

IZMIR METROPOLITAN MUNICIPALITY - IZENERGY INC. PUBLICATION ● DECEMBER'23 - JANUARY'24 ● Issue: 15 ● Free of charge



Digital Transformation in Renewable Energy Fields

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Launching Green Transformation in Izmir; Sectors, Priorities and Opportunities
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Tunc SOYER

Mayor of Izmir Metropolitan Municipality

"The Not the Expected, but the Constructed."

Dear fellow countrymen,

We welcomed the 100th anniversary of our Republic in Izmir with the most spectacular celebrations in the history of the republic. On these special days, I am very proud to address you in the 15th issue of Izenerji Magazine.

For 100 years, we once again remember with mercy and gratitude the founder of the Republic of Türkiye, our Great Leader Mustafa Kemal Ataturk and his comrades-in-arms, who have been the guarantee of our sovereignty, uninterrupted peace and freedom in these lands.

One day after 29 October, a bitter sadness took the place of the great joy of the republic in us. On 30 October, on the third anniversary of the earthquake, we once again felt the indescribable pain in our hearts. Once again, I wish God's mercy to the 117 lives we lost and my condolences to their relatives. After this great pain, we continue to continue lamir's work and to heal our wounds in solidarity.

In this direction, we have defined the urban regeneration campaign we have initiated with the principle of "spatial justice". We have brought urban regeneration together with the cooperative model through the People's Housing mobilisation. We are rebuilding this city as a safe city where buildings do not collapse in earthquakes and which is resistant to disasters, so that the pain of a loved one will never fall on anyone's heart again.

We work for Izmir with love and we dream the future of Izmir. Because as I always say, "the future is not what is expected, but what is built."

One of our biggest dreams on this path is to have a clean, sparkling and swimmable Bay of Izmir. In Izmir, we



have done what no one else has done to achieve this goal and we have put our hands under the stone. With our Living Bay Mobilization, which we prepared in the light of scientific data, we have taken the pollution in the bay under control with 11 different projects extending like the links of a chain on land, on the shore and in the sea.

Within the scope of our Living Bay Mobilization, we have completed 260 kilometres of storm water lines to the bay in the last four years. By increasing the installed capacity of our treatment plants, we are increasing the installed capacity of our treatment plants to a level that will be sufficient for Izmir for about fifty years, that is, even when Izmiris young grandchildren. We transfer the treated fresh water to the Old Gediz bed and from there to the Middle Bay. In this way, we eliminate the odour pressure of treated wastewater on the inner bay. Finally, we are also preventing the problem of odour in the bay caused by plastering. We remove odour-causing materials from the area by conducting dredging works on the seabed up to minus 4 metres at the outlet mouths of the streams, which are plugged up to 0.5 metres with the sweat brought by the streams flowing into the Bay.

With all these works, we prioritised our infrastructure works and increased our underground investments as much as above ground in Izmir. Today, we are proud to have permanently solved the odour problem. Izmiris can now breathe in the bay air that smells like the sea. Our target is a clean Izmir Bay that is swimmable, just like it was years ago.

In the 100th year of our Republic, we promised Izmir 100 works of the Republic. Inspired by the words of our

Great Leader "every factory is a castle", we started to equip Izmir with republican castles.

The first of these republican castles is the Sasal Water Factory in Menderes district. We brought this factory, which had been idle for many years, back into the economy of our city. Our factory, which was leased by our Izdoga company for 25 years, restored in a record time of 10 months and equipped with brand new filling units, was put back into the service of Izmir. Sasal water is now everywhere in our city. With this factory, which is a project of loyalty, we have preserved a 91-year heritage of the Republic.

Inaugurated on 27 October as a aift to the 100th anniversary of our Republic, our Bayindır Milk Factory is the newest work of the Republic we left to Izmir. In this Republican fortress, where we protect the sweat and labour of the masters of our nation, we protect the fertility of our lands. In our factory, we transform the milk we buy from our small producers into high value-added products such as Izmir mozzarella, buratta and ice cream and offer them to the world market under the "Izmiri" brand. With our factory, which is the production pillar of our three-legged Izmir Agriculture programme, we have reinforced our goal of increasing Izmir's prosperity and justice.

IzDonusum is our third republican artefact. This facility serves our city as an artefact of the Republic where we increase Izmir's prosperity and contribute to the circular economy of our city. In our facility, while we bring Izmir's waste to Izmir's economy, we employ our street collector labourers. We improve the living conditions of our citizens who work under difficult conditions. In our IzDonusum Facility, we transform not only Izmir's waste but also the lives of our citizens.

Currently, there are three castles in our city, which are the reflection of our promise of 100 works in the 100th year of our Republic. We are excited to bring 97 more works of the Republic to Izmir in the coming period.

I wish pleasant reading to all our citizens in the 15th issue of Izenergy Magazine. In Izmir, we promise to remain firmly committed to the values of our Republic and to carry the Republic we inherited from our ancestor to the next centuries. Happy 100th anniversary of our Republic.

Sincerely yours.



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Type of Publication

Periodicals - E-Magazine

Language of Publication

Turkish - English

Period of Publication

December'23 - January'24

Website

www.izenerji.com.tr

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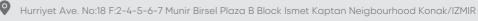
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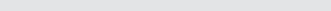
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A. Ercan TURKOGLU Engineer MSC

Chairman of the Board of Directors of IZENERGY INC.

Dear Izmirians:

Our company's sectoral magazine The 15th issue of IZENERGY is with you we are pleased to bring you together.

Izmir Metropolitan Municipality is taking important steps to make Izmir a greener, livable and sustainable city in the 100th anniversary of the Republic bequeathed to us by Mustafa Kemal Ataturk. In this issue, we focus on the environmentally friendly projects prepared by IMM for Izmir, and we will also focus on the Urban Climate Resilience Programme to increase urban resilience against disaster hazards. we're increasing.

As in every issue of our magazine to include all stakeholders of the city we continue Activity who works on our subjects our academics, policies to our politicians who develop, to our professional chambers, NGOs and other to include our stakeholders and to offer you We endeavour to make it available.

In this issue, we include the articles of our valuable stakeholders in our Voice of the sector and voice of our municipalities sections. Enisolar Energy Subsidiaries and Foreign Projects Coordinator Mr. Deniz Yilmaz Garip's presentation on "Digitalisation in Renewable Energy Transformation" and Karsiyaka Mayor Mr. Dr Cemil Tugay's articles titled "Responsible Consumption of Natural Resources is Becoming Widespread in Karsıyaka" to our readers. In our solution partner section, the article of Izmir Development Agency Green Growth Policies Unit Head Ms. Emine Bilgen Eymirli and Green Growth Policies Unit Specialist Mr. Hakki Gokhan Elustun's "Starting the Green Transformation in Izmir; Sectors, Priorities and Opportunities" is sharing wih our valued readers.



IMM Foreign Relations and Department of Tourism EU Grant Projects Branch Manager Mr. Basak Somuncu's "Local Climate Grant for Transformation The Function of Projects" with you to bring you together.

IMM's Sustainable Energy and Climate Action Plan which aims to reduce Izmir's energy consumption, promote the transition to renewable energy sources and combat climate change, the Green City Action Plan which aims to increase the city's green areas, develop parks and gardens and establish environmentally friendly transport systems, the Strategy for Living in Harmony with Nature which aims to protect Izmir's natural resources, support biodiversity and sustainable agriculture, the Plastic Waste-Free City Action Plan which encourages the practice to find a solution to the problem of plastic waste and aims to reduce consumption are continue to publish in our magazine as in sections.

Our work towards achieving 2030 climate neutrality targets continues unabated. Within the GCC Izmir Platform, which we launched in May, working groups have been formed under 6 headings. The groups, which are attended by public, private sector.

universities and NGOs, come together to exchange information and knowledge. They share their experiences. In addition, one of the five missions "Mission for the Restoration of Oceans and Waters" that we have won the right to participate as a signatory. we are honoured to report.

Dear Izmir residents, we are pleased to inform you that we have accomplished the first investment cost-free rooftop SPP application in Tire Gazi Mustafa Kemal Ataturk Stadium for the first time in Türkiye for the second time by a municipal company. With the EPS model we have implemented with IZGUNES company, Tire Municipality will save 10% in electricity consumption for 15 years, and at the end of 15 years, the facility will be transferred to Tire Municipality.

On the 100th anniversary of the Republic Day which is celebrated enthusiastically all over the country, we honour Gazi Mustafa Kemal Ataturk and our martyrs wth respect and we make it our mission to keep the Rebublic alive, forever.

The 15th issue of our magazine is to the full and the headlines enlarge our hopes for the future

See you in our next issue, clean, sunny, with Izmirians, to bright and healthy days...



Ms. Kader SERTPOYRAZ, who has been serving as a member of the Board of Directors of Izenergy Inc. since June 2014, has resigned from the Board of Directors of our company as of 31/10/2023. We would like to thank Ms. Kader SERTPOYRAZ for his valuable contributions.

Kader SERTPOYRAZ

City and Regional Planner

ESHOT Assistant General Manager





Prof. Dr.
Isikhan GULER
Coastal and Marine Engineer

IZENERGY INC. Board Member

He was born in Adana. He completed his primary and secondary education in Adana. He completed his higher education at METU Department of Civil Engineering. In 1983, after completing his undergraduate education, he completed his master and doctoral studies in Coastal and Port Engineering in the same department. He is currently working in METU Civil Engineering. He continues to give graduate and doctoral courses as an adjunct faculty member in the Department.

Some of his areas of expertise are maritime policies, integrated coastal marine spatial planning, port and marina planning and design, construction control, pollution of marine and coastal areas. In addition to his academic studies, he has been working professionally for 40 years as a senior manager. Some of the important projects he carried out are as follows: He took part in national and international projects especially the Marmaray Tube Passage Project. He has carried out important are as follows:

•Istanbul Bosphorus Tube Crossing (Marmaray)

- •Commercial Port Master Plan Study
- •Marina Master Plan
- •Preparation of Earthquake Technical Regulations for Coastal Structures, Railways, Airports Constructions
- •Petlim Container Port
- •Iskenderun Port Container, Cargo, Ro-Ro and Bulk Cargo Projects
- •Ordu Giresun Airport
- •TUPRAS Oil Pier
- •BOTAS, Baku Tbilisi Ceyhan Crude Oil Pipeline Ceyhan Marine Terminal Marine Structures Work
- •Izmir Port Rehabilitation, Ship Approach and Circulation Channel Dredging
- •Ordu Giresun Airport
- •TUPRAS Oil Pier
- •BOTAS, Baku-Tbilisi-Ceyhan Crude Oil Pipeline Ceyhan Marine Terminal Marine Structures Works
- •lzmir Port Rehabilitation, Ship Approach and Circulation Channel Dredging

He is a founding member of the Underwater "Association of Researches", which was laid in 1983 in relation to marine and nature conservation. He participated in studies on marine environment, nature conservation and coastal areas and served on the executive boards of various scientific symposiums and congresses. One of the most important problems of our country, especially in recent years, is that sea areas are being plundered as a result of the attack on sea areas with the greed for rent, and environmental problems that are difficult to reverse are emerging. As one of the most important areas of climate change and environmental struggle, he is intensively involved in the sustainable struggle of nature with "prevention studies on sustainability of the destruction of coastal and marine areas" in relation to the protection of coastal areas and the struggle for nature. He served as chairman and executive committee member in various scientific national symposiums and congress executive committees. He took an active role in the Coastal Engineering Symposiums organised by the Chamber of Civil Engineers since 1996, including the chairmanship of the symposium. He took part in the organisation and executive committee of ICCE 2016 (International Conference on Coastal Engineering). He has more than 70 papers and articles which are available in national and international publications.

He is a Member of the Board of Directors of IZSU (General Directorate of Izmir Water and Sewerage Administration) between November 2022 and October 2023. He took part in many civil society, democratic and professional organizations and served as a manager at various levels. He is a member of the Izenergy Board of Directors.



Born in 1973 in Ankara, Alper Kalayci completed his primary, secondary and high school education in Bolu. In 1998, he graduated from Dokuz Eylul University, Department of Mechanical Engineering and started his career in as an installation maintenance engineer for Türkiye's first wind power plants. Continuina to work as a project manager, Kalayci designed, manufactured and installed Türkiye's first wind measurement station. The first tens of wind turbine power plants of our country were commisioned as a result of this measurement data.

In December 2001, Mr Kalayci started to work at Aero Wind Industry Company, which produces Türkiye's first composite wind turbine blades in the Aegean Free Zone, and has been serving as the General Manager and Chairman of the Board of Directors of the same company since January 2011. He has made significant contributions to the development of high-end composite production in our country and to the development of domestic raw material producers. His

Alper KALAYCI

Mechanical Engineer

Energy Industrialists and Business People's Association (ENSIA) Chairman of the Board of Directors

contributions to the composite sector paved the way for Izmir to become a composite wind turbine centre in the following years. Alper Kalayci, who is also the Chairman of the Board of Directors and General Manager of WEC Tower Company, which produces wind turbine concrete towers in Torbali, Izmir, has produced the first concrete tower in Türkiye for local projects. He has continued to contribute to the composites industry as the Chairman of the 31st Other Products Professional Committee of the Aegean Region Chamber of Industry (ARCI) and as a member of the Board of Directors of Composite Industrialists Association.



In 2016, Alper Kalayci, who was among the founding staff of the Industrialists and Business Energy People Association (ENSIA), has been serving as the Chairman of the Board of Directors of the association as of March 2021. With the experience of 25 years in the sector, he continues to take active roles in many non-governmental different organisations and chambers. Throughout his business life, he has participated in many fairs, seminars and congresses at home and abroad, made presentations at many universities in our country worked for and development of both the composite and clean energy sector. He has Board of membership of Izenergy Directors.



WORLD NEWS



Rooftop SPP Mandatory in All Public Buildings by 2030

Solarpower Europe Statement dated December 8, 2023

Late yesterday evening, EU negotiations on the European Building Performance Directive concluded. The Directive defines energy efficiency targets aimed at decarbonising the EU building stock and key measures for the use of rooftop solar energy to meet the

Jan OSENBERG

SolarPower European Policy Advisor

remaining electricity demand. Solar-PowerEurope issued the following statement:

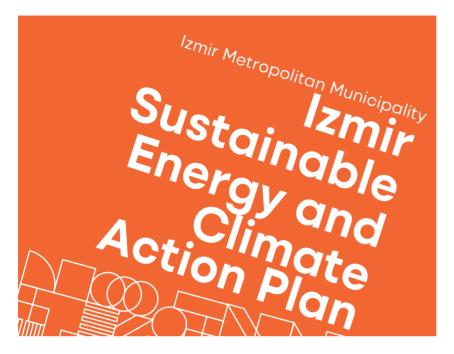
Jan Osenberg, Policy Advisor at SolarPower Europe, said. "EU negotiators yesterday reached a major milestone in accelerating the deployment of renewable energy by signing an agreement on the EU Solar Energy Standard. It will make solar installations mandatory in all EU countries in all new public and commercial buildings by 2026, in all new residential buildings by 2029, in non-residential buildings undergoing a relevant refurbishment by 2027 and in all existing public buildings on a

phased approach by 2030. The Commission considers this measure as a part of the EU Solar Roof Strategy to address the energy crisis. as a part of the programme.

In addition to increasing the use of solar energy in all building segments, the measure will strengthen the efficient integration of PV installations into building construction processes. For example, rooftop construction will soon always be combined with solar installations, reducing costs and enabling us to utilise the limited available labour power as efficiently as possible. This is a wise step, and the benefits of having solar energy on the roof are obvious. as clear as having the energy where there's a future where there's a future is an important step.







Excerpted verbatim from the Sustainable Energy and Climate Action Plan (SECAP), which includes actions for greenhouse gas mitigation and adaptation to the impacts of climate change, funded by the European Union and supported by the European Bank for Reconstruction and Development (EBRD), which is one of the works carried out by Izmir Metropolitan Municipality to leave a cleaner and livable city for future generations, such as the issue of energy and resource consumption for Izmir's urban sustainability combating the climate crisis;

Preparation of Consent Reviews

Within the scope of this report, 3 different types of fidelity reviews have been prepared to reflect the different types of contribution of the actions, namely: Adaptation, Mitigation and Izmir GCAP.

For 25 actions that are also within the scope of GCAP the due diligence reviews have been prepared within the scope of the details in sections 'i' to 'iii' below. The due diligence reviews prepared for adaptation and mitigation specific actions include the details required by the CoM reporting methodology. For adaptation actions, these details include: description of the action, rationale/objective, type of action, timeline, risks and vulnerabilities addressed, responsible organization, stakeholders and financing options. For mitigation actions; justification/objective, implementation steps, timeline.

in quantity, possible barriers, action owner, stakeholders and financing options.

Actions in Common with GCAP:

As indicated in Annexes H and I, there are 25 actions within the SECAP that overlap with the **28** actions selected by IMM for the preparation of detailed due diligence reviews under the GCAP. These **25** actions have been aligned with the GCAP; therefore, for these actions, an alternative due diligence template has been used to the template used for the actions included in the SECAP only, and additional information on the GCAP has been provided.

Symbols of Environmental Value

Within each feasibility review, there are symbols for the environmental values that are positively affected by the action. These symbols are shown in Table 33 below

i. Benefit Assessment

In order to provide more detail on the potential benefits that can be obtained from actions, the following benefit categories of criteria have been developed.

- **-Health & Wellbeing:** Covers public health improvements such as more active lifestyles, pollution reduction and workplace safety.
- **-Social Inclusion:** Includes access tobasic services, skills development, social equity and social fabric.
- **-Economic Development:** Economic growth encompasses job creation, economic efficiency, income saving/generation and loss avoidance.
- -Environmental: Focuses on protecting and enhancing the ecological value and biodiversity of Izmir, as well as reducing air, water and soil pollution and reducing greenhouse gas emissions.

Each Viability Review, organized by action groups, provides a reference for the criteria that it can directly influence. The full criteria matrix of the value analysis is presented in Annex D.

Symbols of Environmental Value

Indicative economic cost was calculated only for the 28 actions for which IMM requested the preparation of a Consent Review. In cost calculations using Euro currency, the assumptions used are listed in Annex F of the GCAP report. The estimated costs, where applicable for the actions, cover the following aspects:

- -CAPEX: Initial investment cost
- -OPEX: Operating cost
- **-Design / Development:** Other costs such as scoping/feasibility studies

 Table 33: Environmental Value Symbols used within the scope of the Validity Reviews

Status Indicators		GCAP Sectors	
Air quality			
Biodiversity	<u> </u>	Buildings _	\bigcirc
ŕ	9	Energy	₩
Climate risks and adaptation		Industry	er!
Greenhouse Gases		Land use	/// Cath 10 11 a
Green Areas		Waste	
Soil quality		Transport	
Water quality/availability	٥	Water management	8=8
Marine Biology			



5.1. Actions Related to Both Mitigation and Adaptation

This section includes 6 actions that can be applied to both mitigation and adaptation sectors.

5.1.1. Buildings

Sector Purpose and Objective: See section 5.2.1.

Number of actions: 2

These actions for both mitigation and adaptation take into account the quality of the existing building stock and the existing characteristics of Izmir's urban environment, and build on IMM's ongoing work (e.g. the Energy Efficiency in Municipal Buildings Study and the Building Inventory conducted as part of the Izmir Earthquake Scenario and Earthquake Master Plan).

Study) is utilized. It has also taken into account that IMM can influence building design and performance.

There are several national strategic plans and regulations in the building sector, including the Energy Efficiency Strategy Document (2012-2023) and the National Energy Efficiency Action Plan (2017-2023) prepared by the Ministry of Environment and Urbanization for the building sector, the Turkish Energy Efficiency Law and the EU Energy Performance of Buildings Regulation.

In formulating and implementing these actions, it is important to take into account practices that do not have a positive impact on compliance. In future, management practices and climate change adaptation and mitigation in technical applications

If not taken into account, the expected impacts of climate change could be exacerbated. An important way to do this in the buildings sector is to prevent the transfer of climate risk pressures or impacts to other environments (e.g. neighboring areas). An example of this is the use of air conditioning to cope with extreme heat. Although air conditioners cool the inside of buildings, waste heat is released into the urban environment, increasing the urban heat island effect.

Table 34 below matches the actions presented for the buildings sector in the IMM Strategic Plan 2020- 2024 targets.

The SECAP mitigation and adaptation actions for buildings are summarised in Table 35 below, and a concurrence review has also been prepared.

Table 34: IMM Strategic Plan 2020-2024 targets addressed

Strategic Title	Strategic Objective	Strategic Goal(s)
Infrastructure - Urban Infrastructure	1. Creating a Sustainable Infrastructure Inclusive for All	1.1: A Sustainable Urban Infrastructure will be Built to Contribute to the Urban Economy
Infrastructure - Sustainable Living Spaces	1. Creating a Sustainable Infrastructure Inclusive for All	1.2: Settlements will be built or reconstructed in a planned, safe and sound manner.

Table 35: Summary of actions in the buildings sector

Descrip Action	tion of Title of Actionible	Respons Unit	Benefits Spanning Multiple Sectors	Link to Mitigation
B1.3	Reviewing and updating the planning regulations and guidelines for future development works of the Municipality in terms of energy efficiency.	IMM	Public Health	YES
B1.11	Explore ways to support housing renovations to a higher and greener standard of energy performance	MM	Public Health	YES

B1.3 Reviewing and updating the planning regulations and guidelines for future development works of the Municipality in terms of energy efficiency		
Strategic Plan Objectives	1.2 Settlements will be built or reconstructed in a planned, safe and sound manner	
Definition	Allocate a source of financing/subsidy to support the renovation of existing private dwellings to improve their energy efficiency. Eligible renovation works could include, for example, renovation of the building exterior and roof (e.g. walls and roof insulation, windows, air tightness, etc.) or services in the building (e.g. heating systems and water systems/plumbing). Administrative and supervisory bodies should be established to provide the necessary financing for this action. This action should be coordinated with Action B1.11, which includes research and surveys to assess the current energy performance of the building stock to target areas that are currently underperforming.	





For the first time in Türkiye, the European Bank for Reconstruction and Development (EBRD) provided a grant of EUR 300 thousand to Izmir for the preparation of a "Green City Action Plan". All stakeholders of the city participated in the preparation process of the Green City Action Plan. The Green City Action Plan was prepared with the of more contribution than participants from Izmir Metropolitan Municipality units, public institutions, non-governmental organisations, universities and professional chambers. approved by the Izmir Green Excerpted verbatim from the City Action Plan;

Group 5: Install lowzero carbon and energy efficient technologies in municipal buildings and land

Energy: ES1.5, ES1.7.

Low and zero carbon (LZC), energy efficient technologies are installed, as well as GHG emissions in the city are reduced and environmental gains will increase while operating costs are reduced. Actions in this group will be undertaken to minimise the risk of GHG emissions from municipal buildings and land and in group 4, under IMM's commitment to net zero energy in municipally owned and operated buildings.

According to the 2018 base year emission inventory in Izmir SECAP. municipal buildings municipality-owned areas consume 403,894 MWh of energy, resulting in 181,289 tCOe of emissions. This value corresponds to 0.7 percent of the total emissions of the province. This rate includes emissions from buildings non-residential and dwellings in the province. emission values from this ratio is added to the total emissions to 23.5 per cent.

In addition, public space lighting is IMM's largest source of all municipal emissions. has a rate of 4%. This value is 4% of the total emission values in the province. This corresponds to 0.13% and is estimated to have consumed 230,000 MWh of energy in 2018. When street and road lighting, which is the responsibility of GDZ (Electricity Distribution Company) and the General Directorate of Highways, is added, the figure rises to 0.8%.

Current work in the current situation

Although IMM's influence on the private sector is limited, the municipality can take a leadership role and raise awareness on the use of low and zero carbon and energy efficient technologies and promote best practices from around the world. This issue was included in the 2015 Izmir Sustainable Energy and Climate Action Plan. IMM has committed,

To take measures to reduce greenhouse gas emissions within the plan. In addition, the IMM Strategic Plan 2020-2024 includes a commitment to raise awareness of the municipal administration and the public on clean energy, preliminary studies on renewable energy technology studies and the municipality on-site clean energy with the launch of applications related objectives.

These commitments are supported by national policies and strategies such as the Turkish Climate Change Strategy, the Energy Efficiency Document. the Strategy Development Plan and the Ministry of Energy and Natural Resources 2019-2023 Strategy Plan. The Republic of Türkiye aims to meet at least 30% of all its energy needs from renewable energy sources by 2023. This target is by severalnational supported strategic plans and regulations, including the Turkish National Energy Renewable Action 2011-2023.

The Izmir Sustainable Energy and (SECAP), Climate Action Plan developed in parallel with the GCAP, is an update of the Izmir Sustainable Energy Action Plan (SEAP). As part of the Covenant of Mayors, IMM is committed to reducing its greenhouse gas emissions by 40% by 2030, calculated on a 2018 base year. This To achieve this goal, SECAP aims to deploy 15 MW of low- and zero-carbon energy technologies in IMM-owned buildings and 745 MW of low - and zero-carbon technologies citywide by 2030. IMM also aims to conduct pre-feasibility studies on different renewable energysources such as solar, biogas and other renewable energy sources over the next five years. These studies will be useful guides for potential investors.

addition, Izmir Metropolitan Municipality installed solar panels on the roofs of Bergama Slaughterhouse, Aliaga Fire Department, Uzundere Multi-Purpose Hall and Cigli Family Counselling Centre. Thanks to these investments, 140 tonnes of carbon dioxide emissions will be prevented annually and 280.000 kWh of energy will be obtained annually. Apart from these facilities, solar panels are installed in private facilities such as Ekrem Akurgal Life Park, Dog Shelter and Solid Waste Transfer Station throughout the province, and ESHOT Buca Electric buses in the facilities in the sun energy is charged by panels.



IMM Strategic Plan 2020-2024 Targets Related to Actions

Selected targets from the IMM Strategic Plan 2020 - 2024 related to the actions the group focuses on summariz ed below:

Case Study: Examples of good practices from other cities³⁹

Solar City - Halifax Regional Municipality, Nova Scotia, Canada.

The Halifax regional municipality provides a service t o property owners (residential, for-profit

Table 22: IMM Strategic Plan 2020-2024 Objectives under this group

is targeted. Under the program, users sign an agreement with the municipality, which covers the investment costs of solar energy systems to be installed on their land. The municipality applies a voluntary 'Local Improvement Fee' to the property after payment of the solar contract. This is deducted from the annual tax bill for the property owner.

Strategic Title	Strategic Objective	Strategic Target
Infrastructure - Urban Infrastructure	1. Creating a Sustainable Infrastructure Inclusive for All	1.1 A Sustainable Urban Infrastructure to Contribute to the City Economy To Be Built
Quality of Life - Accessible a Clean Energy	2. Build Izmir as a Smart City with a High Quality of Life and a Welldeveloped Transportation Network Transforming the City	2.4 Access to Reliable, Sustainable and Affordable Energy for All To be Supported

Priority Environmental Challenges Addressed

The following key findings from this study were presented at the Challenge Prioritization Workshop. The workshop sought the views of Technical Committee members and stakeholders to validate these findings and prioritize the challenges. IMM's climate change mitigation planning on the prioritization of environmental challenges are as follows:

Table 23: Priority Environmental Challenges

non-profit organizations, houses of worship, charities and cooperatives) have established the Solar City Program, which offers innovative solar energy options within the city's jurisdiction. This program is funded through the municipality's solar collection account. There are three options for property owners to benefit from solar energy in the form of electricity, hot air or hot water. The Solar City Program has an annual budget of 4 Million Canadian dollars and 450 installations per year through the program

separately, it is an annual fee paid at a fixed interest rate (4.75%) for more than 10 years with the option to pay the balance in full.

The benefits of this program are that it makes solar energy accessible to multiple buildings and organizations across the municipality in an affordable, 10-year program. The program's solar hot water provision alone will reduce greenhouse gas emissions by 16 million kg and save 320 million liters of water over the 23-year lifetime of the installations. is expected to be ensured.

Status Indicator	Priority Environmental Challenge
Greenhouse Gas Emissions	Renewable energy use by both the municipality and the private sector is minimal.
Greenhouse Gas Emissions	Reducing Izmir's emissions for the 2018 baseline year by 40% by 2030 reduction of emissions from municipal sources as part of the commitment.

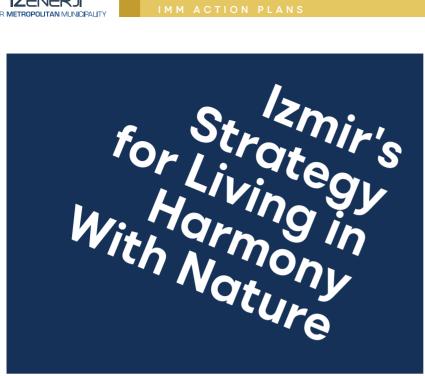
Actions

Green City actions developed across the municipality related to low-zero carbon technologies a r e summarized below (Table 24). For these actions, as they are not among IMM's prioritized action options detailed assessment has not been made. However, considering the development and implementation of these actions in an appropriate timeframe, the establishment of a public-private partnership would be an appropriate path to follow for these actions.

Table 24: 5. Actions in Group 5.

Action Code	Action Title	Action Type	Priority Challenges	Impact Level of Action	Indicative Cost
ES1.5	Expand the use of solar energy on municipal assets and land, such as municipal buildings, dedicated road areas, bus stops, etc.	Investment project	Renewable energy is used at a minimum rate.	High	-
ES1.7	Replacement of all municipality owned/operated street lighting with LED.	Investment project	Municipal mitigation planning	High	-





Izmir's Strategy for Living in Harmony with Nature Excerpted verbatim from Izmir's Strategy for Living in Harmony with Nature.

Kulturpark Ecological Rehabilitation Project LAYER

Integrative axes:

Ensuring the penetration of nature Into the city Ensuring the penetration of people into the

Promoting a circular economy Strengthening ties between urban and rural cultures

Explanations:

Izmir Metropolitan Municipality has prepared a Conservation Zoning Plan for Kulturpark, one of the symbols of the city, with the aim of protecting it by improving its natural texture and preserving its place in the city's memory. In this direction, Kulturpark's Ecosystem Protection Plan has also been put into effect in order to increase both the quantity and quality of the park's green areas. The study, which is based on the protection and rehabilitation of the flora and fauna of the area, also includes the integration of Kulturpark with other green areas through green corridors. With the protection plan, the square meters of green areas will be increased and the ecosystem value of the park will be further enhanced by using natural plant species belonging to the flora of Izmir while establishing new green areas.



The most important and largest park area in the center of Izmir is Kulturpark.

Olivelo Izmir Ecological Communal Living Space on the Urban Periphery LAYER

Integrative axes:

✓ Ensuring the penetration of nature into the city

Ensuring the penetration of people into the countryside in harmony with

Promoting a circular economy ✓ Between urban and rural cultures strengthen ties

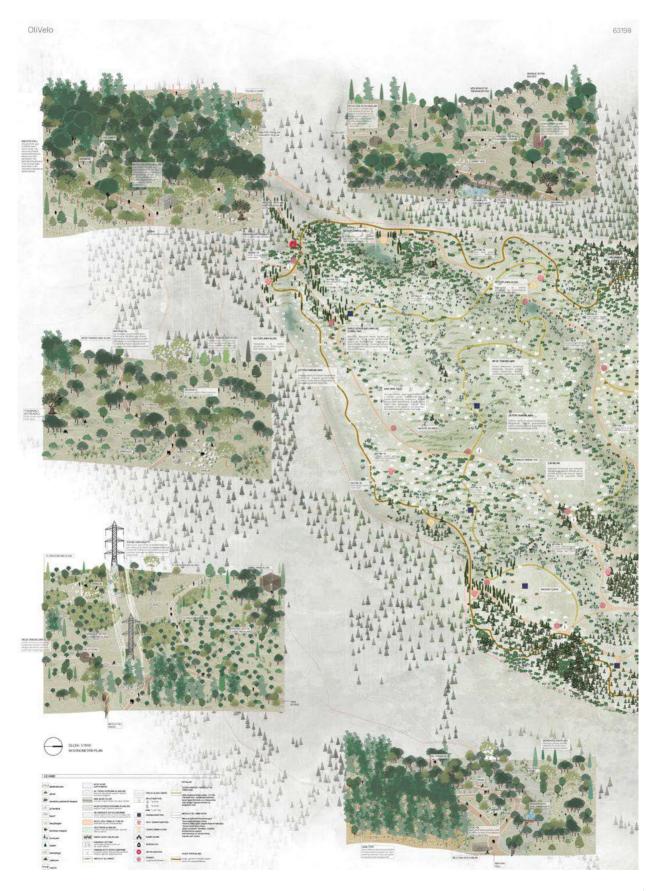
Explanations:

The project area, which forms a sensitive interface between the urban and rural areas of Yelki in terms of its location and qualities, has been designed with seven pattern networks network. Geographical (Social network, Information network, User network, Ecology network, Perception network, Program network). The social network is the network that defines all actors in the immediate and distant surroundings of the park that will contribute to production, operation documentation.

The Olivelo Project is a network of information at different layers research and documents them, brings them together in favor of nature and humanity, and researches and shares them with its users. Users are defined as stakeholders who contribute to the production and can co-construct, who can share and enhances the cultural and physical environment in which it islocated. Ecosystem self-sustainability wil grow random situations creation of and new species that support biodiversity, ecological environment preservedand enhanced. The perception network enables all characteristic signs in the area and its immediate surroundings to be created as a mind map and to describe some as visible and some as discoverable

In a limited area, it is envisaged to include a bicycle rental and repair shop, information unit, library and archive units, training workshops, restaurant, olive workplace, technical and warehouses, areas Olivelo assembly area and office areas within a qualified rural texture using sustainable construction techniques. Within the large section designed as a nature conservation and development area, a very sparsely intervened area with walking and cycling trails, information units, focal and ecosanat areas is designed. The Olivelo Project was prepared through a competition and started to be implemented in 2021.









WWF has launched a worldwide programme and 36 countries took part in the "Plastic Waste Free Cities Network" by IMM in December 2019 President Mr Tunc Soyer's intention in Izmir with the signing of the declaration and after Nice Plastic in the Mediterranean by 2030 commitment to be a waste-free city Izmir was the second city.

In this direction, the project initiated in Çesme as a result of pilot applications "Plastic Waste-Free City Action Plan" (verbatim quotation) you, dear with our readers.

2.2.3 Ensuring Separate Collection of Agricultural Packaging Used in Agriculture		
Strategic Plan Objectives	5.1 Sustainable waste management and recycling mechanisms will be developed	
Definition	Expanding the 'Separate Collection of Pesticide Packaging Project', which is currently being carried out by Izmir Metropolitan Municipality in the pilot region, throughout the province	
Implementation Steps	1. Within the scope of the Separate Collection of Pesticide Packages project, determining the frequency and timing of pesticide use in agricultural areas in the regions 2. Organizing trainings for farmers in the nearest mukhtars' offices, informing them about the internationally recognized 'Triple Wash Method' after completely emptying the pesticide packages they use, and explaining the importance of separate collection of these packages, which become non-hazardous packages, in terms of environment and human health 3. Coordinating the collection of agricultural packaging waste accumulated at certain intervals 4. Distribution of organic fertilizers to agricultural producers as an incentive	
Time Frame	2021-2025	
Stakeholders	IMM Waste Management Department, Department of Agricultural Services District Municipalities Waste collection companies contracted with District Municipalities Citizens	







2.2.4 Make separate collection of dry recyclable materials mandatory by setting policies at district municipality level (SW 1.3)		
Strategic Plan Objectives	5.1 Sustainable Waste Management and Recycling Mechanisms to be Developed	
Definition	In line with the Zero Waste Regulation and in cooperation with SECAP SW 1.8, mandatory requirements for separate collection of dry recyclable materials will be determined at District Municipalities level and public awareness will be raised. In addition, according to the regulation, District Municipalities are required to start implementing the Zero Waste Management system by December 31, 2020.	
	According to the waste characterization study carried out in Izmir Province in 2018, the available samples show that recyclable packaging waste is the most significant element (18.97% by weight on average). Therefore, separate collection of dry recyclable materials	
Rationale	• Reduce the amount of waste sent to landfills (the amount of waste sent for disposal must be reduced by at least 15% in accordance with the Zero Waste Regulation) and reduce the need for land for waste storage	
Rationale	Will contribute to the economy	
	• It will help IMM achieve the target of collecting at least 12% of packaging waste separately at source by 2023, one of the targets of the Izmir Integrated Solid Waste Management Plan prepared in 2018.	
	1. Investigate regulatory and budgetary measures to enable municipalities to implement feasible policies for sorting dry recyclables	
	2. Assess and identify existing markets and investments for the collection, sorting, processing and export of recyclable materials	
Implementation Steps	3. Assess and identify useful infrastructure requirements (bins, depots, collection and process requirements) to enable district municipalities to efficiently collect waste separately	
	4. Working together with district municipalities	
	5. Determining and approving the modalities of policy and enforcement measures	
	6. Preparation of zoning and implementation plans to include infrastructure investment and necessary revisions in building standards	
Time Frame	2020-2025	
Action Owner	IMM	
Stakeholders	MoEU, Provincial Directorate of Environment and Urbanization, CEVKO Association, district municipalities, citizens of Izmir	

2.2.5: Specialised waste treatment for restaurants and tradesmen working in the food sector in accordance with the management infrastructure and technology to examine the possibility of providing a collection service (SW 1.16)			
Action Description	This action should be aligned with actions SW 1.4 and SW 1.3. A feasibility report will be prepared to identify where the collected waste can be used for composting and the facilities required based on the projected amount of waste, focusing on areas of the city with a higher concentration of the food sector, such as Alsancak. This will require collaboration with district municipalities and private management companies involved in the waste management process.		
Possible Impacts	This action, together with SECAP action SW 1.8 and GCAP actions SW 1.6, SW 1.16 and SW 1.17, contributes to GHG reduction by not sending some of the waste to landfills. Approximately 667,279 tCO ₂ reduction is expected to be seen by 2030.		
Time Frame	2021-2025		
Action Owner	IMM		
Financing Options	Municipal Budget, Public-Private Sector collaborations		



Digital Transformation in Renewable Energy Fields

Human beings have consumed natural resources unconsciously throughout its thousands of vears of adventure and this has reached a dimension that threatens our future. Mankind has only realised this threat in the present century. The raw material of all forms of energy on earth is the sun. The cycle of water in the world, photosynthesis, which is the first link of the food chain, and the formation of the physical conditions required for the formation of fossil fuels are processes completely dependent on the sun. Our company ENISOLAR was founded with the aim of increasing the share of renewable energy sources in our lives by adopting principle that sustainable development possible sustainable energy sources. In our 17-year adventure, we have offered solution partnership in wind and solar energy projects, which are the of cornerstones sustainable development in Türkiye and abroad. We continue to provide project development and consultancy services to the renewable energy sector with our 90 MW solar energy project and contracting portfolio, 1560 MW domestic and 240 international wind and solar energy project development experience and our expert staff.

Deniz Garip YILMAZ

Enisolar Energy Subsidiaries and Overseas Projects Coordinator



Clean Energy Against Climate Crisis

The International Renewable Energy Agency's (IRENA) World Energy Transitions Outlook 2023 report calls for an annual addition of 1,000 GW of renewable energy by 2030 to keep the 1.5°C climate target achievable. In order to achieve these targets, Türkiye is also pursuing an energy policy that aims to ensure that the share of renewable energy sources in the country is at least 30% by 2030 and the share of natural gas is reduced to 30%. With the investments made, Türkiye ranked 5th in Europe and 12th in the world in terms of renewable energy installed capacity by 2023. In terms of share, solar energy systems have approached 10 per cent of production. Turkev's energy Considering that this value was 1% in 2014. the development in this field can be better understood. In potential of our wind energy, the country has been determined to be 48,000 MW, 867 MW of new systems have been commissioned to the existing production in the last year while the total installed

increased to 12,000 MW, providing 11% of the overall energy production. has arrived. Türkiye with these data, Wind power in Europe in terms of installed capacity 6, which accounts for a third of its energy country.

UAVs Reduce Energy Losses

In the light of all these developments, it can be said that renewable energy investments will continue However, after accelerate. commissioning of these facilities, it has become equally important to ensure their continuity and maintain their efficiency. At this point, new aviation technologies have come to the fore for fast and efficient inspection, fault detection and reporting processes in solar power plants spread over large areas and wind fields requiring engineering and maintenance services at high altitudes. As a result of these findings, ENISOLAR has entered into a partnership business AMANOSDRONES, one of the leading companies in the sector, and the two companies have decided to continue their activities under the same roof under the name ENISOLAR AMANOS.







Apart from their use in the agriculture and construction sectors, monitoring and maintenance of energy infrastructure is one of the most common uses of UAVs, and these devices can be equipped with equipment such as cameras and thermal imaging systems that provide high-resolution images and can periodically inspect power generation facilities and transmission lines. This enables early detection of possible malfunctions and energy means that interruptions can be avoided income.

For example, when energy losses in solar power plants are examined, it can be seen that energy losses can be 7% due to shading, 4.6% in high temperatures above 25 degrees, 3% due to inverter problems, 1.5% in cabling and up to 2% due to natural physical effects such as dirt, dust and snow. This and similar losses factors should be monitored and fast interventions energy uninterrupted and highly efficient production in a way that ensures its continuation.

It is aimed to produce fast solutions and ensure energy continuity in production facilities by performing many fault and problem detection studies such as single cell control, heated junction box detection, short circuit analysis in UAV-supported scans in solar power plants. By means of UAV's, a very serious inspection speed such as the completion of nearly 25 MW photovoltaic production area within 2 days can be achieved, which is becoming more and more important for the continuity of increasing clean energy production and ensuring high capacity operating conditions.

Using UAVs for Occupational Safety

UAV's also offer considerable convenience for inspecting installations in hazardous inaccessible areas. One of the best examples of this is that wind turbines can be monitored even at high altitude and under unfavourable climatic conditions. Significant energy losses can occur in wind power plants due to blade failures and damages. Turbine inspections and repairs require a specialised technical team capable of working at high altitude. At this point, UAVs have provided very important solutions to create work safety and human-oriented working processes. ENISOLAR AMANOS offers safe and fast inspection services to its business partners with its experienced pilots with more than 500 hours of flight experience. UAV - 1 / UAV - 2 certificate holders, map modelling experts and state-of-the-art aerial vehicles. Following the field studies, the collected data are analysed and detailed analyses to the owners of the work being done is reported.

As AMANOS ENISOLAR, we have recently carried out more than 200 wind turbine inspections in a short time with our business partnership with ZEITVIEW company, we have carried out active inspections in 15 different sites. As a result of the collected data from the result of the studies performed, analyses that can reverse to action and reports, the energy efficiency of the sites we provide service we have made a positive contribution.

It should not be forgotten that one of the most important pillars of the fight against the climate crisis is the zero carbon policy. Enisolar has committed to act in accordance with the requirements of the Paris Agreement signed for this purpose while laying the foundations of the company. The expansion of renewable energy production is one of the most important tools in the fight against the climate crisis. In order to implement a zero carbon policy on a global scale, energy the industry is also keeping pace with this change it is imperative to fit in. For this purpose, Enisolar will continue to support its customers in Zero Carbon Energy Production by benefiting from its knowledge and experience in the renewable energy sector.

In order to look to the future with hope and to ensure favourable living conditions for new generations, we say "Together, for future" and we pledge to do our best to reduce Türkiye's energy dependency and to work for a clean, livable environment as we proudly celebrate the 100th anniversary of our republic.







Emine Bilgen EYMIRLI Environmental Engineer

Izmir Development Agency Green Growth Head of Policy Unit

Launching Green Transformat ion in Izmir; Sectors, Priorities and Opportunities

Rapidly growing industry, intensive agricultural production and increasing urbanisation create serious environmental and social pressures on the sensitive ecosystems and natural resources of Izmir.These pressures are natural resource utilisation and agricultural production dominated by sectors based on existing economic activities significant risks to its continuity is the centre of the world.

Green transformation, available for Izmir created by the economic system to minimise the risks mentionedand to that Izmir's of opportunities it has important to ensure that it is evaluated is seen as a tool. Green transformation, economic growth natural resources, maintaining protecting, efficiently utilised and a production that prevents environmental pollution is the process of transition to the model. Izmir limited natural resources, under protection sensitive ecosystems that need to be protected, Izmir with its growing polluting industry, to initiate the green conversion at advantageous and strategic location is taking.

Although it offers economic opportunities as well as enhancing environmental sustainability, green regeneration comes at a significant cost. It is therefore critical to direct limited resources towards actions and investments where regeneration can

quickly generate positive impacts and contribute to the recovery of natural resources. In order to determine a strategic path based on prioritisation in this direction, it is necessary to identify areas to focus on for transformation, taking into account the opportunities and constraints created by the current economic structure. In this direction, Izmir Development Agency has carried out the Green Transformation and Blue Opportunities Perspective in Izmir study to identify priority areas, sectors spatial foci for transformation in Izmir. The study was carried out by a large team of Agency experts with a unique methodology, prioritised for transformation sectors and spatial foci intervention developed through proposals and the implementation of these interventions with the implementation of the next 10 vears economic to be obtained in the period, environmental and social benefits and investment costs. This feature is more of a guide that directs and forms a starting point for future studies on green transformation, rather than a classical strategy document.

Hakki Gokhan ELUSTUN Mechanical Engineer

> Izmir Development Agency Green Growth Policy Unit Expert

As a result of many qualitative and quantitative assessments from macro level to sub-sectors, three overarching and strategic areas where the impact of transformation for Izmir can be seen at a high level, which will create economic opportunities while reducing environmental impacts, have been identified as waste, water and energy. selection of the transformation/opportunity areas, the nature of the problems within the existing economic structure and the potential ameliorative impact transformation were taken consideration. The sectors that have the potential to make the greatest contribution to the realisation of the transformation targets set under the waste, water and energy areas and the spatial foci where they are concentrated have been identified through a three-stage prioritisation analysis. Under three main headings, namely Green Transformation Industry, Green Transformation Agriculture and Blue Opportunities, transformation interventions and the benefits and costs that will arise if these interventions are realised are presented.

Under transformation green industry, processing/storage of vegetables and fruits, paper and production, recovery, oil production, milk and dairy products and plastic production have been identified as priority sub-sectors and transformation actions have been developed for them. It is possible to group these interventions, developed on a sectoral scale, under the headings of including the expansion of efficiency practices that will reduce energy, water and raw material consumption, increasing production and use of clean energy, transition to high technology in production, reducing dependency through the production of alternative raw materials from waste, value-added recycling, green labour force and skills development and domestic-green technology innovation production.



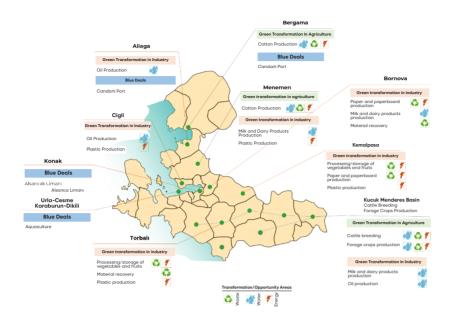


Figure 1: Priority sectoral and spatial foci in waste, water and energy for green transformation and blue opportunities

The interventions in question in case of realisation to be provided in the next decade optimisation of total economic gain the scenario is estimated to be \$725 million. is being carried out. Transformation with the realisation of interventions 1.6 million tonnes of waste reduction of 54 million mof water and 1.8 saving billion kWh of energy seems possible. Total \$338 million investment costs needed green transformation in the heard industry interventions resulted in 4.6 million tonnes of CO greenhouse gas emissions will be able to prevent it.

Green Transformation in Agriculture in the sectoral evaluations; effective management and consumption of water, alternative sources of domestic development, agricultural production activities in accordance with the regional conditions and according to economic gains planning, animal wastes Ensuring sustainable management, high technology in production recommendations for the transition has been developed. As in industry areen in agriculture and green for transformation labour and skills development, the production of indigenous green technology and innovation realisation is critical and integral has importance. Izmir's green agriculture the said programme for the transformation of the interventions for the next ten years total to be provided in the period economic gain in the best-case scenario estimated to be \$7.9 billion is recognised. Total \$907 million transformation with investment realisation of interventions resulting in 12.7 million tonnes of animal recycling of waste to the economy and conservation of 626 billion m of water seems possible. With transformation 341 million in agricultural energy consumption kWh energy savings were achieved, while 1.3 billion kWh biogas energy can be produced. Green in aariculture transformation interventions and ultimately 2.9 million tonnes CO equivalent greenhouse gas emissions can be prevented.

Harbour under the main heading of Blue Opportunities services sector and regional logistics the target of improving the infrastructure two scenarios were studied in this context, in the first scenario, construction activities of the unfinished North Aegean Port wind energy equipment exports to be structured accordingly, a second the other scenario is Alsancak Revitalisation of the harbour The superstructure investment of the Logistics Centre

completion and the establishment of a railway connection development scenario benefit and cost in a way to include the analysis of has been analysed. North Aegean Port of the development scenario centred if realised, a period of ten years invested \$ 247 million during the period \$3.2 billion against the cost of \$3.2 billion of the profit in the neighbourhood of possible; the second scenario within scope of investment and realisation of interventions in the event that the cost of \$ 500 million against a total of \$1.5 billion returns can be achieved. Another mature sector in Izmir as aquaculture and coastal logistics facility in the fisheries sector and fulfilment of structure needs, for the use of alternative feed Carryina out R&D activities, new blue with the cultivation of species biotechnology studies support prioritised intervention areas have been identified.

Green Transformation and Blue in Izmir Opportunities Perspective work, green and for the initiation of blue conversion represents a prepared approach is a great challenge. This study is primarily sectors and spatial foci by proposing interventions, implementation of these interventions As a result, economical that can be achieved. environmental and social benefits and investment Greening costs in Izmir. The proposals presented are based on the green solving on the basis of transformation when dealing with issues that need to be addressed but also opportunities in the city To evaluate the impact of the new programme. This is Sustainability and competitiveness of Izmir to help him achieve his goals an implementation framework to ensure that Proposals.

Green Transformation and Blue in Izmir Opportunities Perspective, green and green for Izmir to initiate the blue cycle to create a perspective for for the purpose of the study. Study priority sectors and spatial foci intervention recommendations through and develops and develops achieved the implementation through interventions the economic environmental and social benefits and investment costs is revealed. Presented here benefits and costs, green in Izmir on the basis of the transformation approach with the problems that need to be solved an opportunity for opportunities to be exploited provides a framework for implementation.



Responsible Consumption of Natural Resources Becomes Widespread in Karsiyaka

Dr. Cemil TUGAY

Mayor of Karsiyaka Municipality



As Karsiyaka Municipality, we believe that it is one of our most important duties to reduce the use fossil-based energy that causes the climate crisis, to act efficiently and responsibly in the consumption of natural resources such as water, and to raise awareness both within the organisation and in the public about vital issues. With these understanding, our 2021 Sustainable Energy and Climate Action Plan includes 32 mitigation and adaptation actions greenhouse gas emissions for the year 2030 by determining 40% reduction in emissions to ensure water consumption by 30 to reduce electrical energy 100% of our consumption is renewable obtained from energy sources to make it a

In order to achieve these targets, we started with our own organisation and commissioned preliminary energy audits of our five service buildings with high energy consumption, and detailed energy audits of our Main Service Building and Mustafa Kemal Ataturk Karsiyaka Sports Hall. We included the improvement points in our investment plan.

We created the ESDA Resource Monitoring and Efficiency Platform to monitor all our consumption on a single platform, identify improvement points, calculate and report our carbon footprint. As of January 2022, we have 170 electricity, 280 water and 11 natural gas subscribers, 260 fuel-operated service vehicles and 2 SPP Power Plants. This is a total of 723 consumption and production data.

Saves them all on the ESDA Platform and monitoring. These data analyses with the evaluation on the platform with the following improvements conclusions were reached.

ESDA Resource Monitoring and Efficiency Platform

Comparing January-August 2022 and 2023 results:

- Greenhouse gas emissions decreased by 9.9%.
- •Electric energy consumption decreased by 6%.
- Fuel consumption decreased by 15%.
- Water consumption decreased by
 31.3%

The follow-ups we've done on this platform, timely interventions and as a result of the improvements, in the first quarter of 2023 8.716.530 TL expenditure budget in 8 months (at current unit prices) decreased.

Karsiyaka Municipality's 2 photovoltaic solar power plants with a total installed capacity of 1.63 MWp meet 25% of our annual electricity consumption. The energy we produce with 910 tCO₂e in 2021 and 910 tCO₂e in 2022 1,116 tCO₂e in the first nine months of 2023 918 tCO₂e greenhouse gas reduction. This year, we received connection permits for the 1 MWp rooftop SPP investment, and we planned the investment in 2024.

Karsiyaka Municipality Solar Power Plant

We design and realise our new service buildings with features that can obtain at least Class B Energy Identity Certificate. For example, in our Alzheimer's Day Centre. 5cm XPS thermal insulation board was used on the walls. Heat and water insulation was made on the foundation and terrace. 6+16+6 cm thick, tempered heat and sun control coated glasses were installed. Heat insulated windows were used on the exterior facade. Saving LED lighting, saving taps and toilet system were preferred. Heat and energy saving was achieved by providing fresh air intake to the air conditioners

We use LED bulbs in all newly installed lighting in newly built parks, newly built service units, old parks, service buildings and market places. In order to save water, we are switching to sensor faucets in our service buildings, drip irrigation and automatic irrigation systems in green areas. In addition, Karsiyaka Municipality Council decided to give an award to the site and apartment building management that saves 15% in electricity and water consumption and announced it to the public.

Green Building Guide

We prepared a Green Building Guide and shared recommendations for gas reduction greenhouse efficient use of resources in 11 different areas. We presented a total of 91 improvement efficiency and suggestions to our citizens under the headings of "Energy Use and Performance", "Water and Wastewater Management", "Indoor Environmental "Green Quality", Infrastructure "Transport", Practices", "Waste "Light Pollution", Management", "Disaster Management and Fire Protection", "Materials and Resources", 'Sustainability", "Voluntary Participation and Innovation". Some of them are as follows:





Within the scope of Energy Use and Performance; thermal insulation and jacketing, energy identity certificate, cooling system, domestic hot water system, use of renewable energies, lighting, elevators, energy efficient white goods and heating appliances,

recording energy use.

Within the scope of Water and Wastewater Management; water saving, water quality, leak detection prevention and recording of water use, rainwater harvesting, treatment and use, rainwater collection and discharge systems in buildings, reuse of wastewater (gray water), water insulation, drip irrigation and use of automatic irrigation methods.

Within the scope of transportation; minimum use of private vehicles, walking and cycling for close distances, shared electric vehicles or public transportation for lonaer distances.

Green Infrastructure Green roof, vertical garden, rain garden and landscape applications using arid plants.

Supporting the circular economy through waste minimization secondhand use, separation of waste at source, recycling and recovery within the scope of Waste Management,

Within the scope of sustainability; our expectations from site and apartment managements are protection of investments, protection of energy efficiency systems and equipment, periodic maintenance, protection of green areas, water (from the network), gray water, rainwater collection, drip



maintenance of irrigation systems and equipment and new improvements planning and ensuring its continuity.

Karsiyaka Municipality will continue to produce and publish policies, strengthen co-operation, allocate budget and human resources in strategic plans in order to ensure corporate, financial environmental sustainability.

Bicycle-friendly city Karsiyaka

Within the scope of Voluntary Participation and Innovation; the participation of real and legal persons in local government services without expecting any financial gain in the field of work by revealing their knowledge, skills and talents, all kinds of joint work, opportunities and time is based on the principle of volunteering and is the most effective way to achieve national goals in society. For this reason volunteer for our innovative applications we find your participation very valuable.

We published our Green Building Guide, which we prepared with the above content, in January 2023. We organised many meetings and promoted it to the people of our district. To our citizens who want to get information on various issues with our multidisciplinary technical continue to provide counselling services we do. Details of the guide can be found at https:// karsiyaka.bel.tr/tr/yesil-bina

As Karsivaka Municipality, the common goal of all our work is to protect our energy, water and other natural resources in both corporate and urban areas, to achieve our 40 per cent greenhouse gas reduction target for 2030 by reducing our greenhouse gas emissions and to be a city resilient to the negative effects of the climate crisis.





The Function of Grant Projects in Local Climate Transformation*



Basak SOMUNCU

Political Scientist

Department of Foreign Relations and Tourism EU Grant Projects Branch Manager

Regions the European across Community socio-economic differences between "European Union Regional Policy" in the 1970s Structural Funds and Financial instruments such as Inclusion Funds were put into effect; the funding was relatively objective and universal through "Project-Based Funding Methodology" for implementation. Grant projects, in the 1992 "Project Cycle" adopted in the Management Approach" and on the Union's institutional plane, and in this framework, 6 the annual renewal of the EU Multiannual Financial Programme In Frameworks, various other member, candidate, and countries have various funds for (partner countries) programs and project-based grants foreseen.

Türkiye has benefited from EU funds since the 1990s from the beginning, but became a "candidate country" in 1999 and a "country in the accession process" in 2005. The status of being a "candidate country" increased the EU funds allocated to Türkiye through the Instrument for Pre-Accession Assistance and Community Programmes. The process harmonization with the acquis in Türkiye, in practice, is one of the most important reflections, essentially, the development of a culture of grant projects. Public institutions, especially in the last 15 years, educational institutions, non-governmental organizations, and municipalities, are carrying out studies to benefit from European funds projects.

The European Union's principle of "subsidiarity" as a reflection of the European many municipalities and local authorities have enabled the development of major infrastructure locally effective projects, including

projects that are realized. The EU has, in particular, climate and energy in the local project experiences, proving the important role of local governments in the realization of climate goals.

Climate change first appeared on the institutional agenda of the European Union in the 1990s. In addition to the member states' signature of the 1992 United Nations Framework Convention on Climate Change and the 1997 Kyoto Protocol, regulations and standards on greenhouse gas emission reduction, renewable energy sources, and energy efficiency were introduced at the Union level during these years. As the effects of climate change are felt more and more each year, the Union has been more active in this field over the last 30 years, and binding. The most important regulations shaping the current climate policies and practices of the European Union are the "Energy Union and Climate Action Directive (2018)," which envisages monitoring progress on climate targets; the "Energy Union and Climate Action Directive (2018)," which aims to ensure the competitiveness of the Union, the "Green Deal Package" (2019), which sets out policies and actions to ensure the transition to a green and circular economy, and the "European Climate Act" (2021), which makes binding the Union-wide greenhouse gas emissions reduction by 55% by 2030 (compared to 1990 levels) and the zero carbon (climate neutral) target by 2050.

Since 2007, European climate policy has emphasized that cities, where around 75% of the population lives and which have a large share in carbon emissions, need to make more efforts, and in this framework, the "EU Mayors' Charter for Climate and Energy" system has been implemented to

increase the commitment and municipalities potential of for mitigation. In addition, financing (arants and loans) from the Union budget is provided to member cities for the implementation of local climate actions. Although these opportunities have been able to benefit to a very limited extent compared to member countries, they have been the source of Izmir forming the most important pillars of the climate transformation journey.

Izmir has realized many effective projects, many of which are pioneering in the fields of climate change, environment, and sustainability. Grant project partnerships, in particular, have helped our municipality to adopt the EU mitigation targets and to comply with the Covenant of Mayors. The "Sustainable Energy Action Plan" prepared as part of the process revealed the local situation regarding greenhouse gas emissions identified local priority actions in Thus, effective sectors. municipality's efforts on climate have settled on a systematic target-oriented basis. As a reflection of this; in the field of climate and energy: solar wastewater drying plant installation, municipal buildings, and SPP installation in public areas, nature-based solutions in urban areas implementation, natural and cultural heritage-appropriate spatial planning, climate and education and training on clean energy information activities, Izmir's 2050-2100 climate change ecosystem modeling, mapping between cities on issues such as sharing experience many grant projects have been implemented. In addition to these, the city's future climate "Izmir," which will give direction to the efforts of Sustainable Energy

^{*}Due to the multidimensional nature of the topic, only a general perspective could be presented within the space allocated in the article. For this reason, the topic of "grant projects and financing experiences of European cities in the field of climate", which could not be included in the article, is worthy of a separate article.





and Climate Action Plan", "Izmir Green City Action Plan," and "Climate Change Resilience for Cities Guidelines" documents are also available for grant projects prepared with.

The experience gained in the grant projects and the local targets and actions put forward in various sectors in the action plans prepared have contributed to the rapid deepening of



our Municipality's work within the framework of its vision in this field. Within this framework, innovative projects in energy, transport, solid waste management, nature-based urban planning, disaster management, agriculture, wetlands, and many other fields, carried out with the resources of our municipality, support the climate transformation of Izmir. Grant projects currently carried out by our

municipality in the field of climate are: preparation of strategies to ensure behavioral transformation of citizens towards zero carbon, management system of vehicle charging stations, climate-compatible restoration in development implementation of nature-based solutions in coastal areas and wetlands. preparation of Izmir Sustainable Urban Mobility Plan, smart management systems to collect and analyze meteorological data on climate change, drought action plan includes activities such as preparation. In this context; the projects realized by the municipality with its own resources and grant projects are cyclically interrelated and multiplying the EU climate projects in our city.

Grant projects provide our city with technical knowledge and experience on the targets and pioneering practices of the EU climate policy. Despite the global energy and financial crisis environment and the limitations in accessing EU funds, grant projects (although financially insufficient on their own) enable the determination of short and medium-term roadmaps in the field of climate, and the implementation of projects that can be considered new even for the leading cities of Europe in our city and accelerated the climate transition process. The realization of carbon mitigation, zero carbon adaptation, and other targets of the EU Green Deal collective efforts production sectors, actors. and citizens. In this sense. local governments, as the unit closest to the citizens, have become a key actor due

to their potential to mobilize local sectors around local climate actions. In today's world, it is not realistic for citizens to adopt targets that are not set by them. In addition to this, the experiences of European cities show that the steps to be taken in many sectors for local climate transformation should be determined on a city-specific basis. One of the issues, climate change in Izmir supporting transformation for a governance citv-wide program mechanism and local green is to build consensus. This is the actions to be adopted in the process the fulfillment of all local actors' technical knowledge, experience, and funding will increase its need. Therefore, climate financing of the local climate consensus one of the important agenda items will be.





IMM's 103 Million Liras Infrastructure Investment in Bergama



With the "100 Projects in the 100th Year of the Republic" program, the Municipality laid the Izmir Metropolitan foundation of 21 km wastewater and storm water lines and 29 km drinking water lines in Bergama for 103 million liras. Mayor of Izmir Metropolitan Municipality Tunc Soyer stated that thev have launched a infrastructure mobilization for Izmir and promised all Izmir residents a life worthy of human dignity. Emphasizing that three infrastructure projects have started in Bergama, Soyer stated that the infrastructure of the region will be strengthened. IZSU has invested 183 million liras in Bergama in recent years.

Memorial Forest for Izmir in ESHOT's 80th Anniversary

On the 100th anniversary of the Republic of Türkiye and the 80th of ESHOT anniversary General Directoraté, Izmir will have a new commemorative forest. Metropolitan Municipality Mayor Tunc Sover planted the first sapling in Bademler on the Seferihisar road. The Mayor praised Ataturk's peaceful policy and talked about the 80-year history of ESHOT and its afforestation efforts. The forest will be established on an area of 60 thousand square meters and will be filled with drought-resistant olive, pine and almond trees. ESHOT continues its environmentally friendly approaches with the goal of zeroemission public transportation. This forest will also contribute to Izmir's Green City Action Plan.



Part of Zurich Foundation's New Initiative: Izmir



Izmir has joined a program led by the Z Zurich Foundation to build resilience to climate change-related disasters. As part of this global initiative, the project, in collaboration with Izmir Metropolitan Municipality, ICLEI, Zurich Insurance Group Türkiye and Z Zurich Foundation, aims to protect vulnerable communities against floods, heat waves and forest fires. The main focal points of the project are identification of communities in need, in-depth analysis of climate-related issues, development of customized strategies, dissemination of these solutions.



"AAA" Approval from Fitch Ratings

IMM retained its highest credit rating, affirmed as "AAA" by the International Credit Rating Agency Fitch Ratings. Fitch Ratings found the municipality's economic resilience and operational performance positive. Mayor Tunc Soyer said the rating reflects Izmir's economic strength and commitment to its goal of becoming a leading city. The rating will accelerate the city's increasing development by municipality's capacity to finance future major projects. The Fitch Ratings report emphasized that Izmir maintains a high degree of financial reliability, focusing on its strong financial access and debt management. The "AAA" rating implies high solvency capacity and a strong financial structure.



IZTARIM Bayindır Milk Processing Plant Opened



Built with an investment of 350 million Turkish Liras, Bayindır Milk Processing Factory with a daily milk processing capacity of 100 tons was inaugurated. The factory was inspired by Ataturk's quote "Every factory is a fortress". It aims to encourage production and create employment in rural areas. The factory aims to bring local and national seeds to the soil and promote sustainable agriculture. It also aims to ensure food security in Izmir. The project will make a major contribution to Izmir's economy and agriculture sector, and support farmers. The energy needs of the factory, which will make a significant contribution to Izmir's agriculture and food sector and encourage sustainable production, will be met by solar energy panels.

With 144 Projects, We Kept Our Promise

IMM Mayor Tunc Soyer announced that they have completed 144 of the 165 projects in their 2019 election manifesto, achieving an 87 percent success rate. The booklet "We Promised We Did" focuses on Mayor Soyer's achievements in Izmir. In the categories of safe life, economic growth, local democracy, social development, harmony with nature, learning from the past and building the future the completion rates of the projects realized are shared in detail. Among the prominent projects, the booklet includes topics such as Izmir's investments, transformation, living bay mobilization and Republican castles.





A New Century Begins for Our Republic

Founded in 1923 under the leadership of Mustafa Kemal Ataturk, the Republic of Türkiye has achieved great success and experienced profound changes for 100 years. This special year is a time to remember the bright history of our Republic and to celebrate today's and to make the future brighter presented an opportunity to be inspired and the 100th anniversary of the Republic of Türkiye celebrations with great enthusiasm in Izmir realised.

Metropolitan Municipality Assembly convened extraordinarily on the occasion of the 100th anniversary of the Republic of Türkiye. At the assembly meeting, Izmir Metropolitan Municipality Mayor Tunc Soyer and the assembly members celebrated the 100th anniversary of the founding of the Republic. The council members pledged to protect and preserve the of the Republic emphasised the importance of the Republic by commemorating Mustafa Ataturk Kemal comrades-in-arms





Following the official programme of Izmir Governorate, official parade ceremonies were held in Cumhuriyet Square. Governor Elban, Mayor Soyer and General Yeni saluted the official parade standing. In the ceremony, land, naval and air units of the Turkish Armed Forces, the Turkish Police Force. Izmir Metropolitan Municipality teams, chambers professional organisations, schools. cooperatives and associations, associations participated in the official parade and saluted the 100th anniversary of the Republic.

Izmir Metropolitan Municipality Mayor Tunc Soyer, while inviting the people of Izmir to join the Republic celebrations, said: "Izmiris are celebrating the 100th



anniversary with great excitement and enthusiasm. A new century is beginning for our Republic. We are very lucky; we have lived this day, so we are very happy, very excited. We are aware of our responsibilities as we enter the second century. We will continue to walk on the path drawn by Mustafa Kemal Ataturk. We will continue to follow his revolutions. We will continue to be the defender of the Republic, democracy and peace.









We are very happy, very proud. The Republic has maintained uninterrupted peace for 100 years. If we can live in peace while the geography around us is boiling, it is thanks to Mustafa Kemal Ataturk. That is why we will protect his memories, principles and revolutions until the end. Everyone should savour this day. This is a great day that can only be lived once in 100 years. There will never be a day like this again. Enjoy the emotion, the excitement, the enthusiasm I want everyone to live," he said.

Celebrations in Izmir are full of events. 100th Anniversary Yacht Races were organised in Izmir Bay and Republic Youth activities were held in Kulturpark. Izmir Metropolitan Municipality Assembly convened extraordinarily and a symphony concert was held at Ahmed Adnan Saygun Art Centre. Izmir Metropolitan Municipality brought the 100th anniversary celebrations of the Republic to a climax in Izmir and

continued the night's events with a lantern procession and cortege march. Tens of thousands of people flocked to the Republic Square and with the light and fireworks shows, Izmir wrote its name in history on the 100 th anniversary. IZDENIZ ships accompanied the shows with laser shows from the sea.

The last stop of the 100th anniversary of the Republic celebrations in Izmir was a magnificent concert with the famous artist Kenan Dogulu. Kenan Dogulu sang his unforgettable songs in the concert attended by thousands of Izmiris and brought the excitement of the Republic to the peak. Izmir Metropolitan Municipality Mayor Tunc Soyer called on Izmirites to protect Ataturk's revolutions and the Republic in the second century of the Republic. while Kenan Dogulu is on stage He has honoured the value of the Republic.





Life Stopped in Izmir at 5 Past 9



Izmir acted with great unity and respect on the anniversary of Mustafa Kemal Ataturk's death. People of Izmir gathered at Cumhuriyet Square on the 85th anniversary of Atatürk's death. At 9:05 a two-minute silence was observed throughout the city accompanied by sirens. The official commemoration program included a wreath-laying ceremony and the raising and lowering of the Turkish flag to halfmast to show respect for Atatuk's memory.

Izmir Metropolitan Municipality organised various events as part of the commemoration of Ataturk. A giant

Atatürk poster was carried during the "Respect for Ataturk" march and Mayor Tunc Soyer emphasised that Ataturk's principles guide today's political climate. In the evening, from Alsancak Harbour The construction of the the march was well attended and Ataturk's favourite folk songs and a ended with a concert.

Izmir Metropolitan Municipality Mayor Tunc Soyer also spoke at the opening of a photographic exhibition documenting the transformation of the Republic. The exhibition includes Ahmet Izzet Benguboz's documentary photographs of the Republican period and reflects the achievements of the Republic. Soyer emphasised that they are determined to keep the revolution alive and to be loyal to the values of the Republic and stressed the importance of protecting this heritage. Exhibition, Izmir with the support of the Metropolitan Municipality visited until 30 November.

As Izenergy Family, we participated in this commemoration programme on the 85th anniversary of the death of Gazi Mustafa Kemal Ataturk, the founder of the Republic of Türkiye, and commemorated our ancestor





IZTASIT Is Coming To Bergama



Izmir Metropolitan Municipality to the public transportation network of the surrounding districts firstly to integrate IZTASIT real ized in Seferihi sar 6th implementation of the model December in Bergama in the month of will start service

5 thousand in 50 locations in hir car parking lot has been added

Izmir Metropolitan Municipality, 2019
Izmir Metropolitan Municipality, 2019
Izmir Metropolitan Municipality, 2019
Since then, especially in the problem since then, especially in the problem iras since the vehicle parking iras neighbourhoods the vehicles at 50 metropolitations parking lot to the city has won. Izmir Metropolitan Municipality, 2019

Soyer: "Cittaslow, all gives hope to the world



For the title of the world's first Cittaslow Metropolis Izmir has been selected as a pilot city for the International Cittaslow Host the Coordination Committee meeting hosted the meeting. President Tunc Soyer at the meeting, Cittaslow title with Sarkoy from Turkey by awarding certificates to the world cities that received them, "Cittaslow is a great to us and to all gives hope to the

"EuroVelo is our future, paves the way



Mayor of Izmir Metropolitan Municipality Mayor of Izmir Metropolitan Municipality
Tunc Soyer, Izmir's first bicycle city in Türkiye
hosted by EuroVelo Cycling Tourism
hosted by EuroVelo Cycling Tourism
Conference the World Cyclinisht in the Conference the world overnight in the interence the world overlight in \mathfrak{t}_{scope} of addressed his cyclists.

President Soyer Culture 68 Library opened for service



IMM is committed to improving students' access to information to facilitate the development of new another library to the youth of the generation of '68. The generation of 68 gave young people Culture will a Iso ensure the promotion of 68 Library opened at Konak Center.

Izmir's 66 vehicle and pedestrian bridges Municipality, over 4 and a half years, ansure uninterrunted a disaster-resilient city iural creating a alsaster-resilient to ensure uninterrupted access o ensure uninterrupted acced to 700 million TL investment.

Netherlands Ambassador Wijnands Visited Soyer

Ambassador of the Joseph Wijnands and accompanying heriands Joep Wijnands and accompandelegation Mayor of Izmir Metropolitan MunicipalityTunc Soyer in his office

President Soyer in Brussels made contacts



Izmir Metropolitan Municipality Mayor Tunc Soyer held bilateral contacts in Brussels yesterday, and they came from various parts of Europe bringing together local executives 21st European Regions and he participated in Cities Week

Rainwater tanks distribution started



Izmir Metropolitan Municipality o life to fight drought Sponge City Izmir project for 5 buildings for 5 ousand buildings thousand free rain water tank distribution has



Izmir Metropolitan Municipality's city
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geological evidence of an earthquake.



Sustainable Agriculture and 'Another Agriculture is Possible' Vision

In line with Izmir Metropolitan Municipality Mayor Tunc Soyer's vision of "Another Agriculture is Possible" based on four basic principles, farmers and producers have been supported in every field from seeds to saplings, from agricultural machinery to quality feed, and agricultural irrigation investments have been accelerated. Strong business associations established with producer co-operatives have made significant contributions to the sustainability of agricultural and rural employment, and local production has been supported in many areas. With the philosophy of "Another Agriculture is Possible", we can change food consumption habits and fight against drought, one of the most serious consequences of climate change. Let's examine how we can adopt a climate-friendly lifestyle with local and sustainable food options.

- 1.Embrace the "Another Agriculture is Possible" Philosophy
- 2.Support Local and Sustainable Food Choices with the "Izmirian" Brand
- Choose Local and Seasonal Products
- 4.Support Organic and Sustainable Agriculture Products
- **5.**Switch to a Plant-Based Diet and Discover the Flavors of Izmir
- **6.**Pay Attention to Waste Reduction
- 7. Training and Awareness Raising
- 8.Use Social Media and Communication Channels to Support Local and Sustainable Food Choices











Anarhynchus alexandrinus (Anarhynchus alexandrinus) is a bird species belonging to the family Charadriidae. It usually lives on sandy and gravelly coasts, salt ponds and lagoons. Apart from coastal areas, this species can also be seen in inland wetlands. It has a wide distribution in Europe, Asia and Africa.



GCC IZMIR Working Groups Activated!



The Global Climate Community, which has implemented the work of the EU Climate Neutral and Smart Cities Mission in Izmir under the coordination of Izenergy, has started to hold working group meetings with city stakeholders in order to create road maps for the climate neutral target of Izmir.

The 112 Mission Cities selected within the scope of the Mission are expected to prepare a Climate City Charter with the goal of becoming climate neutral by 2030. When the

City Charters prepared by Climate the Mission Cities are approved by the European Commission, these cities will provided with financial. technical and social facilities for climate activities. 2030 Climate City Contracts, which present the roadmap to climate neutrality, consist of 3 basic documents: Action Plan, Investment Plan and Commitments Document. In order to adhere to the time constraint set by the European Commission, Izmir submitted the draft version of the Urban Convention on Climate September 15.

It is aimed to prepare the relevant action and investment plans in the City Climate Agreement, the first version of which has been shared, in a more realistic and detailed way, and to implement application examples by evaluating the current situation regarding the climate target in the working groups under 6 headings: Buildings: Energy Consumption and Energy Efficiency, Energy Production, Mobility and Transportation, Green Infrastructure and Nature Compatible and Solutions, Waste Circular Economy, Green Industry. In the first organised, the meetings practices implemented in Izmir were shared, the scope and perspective of the GCC Izmir Working Groups were conveved and information was provided on the current situation prepared in the draft of the Climate Action Plan. Following the Green Industry Working Group meeting on 20 October, the Waste and Circular Economy Working Group met on 3 November, the Mobility and Transport Working Group met on 10 November. the Buildings: Consumption and Energy Efficiency on 17 November, 24 In November, Green Infrastructure and Nature Compatible Solutions Working Group meetings have been organised.

Thus, Izmir Metropolitan Municipality units, Izmir Development Agency, Aegean Region Chamber of Industry, Izmir Chamber of Commerce, TMMOB, ENSIA and many other organizations Participation representatives, an important work has been initiated to create an Izmir-wide synergy within the scope of the Cities Mission.



GCC Izmir Waste and Circular Economy Working Group Meeting





Izmir joins the EU Mission for the Restoration of Oceans and Waters!



Izmir has become a signatory to the "Restoration of Oceans and Waters" Mission, one of the 5 EU Missions established by the European Commission to provide a holistic solution to global problems.

The application for the "Izmir Bay & Seferihisar Akarca Bay Oceanographic Monitoring" Project, led by IZSU General Directorate, has been accepted by the Mission Board. Izmir's application was accepted by the EU's

will provide an opportunity to actively participate in the Ocean Mission, promote its efforts at EU level and engage with a wide network of relevant stakeholders. The Ocean Mission will provide Izmir comprehensive support to prevent ater pollution, increase biodiversity in marine and coastal inland waters and develop climate-friendly solutions for the blue transition. In this context, Izmir will have the opportunity to collaborate with leading European cities in developing and implementing projects in line with the mission's Furthermore, objectives. opportunity for Izmir to participate in the Horizon Europe Calls, tailored specifically to the Ocean Mission, will not only allow the city to advance its own sustainability goals, but also to contribute to the exchange of knowledge and experience at the European level, with the potential to have a global impact

SECAP Preparation Work with District Municipalities in Izmir Continues



IZENERGY continues to work with great devotion within the scope of the "Integrated SECAP Preparation and Coordination Project at the Scale of Izmir and its Districts", which was initiated" with the support of relevant experts. One of the most important outputs of the project is the publication of the Sustainable Energy and Climate Action Plans as a guide booklet as well as serving to adopt action plans as an institutional culture in the fight against climate change. For this reason, a training meeting was organised with the participation of representatives from Karaburun, Buca, Gaziemir Municipalities, which are the first signatories of the project, and the expert team. During the meeting, a road map for action plans and technical details were transferred and a common evaluation has been ensured.





Netherlands Embassy Delegation Hosted



A productive meeting was held with administrative and technical of the Embassy of Netherlands where we discussed the current developments in the energy sector, the future of the energy sector in Izmir and possible business development areas. During meeting, it was emphasised that the SPP project to be constructed by IZGUNES on the roof of Tire Stadium is the second ESCO model application in Türkiye. ENSIA Chairman Alper Kalayci, Best for Energy Team Leader Ekin Taskin, Onur Energy CEO Onur Gunduru and Ege University Solar Energy Institute Director Prof. Dr. Ceylan ZAFER also attended the meeting where IZENERGY INC. and GCC Izmir activities were presented. The delegation invited to the 2nd Wenergy Expo fair which will be held on 9-11 May 2024.

TAIEX Istanbul Workshop was Held

IZENERGY INC. Chairman of the Board of Directors Ercan Turkoglu took part as a speaker in the session titled "Achieving Climate Neutral Resilient Cities" coordinated by TUBITAK. The event showcased city climate actions of EU and Turkish cities within the framework of Horizon Europe's Climate-Neutral and Smart Cities Mission and focused on the climate action tools offered to cities under the NetZeroCities Mission Platform. Session NetZeroCities City Consultant Deniz Celik Bulgurlu the event. Elvin moderated Bayazit from Istanbul Metropolitan Municipality Climate Change Directorate and Daniel Freitas from Porto Municipality also discussed the issues in detail at the event.



Cluster Collaboration for Carbon Management



Inter Cluster submitted to the European Commission under the coordination of ENSIA Collaboration for Carbon Management (For Carbon Management Cooperation between Clusters) project has reached the contract stage.

In this project, Aegean Ferrous and Non-Ferrous Metals Exporters' Association and DTE2V are partners, while Izmir Development Agency and Eurosolar are Türkiye's partners. With a budget of 520 thousand euro and 95% financed by the European Union, the project will develop the capacities of companies exporting in clean energy and iron and steel sector on carbon mechanism and carbon management at the border and transfer good practice examples from Europe. With this 3-year project, the EU Green Deal our country in line with our goals we will contribute to the road map.



IZENERGY Won Third Place in Dragon Rowing Races

As Izenergy INC. Smyrna Pirates, we participated in the Dragon Rowing Races organised by Izmir Metropolitan Municipality within the scope of the 100th anniversary celebrations of our Republic. Although we did not have personnel professionally interested in this sport in our team, we believed that we could achieve victory and we showed high performance in all our challenging races and reached the final. In the final competition held on 29 October, we completed the races as the 3rd among 32 teams. Our 3rd place cup was presented to us by the Department of Youth and Sports Services. We would like to thank everyone who contributed to this competition which unforgettable memories.



GCC Izmir Works Grow with Young People



We held the first meeting of the GCC Youth Platform on 9 December. The interest of young people in climate change and sustainability issues made us hopeful once again. At the meeting, we discussed not only carbon emission nature, water, soil and renewable energy also in terms of resources to carry out studies were discussed. For cancer mission studies young people expressing that they are volunteers about raising awareness declared their support. Renewable energy, energy efficiency and trainings on sustainability issues was discussed.

TAIEX Workshop on Western Balkan Cities

The NetZeroCities Mission Platform to support changes in implementation, management and financing solutions to achieve climate-neutral cities and urban climate action pathways implemented by EU and Western Balkan cities under Horizon Europe's Climate Neutral and Smart Cities Mission and the NetZeroCities Mission Platform climate action tools within the scope of on 24 November to exhibit "Horizon" in Elbasan, Albania Western Balkan Cities of Europe TAIEX Workshop on Mission" organised. Izmir city on behalf of Izenergy INC. Board of Directors Our President Mr. Ercan Turkoglu attendance has ensured.





Fire Drill at Izenergy



Within the scope of the Regulation on Emergency Situations in Workplaces; we carried out a fire drill in our building in coordination with the IMM Fire Department. In our drill, which started with the sounding of sirens, the personnel in the building first came out safely and the first intervention to the fire was carried out by our emergency teams. Our employees in the risk group with disabilities or chronic illnesses also left the building accompanied by their escorts who were predetermined for emergencies. As per the scenario, one of our employees who was injured while descending the stairs was taken out by the paramedics of the Fire Brigade Department and directed to the medical institution by the AKS vehicle. Our drill, which ended with the intervention of IMM Fire Brigade teams to the fire according to the scenario, did not look like the real thing.

TSE's Quality Management System Surveillance Audits Completed

On 30 November-1 December, we successfully passed the ISO 9001, 14001 and 50001 surveillance audits. Our performance in these audits was reported to the Executive Committee with positive feedback. With the approval of the Committee, our quality studies in the new year of our certificates will continue to improve day by day. The success we have achieved in this process is a result of the devoted efforts of the team and the importance we attach to quality. With our approach aiming continuous improvement excellence, we are taking decisive towards exceeding standards. With our performance, we are both strengthening our current position and laying a solid foundation for our future goals. This success was made possible by the co-operation and determination of the team.



We Hosted ELCEN Romania Delegation



The authorities of Electrocentrale Bucuresti (ELCEN), which operates under the Romanian Ministry of Energy and is the largest thermal energy producer in the country, were hosted. In the meeting with ELCEN, the energy bridge that can be established between Romania and Türkiye and the investment opportunities offered by our country were evaluated. In addition, visits to IZKA, ENSIA, GDZ Electricity and Izmir Geothermal INC., which are among the pioneers of the energy sector in Izmir, were organised to share experiences and information about the sector.



Tire Municipality Sets an Example for Our Country with ESCO Model in Public Sector

The contract for the SPP (Solar Power Plant) project to be built on the roof of Tire Gazi Mustafa Kemal Ataturk Stadium was signed. The project will be the first local administration application within the scope of the "Public Sector Energy Performance Contract"

Izmir Metropolitan Municipality Mayor Tunc Soyer, Tire Municipality Mayor Salih Atakan Duran, Ministry of Energy and Natural Resources Department of Promotion Training and Studies Deputy Expert Veysel Atasoy, IZENERGY Board Chairman Ali Ercan Turkoglu, representatives of political parties, mukhtars and representatives of non-governmental organisations attended the signing ceremony of the SPP project, which will be built without spending public resources.

In Izmir, a rooftop SPP (Solar Power Plant) will be established for the first time in Türkiye with the legislation known as ESCO in the world and organised as "Energy Performance Contract in Public Sector" in Türkiye. In his speech at the ceremony, Izmir Metropolitan Municipality Mayor Tunc Soyer emphasised the climate crisis and said. "Thanks to the SPPs we have established in Izmir, we have achieved a record 540 percent increase in electrical energy production. With this work, Tire Municipality will meet 50 percent of its annual electrical energy needs."



Tire Mayor Salih Atakan Duran emphasised the importance of the project and said: "We are happy to bring green energy to our city with the SPP to be installed on the roof of our stadium. Under no financial burden we won't. We will not enter into a model."

Ali Ercan Turkoglu, Chairman of the Board of Directors of IZENERGY, said, "We have made Izmir one of the pioneer cities in the climate crisis, which is the main problem of our world, without lagging behind European cities. With the Presidential decree, we have put forward the most successful implementation of public energy performance contracts, which describes the build-operate-transfer model in energy. Our institutions can own facilities without using their budgets."

Completion within 3 months the project of the targeted SPP power plant IZGUNES company will build it. One thousand 350 kilowatt installed power will be available the power plant will have a capacity of one million 890 thousand kilowatt-hour energy generation potential will be. The payment of the project is 15 years with guaranteed savings throughout will be provided. Facility free of charge after 15 years will be transferred to Tire Municipality.

After the launch, the panel titled "SPP ESCO Applications with Model" moderated by Mr. Alper Kalayci was held. In the panel, Energy Efficiency Association Board Member Mr. Onur GUNDURU, Tire Municipality Deputy Mayor Mr. Sefa YILDIRIM, IZGUNES Business Development Specialist Mr. Mr. Zeki CETIN and Mr. Veysel ATASOY, Deputy Expert of the Ministry of Energy and Natural Resources, Department of Promotion Training and Studies. Veysel ATASOY shared valuable information on the implementation of the ESCO Thev emphasised model importance of dissemination of the application carried out in Tire Gazi Mustafa Kemal Ataturk Stadium in Türkiye.



(left to right)

Onur GUNDURU - Board Member of Energy Efficiency Association,

Veysel ATASOY - Ministry of Energy and Natural Resources, Department of Promotion, Training and Studies, Assistant Specialist,

Sefa YILDIRIM - Tire Municipality Deputy Mayor,

A. Ercan Turkoglu - Chairman of IZENERGY INC.,

Alper Kalaycı - Chairman of ENSIA,

Zeki CETIN - IZGUNES Business Development Specialist



Izenergy INC. Employees



Gamze SANCMI

Hello, I was born in Izmir in 1988. I graduated from Pamukkale University, Department of Accounting and Tax Law. I have been working as a clerical staff at Izenergy General Directorate HSE departmant for about 3 months. I am very satisfied with my unit and working environment and I am happy to be a part of the Izenergy family.

I have been working as an auxiliary staff at IMM Vocational Factory. I started work on 01.07.2021 with the disabled staff. I am honored to be a member of Izmir Metropolitan Municipality and IZENERGY family. I would like to thank Izmir Metropolitan Municipality and Izenergy INC.

Emrah CELIK





Sultan KILIC

I was born in 1970. I joined the Izenergy family in 2007. I had given up on everything, but Izmir Metropolitan Municipality gave me back my dreams and hopes. I see myself as one of the most glorious people in the world. I would like to thank IMM and Izenergy family very much.

I was born in 1967 in Izmir, I graduated from secondary school, I am married and have one child. I work at Izmir Metropolitan Municipality Parks and Gardens Department. I would like to thank IMM and Izenergy family.

Jogan GULTEKIN





Sirgul HURUST

I was born in 1983 in Mus, graduated from secondary school, married and mother of 2 children. I work as a cleaning staff in Izmir Metropolitan Municipality Urban Cleaning Branch Directorate. I would like to thank IMM and Izenergy family.

I was born in 1985 in Diyarbakir, I graduated from primary school, I am married and have 1 child. I am working at IMM Parks and Gardens Department. I would like to thank Izenergy family and IMM family.





Kadir BULBI

I was born in 1984 in Afyon. In 2008, I joined Izmir Metropolitan Municipality as an employee. I work as a private security guard. I love my institution where I work with the excitement and enthusiasm of the first day. I am proud to be a member of the Izenergy family.

I was born in 1975 in Izmir, I have two sweet daughters. I completed my undergraduate education at Ege University School of Nursing. I am also a graduate of Health Institutions Management. As of 2023, I started working at IZENERGY INC. HSE departmant. I would like to thank IZENERGY INC. for the opportunity to serve beautiful Izmir.





Semal SEVI

Born in 1973 in Erzurum, I am married and have 2 children. Since 2019, I have been working in the Urban Cleaning Unit of the Solid Waste Department. We are fighting for a clean environment. I would like to thank IMM and Izenergy family for providing us with this opportunity.

I was born in 1975 in Malatya. I graduated from primary school. I am married and have 2 children. I am a garden maintenance worker under the Green Space Department. I have been working in the Izenergy family for 4 years. Endless thanks to IMM and Izenergy family.





Sevgi AKUS

Hello, I was born in Izmir in 1996. I graduated from Manisa Celal Bayar University, Department of Finance. I have been working in the Accounting and Financial Affairs Directorate within Izenergy for 1 year. I am happy to be in the Izenergy family and to work with my colleagues.

I was born in Bergama, Izmir. I have been working as a private security guard under Izmir Metropolitan Municipality for 13 years. I am proud to be an employee of IMM and a member of the IZENERGY family. I would like to thank everyone who contributed.





"We said 'Izmir will turn its face to the sun' and we kept our promise. We installed SPP on the roofs of our municipality's service buildings. The buildings belonging to our municipality have become able to meet the energy they consume from their roofs. Thanks to the SPPs we have completed, we have achieved a record 540 percent increase in electrical energy production. Together, we have brought Izmir another work of the Republic."

Tunc SOYERMayor of Izmir Metropolitan Municipality



İZMİR **METROPOLITAN** MUNIC**I**PALITY

"No one can turn us back from the hundred-year journey of the Republic...."

Tunc SOYER
Mayor of Izmir Metropolitan Municipality

