's total cargo volume. Fourteen and seven tenths (14.7 percent) of the container load, which is considered as strategic cargo in terms of transportation in Türkiye, is handled at İzmir ports. As of 2020, the total container load served by 4 container ports in the region is 1.7 million TEUs. This figure shows that one out of every eight containers served in the Mediterranean freight traffic is handled in İzmir. Thanks to the 220 ports directly connected to the container ports in the region, the cargo load handled in the region is rapidly distributed to Europe, America and the Mediterranean via direct transport lines. The industries that create these export products, improve the product quality via direct design and export their products via marine transport are food, textile-apparel, plastics, machinery parts, and functional design-based furniture manufacturing industries.

Entitled the "wind energy capital" of Türkiye, İzmir has recently turned into an important center for the production of wind energy equipment. The city maintains its leading position in wind power generation as well as in the production of wind turbine equipment. İzmir has become the manufacturing hub for wind energy and equipment in the region as it offers an efficient logistics infrastructure, qualified workforce, high living quality for investors and employees, substantial wind energy potential and welcomes key international companies in the industry. Siemens-Gamesa, Enercon, and General Electric (GE), all global turbine manufacturers, produce the main wind turbine equipment in İzmir. Furthermore, of the independent equipment manufacturers in İzmir, TPI Composites own two blade manufacturing facilities and an R&D Center, CS Wind a steel tower factory, and Ateş Power a tower and direct-drive generator manufacturing facility. In addition to the major equipment manufacturers in İzmir, a broad supply chain consisting of local companies manufactures components for this equipment. As of 2021, there are more than 7,500 employees in the wind industry. Over \$400 million of large-size components

and parts, which can generally be classified as "project cargo," are exported annually through the ports. This figure corresponds to approximately 5 percent of İzmir's annual exports standing at \$9.5 billion.

The ship recycling (ship dismantling) industry stands out among other blue economy industries in Türkiye and in the region, as the entire ship recycling industry is located in İzmir. The main activities in the ship dismantling (or ship recycling) industry include the dismantling of end-of-life commercial or military ships and marine platforms using methods that do not pose any threat to human and environmental health, thus converting them into raw materials and semi-finished products to be re-used in different industrial areas. Thanks to the ship recycling industry, 95 percent of end-of-life ships, 98 percent of which are built with steel, are converted into reusable materials. The ship recycling industry has been recognized as a "green industry" by the International Maritime Organization (IMO) since 2019, as it contributes to the global conservation of energy and resources.

Aliğa district, which hosts many of the heavy industry enterprises in our region, also has 22 enterprises operating in the field of ship recycling. These companies dismantle 800,000 tons of ships annually, which provides direct employment to 1,536 people and has an economic value of over \$500 million. With its economic size and dismantling tonnage, Türkiye ranks third (after India and Bangladesh) among countries that are active in this industry. The European Parliament has determined that nine of the 22 companies in İzmir operate in accordance with the "Ship Dismantling Regulation," which was put into effect in 2013 to reduce the negative effects caused by the dismantling of ships with the EU flag, and has accredited these companies. In other words, one out of every three companies in the region dismantles ships in accordance with the "green industry" principles. All activities carried out by companies in the region are conducted in accordance with international conventions that are also signed by Türkiye, such as the "Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal" and the "Hong Kong Convention". The repurpose industry, which is the source of activities in the ship recycling industry, is among the industries with the highest number of background links in the İzmir Regional Input-Output Analysis. For this reason, it is accepted as one of the key sectors of the region. In line with the points summarized above and based on the structure and importance of the industry, the basic elements of the target practices are to develop employment in accordance with the "decent work" principle, and to increase the resilience of the sector and the number of green practices. The "Ship Recycling Industry Value Chain Analysis," prepared by our agency in 2021, includes suggestions for increasing the resilience of the industry. In 2022, in line with the "Resource Efficiency Program," we aim to analyze the sector for its industrial symbiosis dimension, to evaluate the results of the studies as a whole, and to determine relevant intervention tools.

Thirty-four (56 percent) of the 61 important fishing regions on the Aegean coastline of Türkiye are located in İzmir. Although the share of the Aegean Sea in Türkiye's saltwater fish production is about 9 percent, it has a share of 30 percent in terms of income from fishing thanks to hosting high-yielding species. More than a third of the aquaculture production in Turkish seas is carried out in İzmir. The second industry, in which İzmir has the highest share in Türkiye's sectoral export volume is "fishing, operation of fish production and breeding farms and related services," with a share of 27 percent. In the last 20 years, it has been observed that the production volume of fish farming activities has increased, while the production volume of wild fishing is in decline. The region has about 30 enterprises that operate actively in the aquaculture industry, almost all of which are exporters. These enterprises are in close contact with businesses such as fish and shellfish processing facilities, hatcheries, and fishmeal producers. The ROPME is aimed at developing the institutional capacities of local actors operating in the field of aquaculture and fisheries in İzmir, and to strengthen their production activities in terms of modern techniques and sustainability.

In line with its blue economy potential, another factor shaping this coastal city's economy is the ever-increasing power of its creative industries. In the literature, it is observed that individuals who innovate, produce high value-added services and products, and contribute more to growth and



innovation prefer coastal cities, showing there is a high correlation between coastal cities and creativity. This fact draws attention to the geographical correlation of the human capital theory, which states that a highly educated and qualified workforce contributes more to growth. In 2021, our Creative Agency published a study entitled "Analysis of Türkiye's Creative Industries at the Level of NUTS-2 Regions: A General Look at İzmir". When various fields of the creative industry are examined in terms of expertise, dominance and leadership, it is revealed that information communication technologies (software, games, computer programming), advertising and marketing activities, and specialized design activities (fashion design, industrial design, graphic design, interior architecture) in İzmir carry cluster characteristics. To this end, creative industries will be considered as a horizontal intersection area to improve the innovation and entrepreneurship capacity of the region, to increase the attractiveness of İzmir for the creative class (creative human resource potential) and creative initiatives, and to strengthen the creative ecosystem. Hamburg, Antwerp, Singapore and Liverpool will be taken as models as port cities with creative power.

Additionally, the fact that creative centers are located within the interaction areas of the ports is an example of the connection between the seas, coasts, ports and the concept of creativity. Similarly, the interaction area of the İzmir Port, which is located in the heart of the city and is one of the oldest ports in the history of the Republic of Türkiye, is a creative center with its buildings that host an important part of İzmir's industrial cultural heritage, and also has a strong potential for rapid transformation. With art initiatives and creative cultural productions, the region also constitutes one of the cultural production points of the city. The intervention plans for this region are handled with the participation of relevant stakeholders in the city and are therefore prioritized among other integrative studies in the ROP.

In the ROP design, İzmir's aforementioned property as a port city has been accepted as a strength. In addition, ROP activities were designed by reference to the strategic priorities of "High Technology, Innovation and Design Capacity," "Advanced Clusters" and "İzmir as a Center of Attraction Center in the Mediterranean" in the Strong Economy section of the İZBP; strategic priorities of "Quality Urban Life" and "Accessible İzmir" in the High Quality of Life section; and the strategic priorities of "High Employment Capacity" in the Strong Society section.

### **Preliminary Risk Assessment**

As already stated above, the most important activity as part of ROPME is to prepare an economic analysis of the region based on ports. The target audience of the study is the stakeholders in the city's maritime industry. Thus, the possible unwillingness of the groups and organizations that make up the target audience of the program is considered the most fundamental risk. The establishment of effective participation mechanisms is important for the management of this risk. To this end, it is aimed to ensure regular participation in existing governance mechanisms, to establish a new governance mechanism and to ensure regular communication with target groups. Furthermore, time planning for intervention tools and ROP activities is planned in an agile and flexible manner, taking into account the ripple effect of the COVID-19 pandemic on economic sectors.

### **3.3.3 Targeted Outcomes and Outputs**

The outcomes aimed to be achieved as part of the mentioned ROP are included in the following Key Performance Indicators and Output Performance Indicators tables.

Key Performance Indicators					
No.	Indicator Name	Unit	Target	Source of Verification	Number of Relevant Special Purpose(s)
1	Number of Clusters Developed	Number	1	Agency Data	1 and 2
2	Number of Cluster Member Ports	Number	8	Agency Data	1 and 2
3	Increase in the Volume of Cargo Handled at İzmir Ports	Percent	5	MoTI Data	1, 2, 3 and 4
4	Increase in Tonnage and Employment in İzmir Shipbreaking Activities	Percent	5	GEMİSANDER	1
5	Accredited Test and Analysis Laboratory for Industrial Ventilation, Air Conditioning and Refrigeration (EHİSLAB)	Number	1	Agency Data	2.4

Output Performance Indicators					
No.	Output Indicator	Unit	Target		Source of Verification
			2022	Total	
1	Current Situation Analysis and Development Perspective of the Ports of İzmir	Number	1	1	Agency Reports
2	Coordination Studies for Port Community Actors in Line with the Current Situation Analysis and Development Perspective of the Ports of İzmir	Number	2	6	Agency Data
3	Aliğa Ports Hinterland Analysis and Simulation	Number	1	1	Agency Reports
4	Kemalpaşa Logistics Village Feasibility and Operation Model Study	Number	1	1	Agency Reports
5	Number of Participants in Port Community Actors Coordination Meetings	Number	10	45	Agency Data
6	Monitoring and Evaluation Studies for İzmir Tourism Strategy and Action Plan	Number	1	1	Agency Reports
7	Implementation of the NESTA Creative Entrepreneurship Program	Number	1	3	Agency Reports
8	Number of Producers in Historical Production Basins	Number	30	30	Agency Reports

Output Performance Indicators					
No.	Output Indicator	Unit	Target		Source of Verification
			2022	Total	
9	Number of Product Types Identified in Historical Production Basins	Number	30	30	Agency Reports
10	Analysis and Feasibility Studies for the Development of Blue Economy Industries in İzmir	Number	2	6	Agency Reports
11	Analysis and Feasibility Studies to be Prepared in Line with İzmir Vision Discourses	Number	2	2	Agency Reports
12	Preparing an Inventory of İzmir's Underwater Cultural Heritage	Number	1	1	Agency Reports
13	Number of Sectoral Trade Fairs Held in İzmir	Number	1	1	İZFAŞ Data

### 3.3.4 Projects and Activities

The programs, projects and activities to be carried out as part of the related ROP are included in the "ROP Components" table below.

ROP Components Table						
WBS Code	Component Name	Type	Method	Responsible Institution	Responsible Unit	Special Purpose(s)
1	Aliağa Ports Hinterland Analysis and Simulation	Activity	Research, Analysis and Planning	İZKA	BGPU	1 and 2
2	Kemalpaşa Logistics Village Feasibility and Operation Model Study	Activity	Research, Analysis and Planning	İZKA	BGPU	1 and 2
3	Activities for the Development of the Offshore Wind Energy Industry	Activity	Research, Analysis and Planning	İZKA	ISO	1, 2 and 3
4	Analysis and Feasibility Studies for the Development of Blue Economy Industries	Activity	Research, Analysis and Planning	İZKA	BGPU	1
5	Studies on Preparing an Inventory of İzmir's Underwater Cultural Heritage	Activity	Research, Analysis and Planning	İZKA	BGPU	4
6	Analysis and Feasibility Studies to be Prepared in	Activity	Research, Analysis and Planning	İZKA	BGPU	1, 2 and 3

ROP Components Table						
WBS Code	Component Name	Type	Method	Responsible Institution	Responsible Unit	Special Purpose(s)
	Line with İzmir Vision Discourses					
7	Coordination Studies for Port Community Actors in Line with the Current Situation Analysis and Development Perspective of the Ports of İzmir	Activity	Collaboration and Coordination	Stakeholders of the İzmir Ports Ecosystem	BGPU	1, 2 and 3
8	Efforts to Strengthen İzmir's Creative Industries Ecosystem	Activity	Collaboration and Coordination	İZKA	BGPU	4
9	Monitoring and Evaluation Studies for İzmir Tourism Strategy and Action Plan	Activity	Collaboration and Coordination	İZKA	BGPU	4
10	NESTA Creative Entrepreneurship Program	Activity	Capacity Building	İZKA	BGPU	1 and 4
11	Çandarlı Port	Activity	Public Investment Project	MoTI	BGPU	1, 2 and 3
12	Kemalpaşa Logistics Village	Activity	Public Investment Project	MoTI	BGPU	1, 2 and 3
13	"CREATE IN İZMİR": Cultural and Creative Industries Entrepreneurship Center	Project	Stakeholder Project	İEÜ, İZKA	BGPU	4
14	Capacity-Building Project for the Ideal Transformation of the Turkish Creative Economy	Project	Stakeholder Project	KAGM, İZKA, İSTKA	BGPU	4
15	MARENTECH EXPO Offshore Energy Technologies Fair and Conference	Project	Stakeholder Project	DÜRED İZKA, İZFAŞ	BGPU	1 and 3
16	Accredited Test and Analysis Laboratory for Industrial Ventilation, Air Conditioning and Refrigeration (EHİSLAB) Guided Project Support	Project	Guided Project Support	İZKA, ESSİAD	BGPU, PIMU	1 and 4
17	Support Program for the Development of the Ports' Supporting Industries	Sub-Program	Call for Project Proposal	İZKA	BGPU	1, 2 and 3

ROP Components Table						
WBS Code	Component Name	Type	Method	Responsible Institution	Responsible Unit	Special Purpose(s)
18	Historical Cultural and Production Basins Support Program	Sub-Program	Technical Support	İZKA	BGPU	4
19	Technical Assistance Program for Fisheries and Aquaculture Industry	Sub-Program	Technical Support	İZKA	BGPU	1 and 3
20	Financial Support Program Execution Activities	Activity	Executing Financial Support	İZKA	BGPU	1, 2 and 3
21	Participation in ROP-Based Activities Organized by Stakeholders and Other Related Studies	Activity	Capacity Building	İZKA	BGPU	1, 2, 3 and 4

### 3.3.4.1 Research, Analysis and Planning

As part of this ROP, the Agency plans to carry out the following research and analyses in addition to its existing studies.

**Aliğa Ports Hinterland Analysis and Simulation Study:** One of the most important results of the Current Situation Analysis and Development Perspective of the Ports of İzmir study, which was completed in 2021, is the identification of infrastructure inadequacies of the ports in the Aliğa region, especially in terms of highways and connection roads in its hinterland. Thus, the development of Aliğa ports can only be supported by reinforcing the region's rail and motorway logistics infrastructure and increasing the storage facilities. In this context, a hinterland analysis will be conducted for the Agency to focus thematically on these dimensions and needs, which are not included in the plans of local governments, and to support these areas with the information it produces. Thus, the conditions necessary for regional ports to produce healthy services in line with their theoretical capacities and the nature of their cargo loads will be determined. A *"health check"* will be applied to regional ports to identify their optimum performance. Results and analysis will be combined in a simulation, and concrete results for making the investments needed by both the ports and the relevant public stakeholders will be shared with the public. To provide this service, collaborations are planned with international organizations specialized in this field.

**Kemalpaşa Logistics Village Feasibility and Operation Model Study:** Kemalpaşa Organized Industrial Zone, which has a highway and railway connection, is one of the most important organized industrial zones in the Aegean Region. Kemalpaşa Logistics Center, located next to this OIZ and 30.5 km from TCDD İzmir Port, is one of the most important public investments in the region. If the planned Torbalı-Kemalpaşa railway connection and the railway between Cumaovası and Aliğa are allocated for urban transportation, the railway loads coming from the Denizli-Aydın direction will follow the Torbalı-Kemalpaşa-Menemen-Aliğa-Çandarlı route and reach the port in Çandarlı. This way, Kemalpaşa Logistics Center will be a collection hub for the cargoes of the entire Aegean Region. This will strengthen the logistics power of İzmir on the railway and seaway networks.

Based on this background, the investment and financial perspective for Kemalpaşa Logistics Village is planned to be updated with the feasibility study to be prepared, and business models are planned to be proposed in the light of the updated feasibility study.

### **Analysis and Feasibility Studies to be Prepared in Line with "İzmir Vision" Discourses:**

Detailed feasibility studies and analyses are planned to be conducted to support the discourses of "İzmir, the Pioneer of Innovative Industries" and "İzmir, the Capital of Clean Energy," both of which are shaped by the works of our Agency and adopted by our Board of Directors. Consequently, in line with "İzmir, the Pioneer City of Innovative Industries," which is the core of our creative industries works, a detailed financial feasibility and business model study will be performed aimed at bringing the hinterland of TCDD İzmir Port and the industrial heritage structures located in the region into urban life by assuming new functions, and transforming the region into a production base for creative industries. Additionally, within the scope of the "İzmir, the Capital of Clean Energy" discourse, detailed concept project, feasibility, geological survey and operation model studies will be carried out in order to create a specialized new port infrastructure for supporting the export of wind turbine components and parts. İzmir is among the leading cities of our country in the production of equipment classified as "project cargo," such as industrial machinery and wind turbine components and parts. However, as a result of the interviews carried out with companies, it has been determined that in İzmir, the port infrastructure where the logistics processes for these cargoes can be carried out is limited. İzmir has a relatively higher handling capacity for container and bulk cargo, and ports focus their activities accordingly. Thus, project cargo transportation has remained in the background in terms of infrastructure. To export industrial machinery and wind turbine components and parts, which have high added value but more complex logistics processes, a new port infrastructure specialized in this field is needed in İzmir. Today, Türkiye has four wind turbine blade manufacturing plants, all of which are located in İzmir. In İzmir, 50-70 meters long turbine blades can be manufactured and logistics services can be provided for blades of that dimension. However, the demand for turbine blades has started to change in the global market. Together with offshore applications, blades reaching 100-120 meters in length have also started to be used in the industry, and their use is rapidly spreading. Similarly, the demand for other parts like towers, nacelles and cast parts has also started to change. Furthermore, the production and logistics of floating platforms also create the need for a specialized port. When we look at international examples of good practice (Aalborg, Esbjerg, Hull, Bilbao), we see that high-volume turbine component production sites are designed in a way to ensure that the logistics processes for the produced equipment is carried out in the easiest way. Given the fact that the industry is clustered in and around İzmir, we can say that the Çandarlı port, which is currently under construction in İzmir, will be the most suitable port for this purpose. Thanks to the revision and implementation of the Çandarlı Port project, a concept project is planned to be developed for this purpose. This concept project, which is needed by İzmir's manufacturing industry, will contain both ports and integrated production areas, and will carry our country to the future.

**Activities for the Development of Offshore Wind Energy Industry:** Offshore wind energy is a type of clean energy that has gone through rapid development worldwide and has recently entered Türkiye's agenda. The Ministry of Energy and Natural Resources continues its preparations for tenders for the establishment of offshore wind power plant sites and the wind energy industry's interest in this field is increasing every day.

İzmir has become the most advanced manufacturing hub for wind energy and equipment in the region as it offers efficient road and maritime connections, logistics infrastructure, qualified workforce, high living quality for investors and employees, substantial wind energy potential and welcomes key international companies in the industry. A sectoral roadmap has been created to ensure the sustainability of the İzmir wind industry's maturity level and to ensure its access to the offshore wind energy market. To this end, our Agency will first perform offshore wind measurements. This study aims to create usable offshore wind models to enable investments in new offshore wind power plants in Türkiye, to share these models with the industry's stakeholders and to produce the necessary data for planning future

strategies and investments in the region. This study will be carried out in collaboration with İzmir Institute of Technology and will be the first of its kind in Türkiye. The study also aims to accelerate the development of the industry by conducting research, analysis and program studies covering topics such as Identification of Areas Suitable for Offshore WPP Investment; Determination of Turbine Capacity and Technology Suitable for Marine Areas; and Identification of Infrastructure Needs such as Human Resources, Production, Logistics and Network; and Promotion.

All these efforts will be carried out in coordination and collaboration with the relevant institutions, especially the MoIT, the Ministry of Energy and Natural Resources, the Turkish Wind Energy Association (TÜREB), the Offshore Wind Energy Association (DÜRED), and the Southern Marmara Development Agency.

#### **Analysis and Feasibility Studies for the Development of Blue Economy Industries in İzmir:**

In EU sources, coastal tourism, maritime transport, shipbuilding, ship repair and recycling, port services, seabed mining, aquaculture, and sea fishing are considered as existing marine industries. Industries such as blue energy (offshore wind, wave, tide), blue biotechnology, and seawater purification are considered as emerging sectors. Research, analysis and feasibility studies will be carried out to determine the region's potential and investment opportunities in both existing and newly developing sectors, and to identify new technology areas to enable value-added production in the region. In line with these purposes, necessary research, analysis and feasibility studies will be carried out in collaboration with regional stakeholders and relevant institutions and organizations in areas of importance, especially aquaculture and fisheries, ship recycling and blue biotechnology.

**Studies on Preparing an Inventory of İzmir's Underwater Cultural Heritage:** Being an important port city on sea trade routes, İzmir has a high potential in terms of shipwrecks belonging to different centuries. In this respect, the detection and examination of underwater cultural assets in the İzmir Bay, discovery of the historical values lost in time, and transformation of them into tourism assets are important in terms of further developing the coastal tourism potential of the region. Initiated in 2021, the inventory work to reveal the underwater cultural heritage in İzmir Bay will be further advanced to protect the identified cultural heritage and turn it into a cultural tourism asset. Suggestions for making İzmir a model province in this regard will be continued together with implementation steps and a feasibility study for the establishment of Türkiye's first museum of naval war history in İzmir.

#### **3.3.4.2 Collaboration and Coordination**

All activities within the scope of this ROP will be carried out in collaboration with different stakeholders and in coordination with relevant stakeholders in the region. However, since these issues are also included under other headings, they are not included here. Other activities that fall under the scope of collaboration and coordination are summarized below.

#### **Coordination Meetings for Port Community Actors in Line with the Current Situation Analysis and Development Perspective of the Ports of İzmir:**

Port governance practices based on multi-actor participants and partnership-based new management models are used to improve the performance of ports and their services. The development, effectiveness and productivity of ports depend on their location, infrastructure and superstructure development state, connections with transportation systems, and relations with stakeholders, customers and the environment. It is aimed to ensure regional stakeholders' understanding and adoption of the "Current Situation Analysis and Development Perspective of the Ports of İzmir" study initiated in 2020 and completed in 2021; support the collaboration established with and among stakeholders through the development scenarios pointed out in the study; raise the awareness of port stakeholders in the region on governance principles; improve

inter-actor dialogue, transparency, collaboration and accountability; and carry out studies to increase performance.

Accordingly, collaboration will be established with the PortXL Entrepreneurial Accelerator Program, which is an initiative born out of the Rotterdam Port ecosystem and is the world's most prestigious accelerator program in marine technologies. Thus, the program will be promoted nationally, the inclusion of enterprises offering maritime transport and port services products will be encouraged, the maritime technologies entrepreneurship ecosystem will be explored, the experience of the initiatives that can be accepted into the program and the initiatives in international accelerator programs will be improved. As a result of the ecosystem analysis to be carried out by PortXL, the maturity level, needs and capacity development perspective of the marine technologies entrepreneurship ecosystem in Türkiye and our region will be determined.

**Efforts to Strengthen İzmir's Creative Industries Ecosystem:** The “Analysis of Türkiye's Creative Industries at the Level of NUTS-2 Regions: A General Look at İzmir” was completed in 2020 and shared with the public in 2021. As part of this study, a comparative analysis was carried out on the creative industries potential of İzmir. In accordance with the definition provided by the United Kingdom Department of Culture, Media and Sports' (DCMS) for "creative industries" in 2001, prominent areas have been determined through statistics such as total production value, added value, number of employees, number of companies, investments, foreign trade and R&D. The highest specialization in İzmir was observed in the information technologies, software and computer services industries. Advertising and public relations activities and specialized design services (fashion, industrial design, interior architecture) have been identified as the industries closest to specialization. “Creative diffusions” are defined as creative industries' direct contribution to their region's creative capacity through their innovative activities and the spread of this influence to other areas of the economy. "Co-location" is defined as the tendency of industries and firms, which have knowledge dissemination between each other, to be located in the same regions. It has been observed that the information technologies, software and computer services industries and the advertising and public relations specialized design activities industries show a strong association in the İzmir region in terms of creative diffusion and co-location. In the light of these findings, it is aimed to carry out activities to strengthen the relationship between both industries and to reinforce the capacity in the field of design. Based on the mapping of the actors in the creative industries ecosystem in İzmir, which was carried out to complement this study, studies will be carried out in 2022 to develop the creative industries ecosystem in terms of defined needs, and to strengthen the prominent creative industries in İzmir.

**Monitoring and Evaluation Studies for İzmir Tourism Strategy and Action Plan:** The İzmir Foundation, supported by İzmir Metropolitan Municipality, has a multi-stakeholder structure that brings together local government, private sector, and nongovernmental organizations and is positioned as an actor responsible for the promotion of İzmir. The monitoring and evaluation studies of the İzmir Tourism Strategy and Action Plan prepared by the İzmir Foundation will be carried out by the Agency. The monitoring and evaluation model of the study was created in 2021. In line with this model, the first measurement and evaluation will be made in 2022, to analytically measure the effect created by the strategy and evaluate the impact of the targets determined in the strategy and action plan on the urban economy, primarily on the coastal economy.

### **3.3.4.3 Capacity Building**

**Implementation of NESTA Creative Entrepreneurship Program:** With the training programs held for the first time in 2021 and planned to continue in 2022 and 2023, it is aimed to ensure the development of the creative ecosystem of the region through creative entrepreneurs. A three-day training program, which consists of different modules to help creative entrepreneurs turn their business ideas into reality, will be implemented. The target group of the program is creative entrepreneurs who have a



powerful business idea at the design stage, have businesses at the establishment stage (0-3 years), or have a new creative business and are planning to make changes. The program will focus on creative industries such as design, fashion, and technology. During the modules, the program participants will be provided knowledge and experience about establishing and running an enterprise that is successful in developing business ideas, identifying potential customers, analyzing the market and income model, and evaluating the financial situation.

**Participation in ROP-Based Activities Organized by Stakeholders and Other Related Studies:** Both regional and national institutions and organizations carry out a number of studies and organize activities to support the Agency and the region in accordance with the objectives and priorities indicated in the ROP. Participation will be ensured in these activities and studies that are in line with the result-oriented program priorities. Relevant studies on the international, national and regional levels will be followed, the results will be disseminated in the region, and the information obtained from this follow-up will be taken into account for the improvement and revision of the ROP when necessary. In line with the objectives and priorities of the ROP, joint workshops, meetings, events and training programs will be organized in collaboration with relevant stakeholders to contribute to the content and objectives of the ROP.

#### **3.3.4.4 Agency Supports**

**Accredited Test and Analysis Laboratory for Industrial Ventilation, Air Conditioning and Refrigeration (EHİSLAB) Guided Project Support:** The industrial ventilation, air conditioning, and refrigeration industry has the characteristics of a mature cluster in our region. It grows by increasing its exports by 8 percent every year, exports 1/3 of its production, and is one of the most powerful industries among the industries of our region that export by sea. This project, the applicant of which is the Aegean Refrigeration Industrialists' Association (ESSİAD), aims to establish a laboratory infrastructure that will meet the testing and analysis needs of the industry. The laboratory to be established will make it possible to carry out tests that cannot be performed in TSE laboratories, especially for air handling units, water type batteries and heat recovery devices. Thus, these services will be localized for this industry, whose annual test and analysis expenditures are around €3 million. After achieving the EUROVENT accreditation, which is needed for exporting to EU countries (the main export market of the industry), the first accredited test and analysis laboratory serving the Turkish industrial ventilation, air conditioning, and refrigeration industry will have been established.

**Support Program for the Development of the Ports' Supporting Industries:** The financial support program includes the design and implementation of financial support instruments suitable for the industries and needs determined in line with the results of the Current Situation Analysis and Development Perspective of the Ports of İzmir study. The financial support program, which will be a regional adaptation of a model previously implemented in the United Kingdom, aims to increase through design the value-added production, export and creativity capacities of certain pilot sub-sectors that use maritime transport to export. The objective is to carry out comprehensive analyses in terms of production, service and human resources of the enterprises to be determined through calls in the pilot industries, making designer-enterprise matches to start the implementation period of the program for enterprises, and to extend the leverage effect expected to be created through design to other economic industries in the medium- and long-term. Program priorities, project activities and budget will be finalized after detailed studies and will be determined by studies to be carried out during the year.

**Historical Cultural and Production Basins Technical Support Program:** In this study that started in 2020, the basins in the periphery of İzmir, which can be described as "historical production basins" (HPB), were identified, and inventories of the characteristics, flora, fauna, human settlement

properties, product patterns and traditional production methods in these basins were recorded. In line with the Agency's thematic focus on sustainability, a technical support application that will enable the development of traditional production methods and subsistence economy, which is one of the main features of HPBs, is planned to be implemented in 2022. The technical support program aims to develop the capacities of interface institutions for the marketing of HPB products, the creation and promotion of sales channels, and to provide consultancy in areas such as water management in HPB basins.

**Technical Assistance Program for Fisheries and Aquaculture Industry:** The aim of the program is to provide consultancy to local actors operating in the fisheries and aquaculture industry in İzmir for their works that are important in terms of production sustainability, but have difficulties in the preparation and implementation stages due to the lack of institutional capacity. Thus, the priorities of the program are to provide consultancy to enterprises, business organizations, unions, chambers, cooperatives and local administrations to "ensure the use of advanced technology and modernization in aquaculture systems," "achieve sustainability in the fishing and aquaculture industry," and "support the use of clean energy resources in the industry".

**Financial Support Program Execution Activities:** As part of this ROP, application guides and promotional documents will be prepared regarding the calls for proposals for projects. Subsequently, calls for proposals will be announced and information meetings will be held on the preparation and submission of project proposals. In addition to the training sessions to be provided, consultancy services will be procured to provide technical assistance to potential applicants. Activities will be carried out regarding the selection and training of independent assessors who will participate in the evaluation of projects in terms of technical and financial quality. Assessment committees will be formed on a program basis to conduct the necessary checks on the assessments carried out by independent assessors, to formulate and report opinions, and to suggest the list of projects deemed eligible for financial support. Preview visits will also be organized as part of the projects. Where necessary, organizations related to programs and projects will be held or participation will be ensured in the existing events, and technical support service will be procured.

#### **3.3.4.5 Major Public Investments**

**Çandarlı Port:** The project site of the North Aegean Çandarlı Port is located within the borders of the Bergama District, Zeytinadağ Municipality. Located in the east of Çandarlı Bay, which is 20 km long and 25 km wide, the region is 80 km and 55 nautical miles away from İzmir. Site selection studies for Çandarlı Port were carried out in 1993, and the port was primarily planned to serve transshipment cargoes. Four feasibility studies for Çandarlı Port were conducted by the former General Directorate for the Construction of Railways Harbors and Airports (currently the Ministry of Transport, Maritime Affairs and Communications, General Directorate of Infrastructure Investments). Construction of the port is still ongoing. Planned in two stages, the first stage of the port will comprise a 1,000-meter dock that will yield a capacity of 2 million TEUs/year. Subsequently, the dock is planned to be extended to 2,000 meters by 2035, increasing the annual capacity to 4 million TEUs/year.

**Kemalpaşa Logistics Village:** The logistics village project, carried out by the Ministry of Transport, Maritime Affairs and Communications in Kemalpaşa district, will provide railway connection to the OIZs in Turgutlu, Manisa, Torbalı, Aydın, Denizli, and especially İzmir, and highway connection to Istanbul and Ankara. The village, which is planned to be established on an area of 1.2 million square meters, will have a hinterland of 3 million square meters. The first phase of the village, which was included in the 2010 investment program, has been completed. The infrastructure tender for

the village was held in 2012 and the tender for its second phase was held in 2018. The investment, whose expropriation processes are in progress, is planned to be put into operation in 2025.

#### **3.3.4.6 Projects Related to EU and Other International Programs**

**CIRCULAMARE Program - Regional Project for the Elimination of Plastic Sea Waste:** The CirculaMare Program created by the Alliance to End Plastic Waste (AEPW) and the German Organization for International Cooperation (GIZ), has a budget of €50 million and aims to develop innovative methods for reducing the amount of plastic waste and pollution in the Mediterranean Sea. The implementation period of this international program, which covers Albania, Algeria, Kosovo, North Macedonia, Egypt, Serbia, Greece and Türkiye, is planned to start in 2022. Nine scalable and economically viable projects will be funded by the program. As part of the program, GIZ made a collaboration request and suggested that İzmir could be one of the implementation areas. This suggestion has been evaluated and it has been decided to cooperate in developing a project proposal that includes the stages of effective separation, collection and recycling of plastic waste at the source by attracting the relevant financial source to our region. We plan to cooperate with GIZ on the development, sectoral and implementation steps of this project in 2022.

#### **3.3.4.7 Other Projects and Activities**

Collaboration and interaction between institutions and between projects play a critical role in achieving the goals stated in the ROP. As part of this ROP, the Agency may guide the works to be carried out by other stakeholders in the region. In the first stage, these activities have been determined as follows. However, the ROP will be revised if an important new project or activity is identified in the ROP evaluations carried out in 2022.

**CREATE IN İZMİR - Cultural and Creative Industries Entrepreneurship Center:** As part of the Creative Industries category of the Competitive Industries Program implemented as a joint venture by the MoIT and the European Union, the “Create in İzmir - Cultural and Creative Industries Entrepreneurship Center” project was entitled to receive sponsorship. The project was presented by İzmir University of Economics and our Agency is among the project partners. The Create in İzmir project aims to develop and strengthen the creative culture industries ecosystem in İzmir, to increase the entrepreneurship and innovation capacity of the region through creative industries, to strengthen the bonds between ecosystem actors, to boost the product development capacity in target sectors, and to establish in the region a strong and effective Creative Industries Entrepreneurship Center that will solidify inter-actor collaboration. Activities to be carried out jointly as part of the project will be conducted under this category.

**As part of the program "Technical Assistance for Building Capacity for the Appropriate Transformation of the Creative Economy in Türkiye:** Sectoral Operational Program for Competitiveness and Innovation," and in line with the sub-goal of "Activity 3.2: Institutional Capacity Building Regarding the EU Acquis and the Sectoral Approach," the technical support project will be implemented. For this project, the KAGM assumes the applicant role, and our Agency and ISTKA are project partners. The main objective of the project is to increase the capacity of central and local institutions in Türkiye to be included in the creative economy under the coordination of our Ministry. To this regard, activities are planned to develop an inclusive creative economy strategy, map the creative economy of Türkiye with Istanbul and İzmir being applied as examples, define and classify creative professions, revise the current statistical model for the creative economy (thus use the correct parameters and criteria for measurement), develop the creative ecosystem in Türkiye and create a more qualified governance structure in a way that Istanbul and İzmir will set an example. The aim of the international “Creative Summit of Türkiye” event, which will be held for the first time in Türkiye, is to raise

awareness about the field. The project budget is €2.9 million and the implementation period is 18 months.

**MARENTECH EXPO Offshore Energy Technologies Fair and Conference:** Established under the leadership of Istanbul Metropolitan Municipality and in partnership with the Union of Chambers and Commodity Exchanges of Türkiye (TOBB), EBSO, İZTO, İTB and EİB, İzmir Fuarcılık Hizmetleri Kültür ve Sanat Etkinlikleri A.Ş. (İZFAŞ) is responsible for the management of the İzmir Fair events. İZFAŞ organizes many specialized fairs in İzmir, and since 2015 it has been organizing all its fairs at the Fair İzmir site, which has a total area of 330,000 square meters and an indoor and outdoor exhibition area of 120,000 square meters. MARENTECH EXPO Offshore Energy Technologies Fair and Conference will be held in İzmir between May 25-27, 2022 as a result of the collaboration between İZFAŞ, DÜRED, and our Agency. With this event, the goal of "organizing a clean energy fair in İzmir," which is included in the 2021 Work Program and ROP, will have been realized. The fair also aims to bring together participants who offer alternative energy services, products and technologies, such as floating SPP, wave power, current power, as well as offshore wind technologies. The target audience of the fair is maritime companies; energy equipment manufacturers; port, shipyard, shipping, service, marine construction/assembly companies; and foundation engineering and bathymetric companies. The conference, which will be held simultaneously with the fair, will be a scientific event to bring together academics, public representatives and industry working in the field of offshore wind energy.

### 3.3.5 Program Duration and Schedule

The duration of the ROP is five years, from 2021 to 2025. Key activities of the ROP will be concluded within the first three years. In the final two years, activities that were initiated but not concluded within the first three years, such as activities carried out under financial support programs or outsourced projects will continue. No new financial support will be implemented as part of the ROP in the final two years.

ROP Scheduling Table				
WBS Code	Component Name	Duration	Start Period (Year/Quarter)	End Period (Year/Quarter)
1	Aliğa Ports Hinterland Analysis and Simulation	12 months	2022/1	2022/4
2	Kemalpaşa Logistics Village Feasibility and Operation Model Study	12 months	2022/1	2022/4
3	Activities for the Development of the Offshore Wind Energy Industry	36 months	2021/1	2023/4
4	Analysis and Feasibility Studies for the Development of Blue Economy Industries	24 months	2021/1	2022/4
5	Studies on Preparing an Inventory of İzmir's Underwater Cultural Heritage	24 months	2021/1	2022/4
6	Coordination Studies for Port Community Actors in Line with the Current Situation Analysis and Development Perspective of the Ports of İzmir	36 months	2021/1	2023/4
7	Efforts to Strengthen İzmir's Creative Industries Ecosystem	36 months	2021/1	2023/4

ROP Scheduling Table				
WBS Code	Component Name	Duration	Start Period (Year/Quarter)	End Period (Year/Quarter)
8	Analysis and Feasibility Studies to be Prepared in Line with İzmir Vision Discourses	24 months	2022/1	2023/4
9	Monitoring and Evaluation Studies for İzmir Tourism Strategy and Action Plan	28 months	2021/4	2023/4
10	NESTA Creative Entrepreneurship Program	36 months	2021/1	2023/4
11	Çandarlı Port	36 months	2021/1	2023/4
12	Kemalpaşa Logistics Village	36 months	2021/1	2023/4
13	CREATE IN IZMIR: Project for Developing the Creative Culture Industries Ecosystem and the Establishment of a Creative Culture Industries Center	24 months	2022/1	2023/4
14	Capacity-Building Project for the Ideal Transformation of the Turkish Creative Economy	24 months	2022/1	2023/4
15	MARENTECH EXPO Offshore Energy Technologies Fair and Conference	6 months	2022/2	2022/3
16	Accredited Test and Analysis Laboratory for Industrial Ventilation, Air Conditioning and Refrigeration (EHİSLAB) Guided Project Support	24 months	2022/1	2024/4
17	Support Program for the Development of the Ports' Supporting Industries	12 months	2024/1	2024/4
18	Historical Cultural and Production Basins Technical Support Program	9 months	2022/2	2022/4
19	Technical Assistance Program for Fisheries and Aquaculture Industry	9 months	2022/2	2022/4
20	Financial Support Program Execution Activities	24 months	2024/1	2025/4
21	Participation in ROP-Based Activities Organized by Stakeholders and Other Related Studies	24 months	2022/1	2022/4

### 3.3.6 Management and Coordination Regulations

The working units in the Agency are ROP-based structures to ensure the effective management of ROPs and thematic specialization required by the ROP. In this regard, the ROP will be implemented by the Blue Growth Policy Unit (BGPU). Different units responsible for the ROP components are included in the components table above. The Project Implementation and Monitoring Unit will be responsible for the monitoring and evaluation of the sub-programs and guided projects to be carried out as part of the ROP.

In-agency coordination and follow-up of the ROP will be carried out by the ROP Management Task Group consisting of the Secretary General and Unit Heads. Coordinated management of the ROP process will be ensured with monthly meetings to be held by the ROP Management Task Group. The head of the relevant unit will nominate a Component Officer on the basis of expertise for activities included the ROP. Necessary follow-up will be carried out by the ROP Management Task Group in the light of the detailed work schedule to be created by the Component Officer.

The general progress of the program will be monitored by the Agency's Board of Directors. To address and solve any potential problems, the opinions and suggestions of the institutions and organizations that cooperate as part of the ROP can be obtained in line with the request of the Board.

### **3.3.7 Monitoring and Evaluation**

The monitoring and evaluation of ROP works will be carried out in line with the above-mentioned management structure. In regular meetings, the current status of the ROP will be monitored, risks will be evaluated and necessary corrective measures will be taken. The Project Implementation and Monitoring Unit (PIMU) will be responsible for the monitoring and evaluation of the sub-programs and guided projects to be carried out by the Agency as part of the ROP. The outputs of the activities to be carried out by the Agency as part of the ROP will be evaluated by the related unit. The activities to be carried out by other institutions as part of the ROP will be monitored by the members of the ROP Management Task Group. The related unit will be responsible for the preparation of the Periodic Progress Reports that will be compiled every 6 months for the ROPs, and for the preparation of the conclusion reports to be compiled at the end of the 3rd and 5th years for the ROP. At the end of the 7th year of the ROP, an impact analysis will be carried out by the ROP Management Task Group.

## 4 CORPORATE DEVELOPMENT

Descriptive information related to the Corporate Development (CD) category is provided below. Activities related to the Agency's organizational structure, human resources, corporate management, communications, promotion and staff training operations are included in this section.

### 4.1 Activities

The programs, projects and activities to be carried out for Corporate Development are included in the "Components" table below.

CD Components Table					
WBS Code	Component Name	Type	Method	Responsible Institution	Responsible Unit
1	Agency Corporate Transformation Studies	Activity	Research, Analysis and Planning	İZKA	CMU
2	Project Pool Building and Preliminary Feasibility Studies	Activity	Research, Analysis and Planning	İZKA	ALL UNITS
3	Development of Strategic Plans and ROPs, Necessary Analysis and Research Studies	Activity	Research, Analysis and Planning	İZKA	ALL UNITS
4	Studies to Increase the Effectiveness of Previous Financial Support (FS) Programs with Guided Projects	Activity	Collaboration and Coordination	İZKA	ALL UNITS
5	Participation in Corporate Development-Related Activities Organized by Stakeholders and Other Related Studies	Activity	Capacity Building	İZKA	ALL UNITS
6	Promotional Studies and Organizations to be Performed by the Agency	Activity	Promotional Activities	İZKA	ALL UNITS
7	Preparation of Agency Promotional Materials	Activity	Promotional Activities	İZKA	ALL UNITS
8	My Investment Support Partner Program	Activity	Promotional Activities	İZKA	ISO
9	General Investment Promotion and Support Activities	Activity	Promotional Activities	İZKA	ISO
10	Meeting of Foreign-Capitalized Companies	Activity	Promotional Activities	İZKA	ISO
11	Training Activities	Activity	Other Projects and Activities	İZKA	CMU
12	Payments Regarding Personnel Expenditures	Activity	Other Projects and Activities	İZKA	ALL UNITS
13	Activities Related to Audits of the Agency	Activity	Other Projects and Activities	İZKA	CMU
14	Execution of the Legal Procedures of the Agency	Activity	Other Projects and Activities	İZKA	HM
15	Execution of General Administrative Services	Activity	Other Projects and Activities	İZKA	CMU

CD Components Table					
WBS Code	Component Name	Type	Method	Responsible Institution	Responsible Unit
16	Management of the Agency's Website and Social Media Accounts	Activity	Other Projects and Activities	İZKA	BGPU
17	Monitoring the Agency's Media Coverage and Corporate Advertisements	Activity	Other Projects and Activities	İZKA	BGPU

#### 4.1.1 Research, Analysis and Planning:

As part of this ROP, the Agency plans to carry out the following research and analyses in addition to its existing studies.

**Agency Corporate Transformation Studies:** Technical infrastructure works for executing Agency operations processes through a single web-based software platform will be completed and thus the paperless office goal will be achieved. As part of the protocol signed by our Ministry with TÜBİTAK SAGE, a software will be developed to evaluate the performance of Development Agencies personnel. Our Agency will make the necessary payments for the software it will use.

#### **Project Pool Building and Preliminary Feasibility Studies:**

To support production by developing projects that will reveal İzmir's potential and accelerate its economic development, a pool of projects with completed preliminary feasibility studies will be created. In addition to guided projects, projects to be developed are expected to be financed by public investment, state subsidies, public-private collaboration, outsourced loans, international funds or private sector equity.

The project subjects that will be included in the project pool will be of a nature that will enable our Agency to move up in the value chains in the ROP areas of its expertise and medium-high technology products, ensure integration with global production systems, and support the institutionalization, marketing, innovation and transportation infrastructures of the regions.

#### **Development of Strategic Plans and ROPs, Necessary Analysis and Research Studies:**

Activities to develop Agency ROPs will be continued in 2022. Participatory activities and collaborations will be developed in order to reveal the future vision of the region, to improve the knowledge and awareness of the stakeholders about the issues on the regional agenda, and to obtain the opinions of different segments with new research and analytical studies that reveal the role of the Agency in the realization of the goals in İZBP and its institutional strategic orientation.

#### 4.1.2 Collaboration and Coordination

All activities in the CD category will be carried out in collaboration with different stakeholders and in coordination with relevant stakeholders in the region. Other activities that fall under the scope of collaboration and coordination are summarized below.

**Studies to Increase the Effectiveness of Previous Financial Support (FS) Programs with Guided Projects:** It is necessary to increase the effectiveness and outputs of the projects supported by the Agency with guided project support and grant programs, to achieve the multiplier impact in the project setup and to strengthen the sustainability of the resulting structures in the ecosystem. For this purpose, large-scale promotion and dissemination studies will be implemented in collaboration with the



beneficiary institutions, especially in the industries or fields in which the projects belong to. Within the scope of this component, the different needs of beneficiary institutions arising from the implementation will be identified and met; collaboration with the targeted segments of the projects will be developed; in large-budget R&D, innovation and sectoral specialization infrastructure facilities obtained especially through guided projects, areas of improvement in different areas such as promotion, operability, efficiency and institutionalization will be determined with the support of experts, and solutions will be developed. These studies will be carried out in 2022 and 2023 in collaboration with relevant institutions and organizations.

#### **4.1.3 Capacity Building**

All projects in the CD category include activities that are aimed at increasing the capacity of not only the stakeholders in İzmir, but also the Agency. However, since these issues are also included under other headings, they are not included here. Other activities that fall under the scope of capacity building are summarized below.

#### **Participation in Corporate Development-Related Activities Organized by Stakeholders and Other Related Studies:**

Both regional and national institutions and organizations organize national and international conferences, seminars and events that will contribute to the corporate development of the Agency. Participation will be ensured in these activities and studies that are in line with our Agency's priorities. Relevant studies on the international, national and regional levels will be followed, the results will be disseminated in the region, and the information obtained from this follow-up will be used for the reinforcement of corporate development policies when necessary. In line with corporate development efforts, joint workshops, meetings, events and training programs will be organized in collaboration with relevant stakeholders.

#### **4.1.4 Promotional Activities**

Promotion and investment support activities within the scope of the CD target are as follows.

**Promotion Activities and Organizations to be Performed by the Agency:** Promotional films will be prepared regarding the activities and operational priorities, and especially the Agency's completed programs and related success stories, promotional materials will be created and effective promotional activities will be ensured. Large-scale meetings will be held to announce the processes and results of grant programs, guided projects and other support activities and Agency activities to the public more widely and effectively, and publicity activities will be implemented through print, visual, and digital media channels for promotion and dissemination.

Meeting, visual and printed material production and promotion works will be carried out annually and periodically within the year to ensure that the Agency's Work Program and priorities in the program are better understood and adopted in the public and thus its success is increased. Publication and research studies will be carried out to evaluate the historical and cultural values of İzmir in studies that support the Agency's promotional and investment efforts. Activities, events, material production and consultancy procurement efforts can be carried out for national or international promotion, provided that they will contribute to the economy of İzmir and Türkiye, and increase the efficiency of the Agency's activities related to the issues that are in the focus areas of its result-oriented programs.

The İzmir Time Machine web page, which was initiated in 2019 and opened in 2021, offers a modeling of İzmir's history by periods. The content development work of the İzmir Time Machine web page, which is presented with a technological infrastructure that will allow interaction on a web-based

platform, will continue this year. Efforts will continue to enable the use of the content to be produced for purposes such as game development, education, tourism promotion, and in multifaceted areas to generate income for the Agency. Studies will be carried out to develop mutual collaboration between this platform and other projects within the Vienna-based Time Machine Europe network. With the content development activities to be carried out in 2022 on the İzmir Time Machine website, the inclusion of centers with historical and cultural value, especially of Bergama and Selçuk, which are on the UNESCO World Heritage List, and Birgi, which is on the Tentative List, will be prioritized. Activities will be carried out to develop and update the content of the portal and to give it a sustainable structure with the technical infrastructure and scientific-technical collaboration network it will create. To this end, necessary collaborations will be established with public, private and nongovernmental organizations, and studies will be carried out to improve the local capacity for modeling and display technologies used in this platform. Informative activities will be carried out to ensure that the people in İzmir are aware of this technology and study. The portal is predicted to have an awareness-raising and capacity-building effect on the entire city and our stakeholders in terms of digitalization and virtual applications that will have a direct and deep effect on many industries, especially tourism.

Bergama is one of the centers where İzmir's most important cultural and historical features come together. Studies will be designed to promote and increase the economic value of its cultural richness and handicrafts such as Pergamon cloth, pottery, traditional parchment making, carpet and rug weaving, saddle making, and basketry, which attract both national and international attention. Additionally, parchment making will be prioritized and handled separately. With the production of parchment, the people of Pergamon initiated a cultural revolution. Parchment enabled the transition from rolls to the codex, which constituted the first examples of today's books, and the technology was then carried to Rome. These developments are of great importance in terms of cultural history. "Karatabakçılık" is the traditional method used for tanning of animal skin into leather, and afterward, processing it for different uses such as buff, shoe leather, parchment and drum leather. This method has been used since ancient times until today. Lamb, cattle, goat or camel skins can be processed for this purpose. The excess meat and fat on the skins are removed by using different manual tools. Then, the skins are kept in lime water to be cleared off from their hair, fat and meat, and then dried by stretching over wooden panels with wooden nails. After the skin is dried, it can be sandpapered using different materials at different thicknesses according to the desired use of the leather. Relevant studies are planned to ensure parchment's inclusion in the list of intangible cultural heritage assets, and to develop parchment production trainers in the region. Some of the other goals include making parchment one of the prominent elements for promoting the region and increasing its touristic attraction, creating tour packages and workshops that will create a parchment-focused tourist experience, adding parchment-oriented activities to events and festivals in the region, and increasing the institutional capacity of local organizations in this regard. In this regard, planning studies will be carried out in districts other than Bergama based on issues such as youth employment, high value-added production, economic diversification, branding, and increasing tourism revenues.

2022 will be the 100th Anniversary of İzmir's liberation from occupation, and 2023 will be the 100th anniversary of the 1st İzmir Economy Congress. For this reason, events such as exhibitions, panels and symposiums can be organized to focus on İzmir's economic life, industry and trade and its critical position as a port city throughout history, and our Agency will take part in the planning of the events to be organized within this scope.

**General Investment Promotion and Support Activities:** Support activities will continue to be carried out within the scope of technical consultancy duties in every process such as providing national

and foreign companies that plan to invest in İzmir with the information they need such as finding an investment area specific to their projects, coordination with institutions, information about incentives and conducting permit and license procedures.

Two main objectives are pursued as part of this task:

1. Contributing to the attraction of new domestic and foreign investments to İzmir
2. Ensuring that Foreign-Capitalized Companies, which already have direct investments in İzmir, maintain and expand their current investments

Investment consultancy services will continue to be provided to potential investors as part of these two main objectives. Infrastructure activities will be carried out. These activities include preparing necessary documents and reports to provide better service to potential investors, conducting joint works with relevant institutions, holding meetings with relevant commissions, and becoming a member of international databases following foreign investment movements.

Field visits to the company and private investment sites will be carried out and support activities will be continued in order to solve the problems of foreign direct investors that have already invested in İzmir or have new investment plans. As part of these visits, it will be ensured that investors' problems are identified on-site and steps are taken to solve them. These visits are aimed at eliminating the negative and bureaucratic image of the public sector in the eyes of investors and to create a new public image in which investors are visited personally to solve any problems. These visits to be made throughout 2022 and 2023 will be planned monthly and applied weekly. A total of 120 companies will be visited and reported on as part of this activity.

As part of the duties assigned to the Development Agencies in the “Decree No. 2012/3305 on State Aids in Investments” published in the Official Gazette on June 19, 2012, necessary activities will be carried out to receive applications from companies that apply for incentive certificates, conducting completion appraisals submitted by the Ministry and providing necessary information and orientation to companies that apply for incentives.

Another study to be carried out within the scope of this activity is the creation of a software-based real-estate database primarily to provide services to foreign investors. Through this database, it is aimed to determine the potential investment areas, to present the possibilities to the investor and the land owner after evaluating the properties and ownership of the areas determined, and to facilitate the reconciliation between the investor and the real-estate owner by presenting the suitable investment areas to the investors at appropriate prices.

**Meeting of Foreign-Capitalized Companies:** The "Meeting of Foreign-Capitalized Companies" event will be organized to bring together foreign capital companies and related institutions operating in İzmir and to discuss collaboration opportunities.

**My Investment Support Partner Program:** There are some services needed locally by native and foreign investors that carry out feasibility studies on and/or have decided to invest in İzmir. In this process, ISO provides information and consultancy services on issues such as investment incentive systems, state supports, relevant legal regulations and favorable investment locations. However, in further steps, investors need services that include more detailed and professional information, and direct guidance from ISO is often requested to obtain these services.

The İzmir Business Partners Program aims to create a partner company pool to meet the needs of domestic and foreign investors, which are complementary to ISO services, and to direct the investors to local reliable, quality service providers from this pool, on an institutional basis.

In this regard, the aim is to facilitate the investment process of the investor by ensuring that the professional and ancillary services (a continuation of the consultancy service received from ISO on issues such as Financial Advice, Legal Advice, etc.) needed in the feasibility process by the local/foreign

companies that will invest in İzmir are provided by reliable local institutions and organizations free of charge or at low cost and quickly. In addition, while ensuring that the said services are provided in an institutional manner, it is also aimed to increase the service quality of service providers and ISO experts under the coordination of ISO.

#### 4.1.5 Projects Related to EU and Other International Programs

As part of Corporate Development, no activities are planned under this heading for 2022. However, the heading will be revised if a suitable activity is identified in the evaluations to be conducted throughout the year.

#### 4.1.6 Other Projects and Activities

**Financial Support Program Monitoring and Evaluation Activities:** An inaugural meeting and other training sessions will be held for the project owners for which the support contract has been signed, and the necessary stationery materials will be purchased during the preparations for the contract process related to the projects. Monitoring and evaluation activities will be carried out for grant programs and monitoring activities will be carried out for guided project supports. Training service purchases related to monitoring and evaluation processes, and participation expenses and allowance fees related to the organized training programs and meetings will be included in this activity. Technical evaluation services will also be purchased if deemed necessary for the projects.

**Payments Regarding Personnel Expenditures:** Expenses such as personnel salaries, other financial and social benefits, taxes, fees, etc. will be paid in line with relevant legislation, Board decisions and court decisions.

**Training Activities:** Various training sessions will be organized to improve the professional and personal competencies of the Agency personnel. The Agency's training programs will be organized in three main areas: development of employees' areas of expertise, improvement of the administrative capacity of the institution, and supporting the personal interests and skills of employees.

The main training topics planned to be carried out in the aforementioned areas for Agency employees are given in the table below. According to the needs that may arise during the year, new training sessions can be prepared under the relevant titles in line with the standards in the Agency's legislation. Training activities will continue in the coming years with the same perspective.

No.	Field	Training Subject	Training Purpose
1	Development of Areas of Expertise	Interpreting Macroeconomic Indicators	Basic indicators and policies, which are important in evaluating the market and general economic situation, will be reviewed in detail and information will be provided about how to interpret these concepts.
2	Development of Areas of Expertise	Economics for Public Policy Experts	This study to be carried out by the Agency, which is a policymaker in the field of regional development and carries out activities for the implementation of these policies, aims to provide an economics training that will strengthen the economic perspective by offering a comprehensive notion of economy.
3	Development of Areas of Expertise	Innovation and Design	Providing information on topics such as Product Design and R&D for Global Competition, Sustainability and Eco-Design, Design Trends, Smart Products, and Entrepreneurship Success Stories.

4	Development of Areas of Expertise	Recent Developments in Regional Development Theory	Acquiring information about new regional development approaches and their applications (Capabilities approach, Intelligent Specialization, etc.)
5	Development of Areas of Expertise	Introduction to GBS and Basic Applications	Developing the capacity for the analysis and visualization of spatial data, priorities and policies, especially within the scope of the ArcGIS program, and to provide spatial analysis input to sub-regional strategy studies.
6	Development of Areas of Expertise	GBS Spatial Analysis Applications	Developing and putting into practice the knowledge and skills about the techniques offered within the ArcGIS program for detailed analysis of spatial data.
7	Development of Areas of Expertise	Design Thinking	Learning and applying the Design Thinking method, which consists of the phases of developing innovative solution methods for different needs, definition, research, interpretation, idea development, prototyping and evaluation
8	Improving the Administrative Capacity of the Agency	Research Methods and Data Compilation	Developing capacity in the areas of face-to-face interviews, survey design and analysis, cluster analysis, data compilation and interpretation, which are needed in analysis and planning studies.

The results aimed to be achieved with the training activity for the Agency personnel are provided in the Output Performance Indicators table below.

Output Performance Indicators						
No.	Component Name	Output Indicator	Unit	Target		Source of Verification
				2021	Total	
1	Training Activities	Annual Duration of Training Participation per Employee	Day	10	30	Agency's Annual Report
2	Training Activities	Orientation Training for New Recruits	hour/person	60	60	Agency's Annual Report

**Execution of the Legal Procedures of the Agency:** Processes will be carried out related to lawsuits and enforcement proceedings to which the Agency is a party, and opinions will be formed on legal issues for which the Board of Directors or the Office of the Secretary General and other units are responsible, as well as cases and transactions that will have legal, financial and penal consequences. In addition, the agreements and contracts to be signed by the Agency and the directives, contracts and protocols issued by the Agency will be examined, their compliance with the legislation will be evaluated and legal follow-up of the projects submitted for legal action will be ensured.

**Execution of General Administrative Services:** As part of general administrative services, the rent, withholding tax, the share of common expenses, maintenance-repair and other expenses will be covered for the existing service building, and the expenses related to institutional service rendered through the service procurement method will be reimbursed. Expenses related to recruitment and orientation of new personnel; correspondence, transportation and communication expenses; archive management and creation of a digital archive system; bank and notary expenses, court fees, taxes and other legal expenses will be covered.

In addition, as part of this component, the procurement, installation, necessary consultancy, maintenance and support services of the relevant modular software that will enable the determination of the working model, the creation of the conceptual design and the implementation of the Integrated Business Process Systems will be provided by considering the compatibility of the Agency's Corporate Management Unit with the business processes. The Agency's information technologies hardware and software infrastructure will be improved, and up-to-date technologies will be used for information security and data backup. Institutional harmonization studies will be carried out for the legislation for information security and protection of personal data, and internal guidelines, policies and rules will be created regarding these issues. The content and technical infrastructure of the Agency library will continue to be developed to allow for research on the history, industry and economic life of the city. In this way, it is aimed to develop collaboration with relevant institutions, especially with universities in İzmir, and to contribute to the function of the Agency as an entity that produces knowledge, which is one of the general missions of development agencies. Planned studies will be implemented in collaboration with relevant institutions and organizations. The results aimed to be achieved in this regard are provided in the Output Performance Indicators table below.

Output Performance Indicators						
No.	Component Name	Output Indicator	Unit	Target		Source of Verification
				2021	Total	
1	Execution of General Administrative Services	Business Process Systems Software	Number	1	1	Information Systems Inventory
2	Execution of General Administrative Services	Establishment of an Internal Communication and Information Portal	Number	1	1	Information Systems Inventory

**Management of Agency Website and Social Media Accounts:** The technical infrastructure of the Agency website will be kept up to date and supported with content to be created. Search engine optimization and social media promotions will be carried out. Social media will be used effectively and posts will be shared regularly. E-bulletins about the activities of the Agency will be prepared periodically in Turkish and English, and will be delivered via email. Activities related to the management of the Agency's website and social media accounts will be handled on an ongoing basis. News will be published and added regularly on the investment promotion website [www.investinizmir.com](http://www.investinizmir.com) and relevant sections will be updated. In addition, information will be shared regularly from social media accounts. Internet-based promotional activities and website updates will continue throughout 2022.

**Monitoring the Agency's Media Coverage and Corporate Advertisements** Corporate announcements will be prepared and published in newspapers and magazines. Monthly media follow-up services will continue to be procured. The activity will continue throughout 2022.

**Preparation of Agency Promotional Materials:** Throughout 2022, films and various promotional materials will be created to increase awareness and acceptance of the Agency's activities and work program issues. Communication and promotion activities will be carried out to make agency activities more visible on local, national and international platforms. Promotional brochures and materials about Agency activities will be updated. Corporate gifts will be designed.

**Preparation of the Agency's Annual Report:** The Agency units' activity reports and interim and annual Agency reports will be compiled in line with the periods specified in the legislation. Studies will be carried out for the design, printing and distribution of the reports. The activity will continue throughout 2022. Semi-annual and annual reports will be prepared as part of this activity.

## 5 LOCAL DEVELOPMENT OPPORTUNITIES (LDO)

Projects and activities not included in ROPs, but that are found to be beneficial in terms of regional development, are discussed under the title of Local Development Opportunities.

The budget of the projects and activities included in the Local Development Opportunities section does not exceed 20 percent of the expenditure budget.

### 5.1 Objective

The objective of these activities is to finalize effectively the financial support applications and newly added activities that started before the Agency started working with ROPs.

### 5.2 The Background and Reason for Intervention

The reason for these activities is to finalize the financial support applications and newly added activities that started before the Agency started working with ROPs.

### 5.3 Targeted Outcomes and Outputs

The outcomes aimed to be achieved with LDOs are included in the following Key Performance Indicators and Output Performance Indicators tables.

Key Performance Indicators				
No.	Indicator Name	Unit	Target	Source of Verification
1	Increase in the Number of Project Applications by Service Providers	Percent	10	Agency data and data from relevant sponsor institutions
2	Increase in the Number of Successful Projects by Service Providers	Percent	15	Agency data and data from relevant sponsor institutions
3	Number of Service Provider Institutions That Received Training	Number	10	Annual Report
4	Total Number of Beneficiary Institutions	Number	25	Agency's Annual Report

Output Performance Indicators					
No.	Output Indicator	Unit	Target		Source of Verification
			2021	Total	
1	Number of People That Received Trainer Training	Person	20	20	Agency data
2	Analysis Report	Number	2	2	Agency's Annual Report
3	Number of Meetings Attended	Number	10	10	Agency's Annual Report
4	Number of People That Participated in Activities	Person	120	120	Agency's Annual Report



Output Performance Indicators					
No.	Output Indicator	Unit	Target		Source of Verification
			2021	Total	
5	Number of People That Received Training	Person	100	100	Agency's Annual Report
6	Technical Support Program	Number	1	1	Agency's Annual Report

#### 5.4 Projects and Activities

The programs, projects and activities to be carried out as part of Local Development Opportunities (LDO) are included in the "LDO Components" table below.

WBS Code	Component Name	Type	Method	Responsible Institution	Responsible Unit
1	İzmir Cooperative Analysis	Activity	Research, Analysis and Planning	İZKA	GGPU
2	Study for the Identification of İzmir's Spatial Features	Activity	Research, Analysis and Planning	İZKA	BGPU
3	Improving the Agency's Overseas Relations Network	Activity	Collaboration and Coordination	İZKA, Ministry of Foreign Affairs İzmir Representative Office, TİKA, THY, İKTİM	ALL UNITS
4	Programs Related to the Youth Employment Theme	Activity	Collaboration and Coordination	İZKA	ALL UNITS
4	Financial Support Program Execution Activities	Activity	Executing Financial Support	İZKA	ALL UNITS
5	"Famous Products" Social Development Support Program	Project	Social Development Support Program	İZKA	PIMU
6	Technical Support Program	Sub-Program	Technical Support Program	İZKA	ALL UNITS
7	2018 Financial Support Program for the Protection and Conservation of Cultural Assets	Sub-Program	Call for Project Proposal	İZKA	PIMU
8	Project for Training Qualified ERP Personnel, Bringing	Sub-Program	Social Development Support Program	İZKA	PIMU

WBS Code	Component Name	Type	Method	Responsible Institution	Responsible Unit
	the Personnel to İzmir's Manufacturing Industry and Supporting Social Development				
9	2018 Financial Support Program for the Sustainable Development of Küçük Menderes Basin	Sub-Program	Call for Project Proposal	İZKA	PIMU
10	"Turkish Textile Opens Up to the World" Social Development Support Project	Sub-Program	Social Development Support Program	İZKA	PIMU
11	No Life Without Agriculture	Sub-Program	Social Development Support Program	İZKA	PIMU
12	Karabağlar Furniture Academy for Women and Youth	Sub-Program	Social Development Support Program	İZKA	PIMU
13	Enhancing Entrepreneurial Capacity for Sustainable Socio-Economic Cohesion (ENHANCER)	Project	Outsourced Project	MoIT, General Directorate of Development Agencies, İZKA,	IEPU

#### 5.4.1 Research, Analysis and Planning

**İzmir Cooperative Analysis:** The İzmir Cooperative Analysis, which started in 2021 to carry out more comprehensive and efficient work on cooperatives throughout the İzmir province, to develop cooperatives in the region and to contribute to employment, is expected to be completed by the beginning of 2022. This study aims to prepare thematic cooperative maps based on product, target group and region, to create cooperative network maps, to evaluate institutional structures, and to reveal needs and development potentials. The analysis is aimed to obtain outputs that will guide the support provided by the Agency and other relevant institutions in the region for cooperatives. The İzmir Cooperative Analysis to be implemented within this framework will be carried out in collaboration with the relevant institutions and organizations. In addition to analysis and research studies, information, coordination and consultation meetings will also be held in order to involve the regional stakeholders in the process.

**Study for the Identification of İzmir's Spatial Features:** As part of the work to be carried out for addressing regional development policies in a sustainable and integrated way, quantitative and qualitative

analyses will be carried out to complement the development of space-sensitive policies to be implemented for regional development, rural development and urbanization. Various indexing efforts to be carried out are aimed at determining the characteristics of the region; understanding and defining the spatial pattern created by the regional dynamics, changing relations between settlements and new network developments; creating spatial typologies; and developing and monitoring policy proposals. The main outputs of the study are ensuring the inclusion of İzmir in Harvard University's Metroverse database, the OECD's Functional Urban Area Study (FUA) database, and EUROSTAT's FUORE database.

#### **5.4.2 Collaboration and Coordination**

**Improving the Agency's Overseas Relations Network:** The Agency's activities for investment promotion and regional development are planned to be promoted more widely to increase their effectiveness and impact by developing collaborations with the Turkish representation offices of foreign development agencies, the trade consultancies of foreign missions, and the foreign representation offices of our country. With these activities aiming to promote İzmir in 2022, an effective communication network will be established with all the stakeholders in question.

#### **5.4.3 Agency Supports**

Among the ongoing financial support programs announced in the past years and implemented by the Agency, those that are not directly related to the existing ROPs are included and budgeted under this heading.

**"Famous Products" Social Development Support Program:** Although there are many local and international institutions fighting against drug abuse, these institutions have limited means in terms of their financial power and the capacity to employ drug abusers or at-risk individuals. Therefore, ensuring financial adequacy and sustainability is critical in combating addiction and providing support to relevant disadvantaged groups. This project has been implemented by the İzmir Association for Combating Drug Abuse and Addiction as part of the 2019 Social Development Support Program. As part of the project, it is planned to produce bakery products that will become famous in the eyes of consumers for their quality, health benefits and food safety, and thus will be sold under the brand of "Ünlü Mamuller" (Famous Products). With the income to be obtained from this project, it is aimed to support the fight against addiction and to ensure the sustainability of this social initiative. The project, which is carried out within the framework of the 2019 Social Development Support Program Implementation Procedures and Principles prepared by the MoIT, will be completed in the first quarter of 2022.

**Project for Training Qualified ERP Personnel, Bringing the Personnel to İzmir's Manufacturing Industry and Supporting Social Development:** The project aims to provide qualified young employment in the manufacturing industry in İzmir, to improve the use of ERP in the industries determined by the employment-guaranteed training programs to be provided and thus support the capacity development of industrial enterprises. The project, which will be carried out within the framework of the 2020 Social Development Support Program Implementation Procedures and Principles prepared by the MoIT, will be completed in the first half of 2022.

**"Turkish Textile Opens Up to the World" Social Development Support Project:** With this project, the vocational skills of disadvantaged women living in Bergama, Kınık and Ödemiş districts of İzmir will be increased. Thus, the local values in the region where these women live will be protected and kept alive, the product value will be increased through innovative approaches, women will be involved in income-generating activities and their entrepreneurship potential will be increased, the products produced in these districts will be presented to national and international markets, and women's participation in social

life will be strengthened. The project, which will be carried out within the framework of the 2020 Social Development Support Program Implementation Procedures and Principles prepared by the MoIT, will be completed in 2022.

**No Life Without Agriculture:** The project aims to contribute to the development of professional knowledge and skills, and to increase the income level, quality of life, and active participation in the social and economic life of Roma citizens, primarily women who are victims of violence and also disadvantaged youth. With the implementation of the project, Roma citizens will be provided with special knowledge and skills to take part in agricultural production. To this end, idle agricultural lands will be reorganized and made suitable for poultry, flower sales will be standardized and flower sales volume will be boosted, and thus the income sources of Roman citizens will be strengthened. The project will be carried out within the framework of the 2021 Social Development Support Program Implementation Procedures and Principles prepared by the MoIT.

**Karabağlar FURNITURE Academy:** With this project, theoretical and hands-on training programs will be provided in the Vocational Training Center and Social Facility built by the İzmir Chamber of Craftsmen, Carpenters, and Woodworkers in Karabağlar, to meet the designer and intermediate staff (upholstery) needs of the furniture industry. The training programs are aimed at improving the workforce qualifications, providing a new professional opportunity to the residents of the district or to improving their existing professional skills, thus increasing the employability of individuals. The project especially aims to support the employment of women and youth. Thus, in line with the needs in the furniture sector, their design and production skills will be improved. After the completion of the project, the Chamber will be able to access all companies in the region, establish connections, and identify workforce needs. The District Governorship will be able to reach all citizens in the district who have unemployment problems. In addition, the project also aims to ensure a match between employers who need qualified workers in the furniture industry and those seeking jobs. The solution to the unemployment problem will also provide a solution to many social problems that families experience due to economic inadequacies, and thus contribute to the social adaptation of disadvantaged groups. The project will be carried out within the framework of the 2021 Social Development Support Program Implementation Procedures and Principles prepared by the MoIT.

**Technical Assistance Program:** A call for technical support will be carried out for regional socio-economic development issues such as rural development, cooperatives, value-added production, development and promotion of cultural values, and exports; for the realization of the specific and general objectives specified in the Agency's result-oriented programs; and for the opportunities for youth employment, which is the 2022 theme of Development Agencies. The aim of this program will be building capacity for the main priorities determined in the work program, improving the capacities of beneficiary institutions, and producing solutions to the problems and needs of the region in related issues.

**"Business to Social Cohesion" Project:** This project is carried out in collaboration with Development Agencies under the coordination of the MoIT. The project aims to increase the participation of women entrepreneurs and women's cooperatives in social and economic life and to increase their self-sufficiency, thus supporting social cohesion. The project also aims to provide consultancy services for the needs of women's cooperatives and women entrepreneurs and to provide in-kind support for the needs discovered through consultancy services. To help the supported cooperatives develop their commercialization and sales channels, initiatives will be launched for local, regional and international supply chains, e-commerce platforms and potential buyers in target provinces. Additionally, inventory work will be carried out for the commercialization and promotion of local products, Türkiye's regional product map will be prepared and a local product platform will be created.

**Programs Related to the Youth Employment Theme:** The youth employment programs to be carried out by our agency are listed below:

**a) Skills Development Program:** Young people experience problems in starting their careers due to lack of experience. Thus, skills development programs will be established in collaboration with public institutions and private sector companies.

**b) Training Program with Employment Guarantee:** Training programs will be provided to meet the qualifications needed by the manufacturing industry and other industries in the region. In this regard, the qualifications needed by the market will be determined through interviews and collaborations with institutions/organizations such as companies, technopolises, OIZs, chambers of commerce and industry in the region. Training programs with employment guarantees will be organized to provide these qualifications.

**c) Development Agencies Support Programs:** In projects supported by development agencies (such as MDP, and GPD) the beneficiary institution will be encouraged to employ interns during the project period and this suggestion will be clearly mentioned in the guides. Projects that provide internship opportunities in financial support programs will earn extra points and compulsory internships will be added to guided projects. Youth employment support programs will be implemented. Youth employment will be prioritized in the support programs offered by the agencies for the private sector. As part of SOGEP, agencies will encourage the development of projects for disadvantaged youth.

**d) Program for Supporting Rural Employment:** To increase the employment opportunities of young people in rural areas, studies will be carried out in the following areas:

- Carrying out income-generating activities in rural areas
- Supporting young people producing agricultural goods in rural areas
- Encouraging rural cooperatives
- Encouraging eco-tourism and the production of local and natural products
- Rejuvenation of the agricultural population and financial support programs for young farmers
- Carrying out studies for modern greenhouses
- Carrying out studies for the development of agriculture-based industry
- Encouraging young agricultural engineering graduates to return to rural areas
- Providing training on modern applications such as smart farming and digital farming
- Providing training on rural development, cooperatives, entrepreneurship, project preparation

and implementation, and state incentives

**e) Support Program for Local Youth Entrepreneurship:** Agencies will design special young entrepreneurship programs if they detect a need in a special area or a bottleneck in the industries in which the regions they operate have competitive power. New initiatives established by young people in specific fields, subjects, or industries needed by the regions will be supported. To this end, initiatives that will increase the competitive power of the region or the prominent sectors of the region, or meet an important need, will be supported. New initiatives to be established after receiving support from the program should provide employment for youth.

**Financial Support Program for the Sustainable Development of Küçük Menderes Basin:** The contracts of the program were signed in 2020. The program is expected to be completed by the first half of the year.

**Financial Support Program for the Protection and Conservation of Cultural Assets:** The contracts of the program were signed in 2019. The program is expected to be completed by the first half of the year.

**Financial Support Program Execution Activities:** As part of Local Development Opportunities, application guides and promotional documents will be prepared and printed regarding the calls for proposal or feasibility supports for projects. Subsequently, calls for proposals will be announced and information meetings will be held on the preparation and submission of project proposals. Project proposal development processes will be managed as part of the 2022 Social Development Support Program. In addition to the training sessions to be provided, consultancy services will be procured to provide technical assistance to potential applicants. Activities will be carried out regarding the selection and training of independent assessors who will participate in the evaluation of projects in terms of technical and financial quality. Assessment committees will be formed on a program basis to conduct the necessary checks on the assessments carried out by independent assessors, to formulate and report opinions, and to suggest the list of projects deemed eligible for financial support. Preview visits will also be organized as part of the projects. Where necessary, organizations related to programs and projects will be held or participation will be ensured in the existing events, and technical support service will be procured.

#### 5.4.4 Projects Related to EU and Other International Programs

**Enhancing Entrepreneurial Capacity for Sustainable Socio-Economic Harmony:** The “Enhancing Entrepreneurial Capacity for Sustainable Socio-Economic Harmony” (ENHANCER) Project is financed under the European Union's "Facility for Refugees in Türkiye" (FRIT II) program. The project, the beneficiary of which is the General Directorate of Development Agencies, started in January 2020 under the coordination of the International Centre for Migration Policy Development (ICMPD), and is planned to be completed in 2023. The project aims to contribute to the socio-economic integration of Syrian refugees under temporary protection in Türkiye by improving their entrepreneurial potential and their livelihoods. In line with this purpose, studies will be carried out to increase the entrepreneurial activities of Syrian refugees under temporary protection and Turkish citizens in 11 provinces including İzmir; to develop local entrepreneurship ecosystems; and to strengthen policy, implementation and coordination at both the central and local levels.

#### 5.5 Program Duration and Schedule

Financial support applications included in Local Development Opportunities and components under other headings are expected to be completed in 2022.

ROP Scheduling Table				
WBS Code	Component Name	Duration	Start Period (Year/Quarter)	End Period (Year/Quarter)
1	İzmir Cooperative Analysis	12 months	2021/3	2022/2
2	Study for the Identification of İzmir's Spatial Features	24 months	2022/1	2023/4
3	Improving the Agency's Overseas Relations Network	36 months	2021/1	2023/4
4	Programs Related to Youth Employment	36 months	2021/1	2023/4
4	Financial Support Program Execution Activities	36 months	2021/1	2023/4
5	“Famous Products” Social Support Project	24 months	2021/1	2022/2

ROP Scheduling Table				
WBS Code	Component Name	Duration	Start Period (Year/Quarter)	End Period (Year/Quarter)
6	2018 Financial Support Program for the Protection and Conservation of Cultural Assets	24 months	2021/1	2022/2
7	Technical Support Program	12 months	2022/1	2022/4
8	2018 Financial Support Program for the Sustainable Development of Küçük Menderes Basin	24 months	2021/1	2022/4
9	Project for Training Qualified ERP Personnel, Bringing the Personnel to İzmir's Manufacturing Industry and Supporting Social Development	24 months	2021/1	2022/3
10	"Turkish Textile Opens Up to the World" Social Development Support Project	24 months	2021/1	2022/4
11	No Life Without Agriculture	24 months	2021/3	2023/3
12	Karabağlar Furniture Academy for Women and Youth	24 months	2021/3	2023/3
13	Enhancing Entrepreneurial Capacity for Sustainable Socio-Economic Harmony	48 months	2020/1	2023/4

## 5.6 Management and Coordination Regulations

These activities will be coordinated by the unit responsible for the activity. The Project Implementation and Monitoring Unit will be responsible for the monitoring and evaluation of the sub-programs and guided projects to be carried out as part of this activity.

## 5.7 Monitoring and Evaluation

As part of financial support programs, PIMU provides support for the continuation and successful completion of the projects in accordance with the contracts, and the results are monitored. The results of these projects and activities are shared with related units and used for designing new programs.

It is the responsibility of the relevant unit to carry out the activities that fall outside the grant programs. The outputs of the activities to be carried out by the Agency will be evaluated by relevant units.

## 6 CONCLUSION AND ASSESSMENTS

It is observed that the preparation of more targeted 3-year programs, instead of annual programs, increases the implementation power of regional plans. It is natural that when agencies concentrate their activities and resources on issues that are important for their regions and areas where they are strong, they increase their effectiveness.

Before the establishment of the ROPs, the current situation, potential and dynamics of the TR31 İzmir region, the regional plan, the National Strategy for Regional Development, the 11th Development Plan, and the United Nations Sustainable Development Goals were reviewed. In addition to this information, studies carried out by the Agency and other institutions, experience derived from these studies, regional analyses and strategies, opinions and evaluations obtained from participatory processes, the institutional potential of the Agency and the powers and responsibilities determined by the legislation were

evaluated. In line with the ROPs determined after all these studies, the Agency carried out its 2021 activities in accordance with the 2021-2023 Result-Oriented Programs and completed its pre-implementation preparations by creating the infrastructure for 2022 activities.

In the new period, the Agency will both increase its own institutional capacity and continue to ensure collaboration and coordination by establishing the necessary capacity in the region. Additionally, it will take necessary precautions to achieve the desired results and outputs at the end of the implementation process of the ROPs, and aims to make the highest contribution to the sustainable development of the region by making the best use of other development opportunities.

The 2022 Work Program has been prepared in detail. It is estimated that the activities included in the program can be successfully implemented with the existing human, technical and financial capacity in the Agency's new unit structure.

To support the targeted benefits defined in the ROPs, it is also important to implement the related projects that are targeted by local institutions and organizations.

Efforts to eliminate any foreseen risks are also important for the realization of the targets determined by the ROPs.



**Annex-1/E Table of Planned Research, Analyses, Strategies and Reports**

Planned Research/Analyses/Strategies/Reports	Objective	Implementation Method  (By the Agency, Partial service procurement or Service procurement)	Reason and Scope of Service Procurement
Aliaga Ports Hinterland Analysis and Simulation	Achieving concrete results with a hinterland analysis and an application simulation study for the development of port operations and port services in Aliaga Nemrut Bay in the light of blue growth principles	By the Agency, via partial service procurement	This study aims to eliminate infrastructure inadequacies of the ports in the Aliaga region, especially in terms of highways and connection roads in its hinterland. This was one of the most important inadequacies identified in the Current Situation Analysis and Development Perspective of the Ports of İzmir study, completed in 2021. In this context, a hinterland analysis will be conducted for the Agency to focus thematically and to provide support with the information it produces. Thus, the conditions necessary for regional ports to produce 'healthy' services in line with their theoretical capacities, and the nature of their cargo loads will be determined. A <i>"health check"</i> will be applied to regional ports to identify their optimum performance. Results and analysis will be combined in a simulation, and concrete results for making the investments needed by both the ports and the relevant public stakeholders will be shared with the public. To provide this service, collaborations are planned with international organizations specialized in this field.

Kemalpaşa Logistics Village Feasibility and Operation Model Study	Updating the financial perspective and creating business model proposals in line with the changing conditions for Kemalpaşa Logistics Village, which is one of the most important public investments in the region.	By the Agency, via partial service procurement	Kemalpaşa Organized Industrial Zone, which has a highway and railway connection, is one of the most important organized industrial zones in the Aegean Region. Kemalpaşa Logistics Center, located next to this OIZ and 30.5 km from TCDD İzmir Port, is one of the most important public investments in the region. With this study, it is planned to update the investment and financial perspective of Kemalpaşa Logistics Center and to present business model proposals in the light of updated feasibility.
Analysis and Feasibility Studies to be Prepared in Line with İzmir Vision Discourses	Carrying out detailed feasibility studies and analyses to support the discourses of "İzmir, the Pioneer of Innovative Industries" and "İzmir, the Capital of Clean Energy," both of which are shaped by the works of our Agency and adopted by our Board of Directors.	By the Agency, via partial service procurement	Detailed feasibility studies and analyses are planned to be conducted to support the discourses of "İzmir, the Pioneer of Innovative Industries" and "İzmir, the Capital of Clean Energy," both of which are shaped by the works of our Agency and adopted by our Board of Directors. Consequently, in line with "İzmir, the Pioneer City of Innovative Industries," which is the core of our creative industries works, a detailed financial feasibility and business model study will be performed aimed at bringing the hinterland of TCDD İzmir Port and the industrial heritage structures located in the region into urban life by assuming new functions, and transforming the region into a production base for creative industries. Additionally, within the scope of the "İzmir, the Capital of Clean Energy" discourse, detailed concept project, feasibility, geological survey and operation model studies will be carried out in order to create a specialized new port infrastructure for supporting the export of wind turbine components and parts. İzmir is among the leading cities of our country in the production of equipment classified as "project cargo," such as industrial machinery and wind turbine components and parts. However, as a result of the interviews carried out with companies, it has been determined that in İzmir, the port infrastructure where the logistics processes for these cargoes can be carried out is limited. İzmir has a relatively higher handling capacity for

			<p>container and bulk cargo, and ports focus their activities accordingly. Thus, project cargo transportation has remained in the background in terms of infrastructure. To export industrial machinery and wind turbine components and parts, which have high added value but more complex logistics processes, a new port infrastructure specialized in this field is needed in İzmir. Today, Türkiye has four wind turbine blade manufacturing plants, all of which are located in İzmir. In İzmir, 50-70 meters long turbine blades can be manufactured and logistics services can be provided for blades of that dimension. However, the demand for turbine blades has started to change in the global market. Together with offshore applications, blades reaching 100-120 meters in length have also started to be used in the industry, and their use is rapidly spreading. Similarly, the demand for other parts like towers, nacelles and cast parts has also started to change. Furthermore, the production and logistics of floating platforms also create the need for a specialized port. When we look at international examples of good practice (Aalborg, Esbjerg, Hull, Bilbao), we see that high-volume turbine component production sites are designed in a way to ensure that the logistics processes for the produced equipment is carried out in the easiest way. Given the fact that the industry is clustered in and around İzmir, we can say that the Çandarlı port, which is currently under construction in İzmir, will be the most suitable port for this purpose. Thanks to the revision and implementation of the Çandarlı Port project, a concept project is planned to be developed for this purpose. This concept project, which is needed by İzmir's manufacturing industry, will contain both ports and integrated production areas, and will carry our country to the future.</p>
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Offshore Measurement	Wind	<p>Offshore wind energy is a type of renewable and clean energy that has recently entered Türkiye's agenda. The Ministry of Energy and Natural Resources continues its preparations for wind power plant tenders and the wind energy industry's interest in this field is increasing every day. However, to invest in this new field in Türkiye, an offshore wind modeling that is of usable quality is needed. With this study, the first offshore wind measurements in Türkiye will be carried out, necessary models will be created and the results will be shared with the stakeholders in the industry. Thus, necessary data will be obtained and presented to the Ministry of Energy and Natural Resources and investors to put İzmir on their agenda for new investments. With these investments, the development of the wind energy equipment production industry, a value-added industry that still concentrates in İzmir, will be accelerated. The project, which was launched in 2019, is planned to continue until 2022.</p>	Service procurement	<p>The study includes a technical work that is beyond of the Agency's knowledge and competence.</p>
Preparation of Action Plans for the Implementation of the "Green Transformation and Blue Opportunities" Perspective Document in İzmir		<p>The development of İzmir through green growth and blue growth tools requires a social, economic and institutional transformation. Action plans will be prepared to form the basis of and direct this transformation.</p>	Collaboration or partial service procurement	<p>The Agency and our country, in general, do not have sufficient knowledge and experience in green growth and blue growth fields. When necessary, collaborations will be established with national and international institutions that stand out with their knowledge and experience in these fields. Service procurement will be used at necessary points. In addition to analyzes and research for collaboration and</p>

			service procurement, training, information, coordination and consultation meetings will also be organized to involve the stakeholders in the region.
Research for the Determination of İzmir Manufacturing Industry's Readiness for the Green Deal and Necessary Measures	Measuring the preparedness and awareness of İzmir's manufacturing industry for the Green Deal, developing tools in this regard and determining relevant measures	Collaboration or partial service procurement	The European Green Deal has recently entered the agenda of Türkiye and our region. This issue will particularly affect our exports to European countries as a result of the Carbon Border Adjustment Mechanism. A research study will be conducted with the participation of the chambers and commodity exchanges in İzmir to measure regional companies' preparation and awareness level regarding this process, to develop tools in this regard and to determine the measures that can be taken in the future. As part of the research, collaborations will be established with national and international institutions and universities that are distinct in their knowledge and experience in this field. Service procurement will be used when necessary.
Strategies, analyses and reports to be prepared for the "BEST for Energy" project	The project aims to support the companies that manufacture equipment and environmental technologies for the clean energy industry in İzmir and to establish a strong cluster, thus increasing their global competitive power.	It will be carried out with technical assistance under IPA 2.	All activities, analyses, and strategies as part of the project will be created with technical assistance.
İzmir Cooperative Analysis	The objective is to guide the efforts of institutions that aim to carry out more comprehensive and efficient work on cooperatives throughout the province of İzmir, to develop cooperatives in the region, and to contribute to employment.	Collaboration and partial service procurement	Services are being procured from İzmir University of Economics for the analysis.

Research and Analysis Studies for Supporting Innovation and Entrepreneurship Activities	A research study and analysis will be carried out in the field of composite materials to increase the potential to manufacture and export high value-added and high-tech products, especially in industries such as wind energy, aerospace and automotive. With this study, the current general situation of the composite materials industry in İzmir will be determined, stakeholder analysis will be carried out and the needs/problems and development areas of the sector will be identified. As a result of the study, possible projects for the design, modeling and prototype manufacturing of advanced composite material-based parts or components will be evaluated.	Collaboration and partial service procurement	The study includes a technical work that is beyond of the Agency's knowledge and competence.
Activities to Increase the Economic Value of İzmir's Manufacturing Industry	In parallel with the İzmir Resource Efficiency Program, it is necessary to increase companies' awareness and consciousness on digital transformation and to ensure it is addressed strategically at the company level. For this purpose, activities will be organized in various industries to increase the capacity in areas such as digital transformation principles and methods, and the design and implementation of digitalization strategies. In addition, capacity-building activities will be organized in collaboration with institutions for SMEs in industries whose export	By the Agency and partial service procurement	When necessary, collaborations will be established with institutions that stand out with their knowledge and experience in this field. Service procurement will be used at necessary points.

	activities will be affected by the Green Deal.		
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