



2016 SUSTAINABILITY REPORT





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About Our Report

With this fifth sustainability report of İÇDAŞ, we share with our stakeholders, the developments and the results of our implementations, which shape our economic, social and environmental performance in 2016. Hence, we give our stakeholders the opportunity to evaluate our efforts in managing, measuring, monitoring and improving our impacts resulting from our operations.

Report Scope

In determining our material sustainability issues with our managers, we took into consideration steel production and energy generation, the major business segments of İÇDAŞ. Unless otherwise stated, the information in this report belongs to the period between January 1, 2016 and December 31, 2016 and includes the operations of all the premises of İÇDAŞ.

Reporting Principles

This report has been prepared in accordance with the GRI Standards: Core option. Besides GRI's materiality, stakeholder engagement, sustainability context and completeness principles, we considered the sustainability performance standards of World Steel Association and International Finance Corporation, IFC.

We included our best practices throughout this report that support both UN Global Compact Principles we signed in 2012 and also UN Sustainable Development Goals launched in 2015, which our country is a stakeholder of.

Our Next Report

We plan to publish our next report covering our 2017 sustainability performance in 2018.



Message to Stakeholders



“Our country was the world’s 8th largest crude steel producer in 2016 with 33.2 million tons. We produced 9% of Turkey’s crude steel in our Değirmencik Integrated Plant at Biga, Çanakkale. İÇDAŞ’s energy production has reached 4% of Turkey’s total energy generation by private sector and government, with 11.10 billion kWh in 2016.”

Dear Stakeholders,

With this fifth sustainability report of İÇDAŞ, that present our economic, social and environmental performance in 2016, we continue to share our targets and best practices of how we manage our sustainability impacts.

We operate in steel and energy industries, which are critical to Turkey’s sustainable development and economic structure. İÇDAŞ, with its environment friendly and innovative technologies, is a major steel, energy and ship producer with roles of an employer, a contractor and an investor.

Our country was the world’s 8th largest crude steel producer in 2016 with 33.2 million tons. We produced 9% of Turkey’s crude steel in our Değirmencik Integrated Plant at Biga, Çanakkale. İÇDAŞ energy generation has reached 4% of Turkey’s total energy generation with 11.10 billion kWh in 2016.

We monitor the economic impacts of our industries on our country and the community as well as our social and environmental impacts resulting from our operations. Since our establishment, we have been managing all economic investments along with our social and environmental responsibilities in a holistic manner and to sustain this understanding we have built the necessary systems. While building this infrastructure, we considered the 10 basic principles of UN Global Compact that were designated for business world with the intention to protect human rights, improve working conditions, protect environment and fight anti-corruption. We signed UN Global Compact (UNGC) in 2012. We continue our efforts to contribute to the UN 2030 Global Goals for Sustainable Development since 2016.

We Contribute to the Economy!

Our expansion investments along with our local and national economic contributions were the outstanding topics anew when we analyzed our economic impacts this year. Any business investments we encounter have indirect impacts on national economy and our community. Our strong financial structure supports our environmental and social investments.

We continue to support The Turkish Star project of renovating 100 coasters in Turkish Maritime Coaster Fleet, which started in 2012. We completed Türk Yıldızı (Turkish Star) - 4, 5000 DWT general cargo ship this year in addition to a guiding boat. In 2016, we also started production of stainless steel chemical tanker.

Our Artificial Aggregate Facility and Wind Power Plant investments in Biga became completely operational.

Total direct investment amount of İÇDAŞ in Çanakkale region is 5.5 billion USD so far where approximately 6.1 million of it was done in 2016. We employ 79% of our employees from local communities.

We Value our Employees and the Community!

Primary social impacts of our operations consist of health and security, and engagement with employees and local people. Our mission is creating teamwork, fair attitude, open communication, personal and occupational development opportunities by providing a safe and effective work environment.

We conduct all our operations with zero accident goal. Since our establishment we have been working on raising quality of life, improving social life by providing education opportunities and meeting societal needs.

We continue our education and sports investments that embrace regional youth and investments for the preservation of cultural heritage, which addresses everyone in the community, with a holistic approach.

In the coming periods, we aim to continue including projects that would support The Global Goals for Sustainable Development of United Nations, in all our activities that could have impacts on the communities.

We Respect the Environment!

We are actively involved in industries that have high impacts on environment. Emission management for climate protection, waste management to prevent environmental pollution and water management that we initiated for the preservation of natural resources constitute a significant part in our business.

In 2016, our total investment in environment protection projects is more than 107 million TRY. We undersigned new projects in conserving the biodiversity of our hinterlands like the Artificial Reef and Supporting Biodiversity Project, while continuing the current ones. You will find the details of these projects in our report.

Our primary goal in waste management is to recycle waste. We comply with the regulations and collect all waste separately, including the ones from ships that call at our port, and we either send them to the accredited recycling facilities or dispose of them. This year, our recycled waste rate was 76.6% in Değirmencik and 89.7% in Bekirli facility.

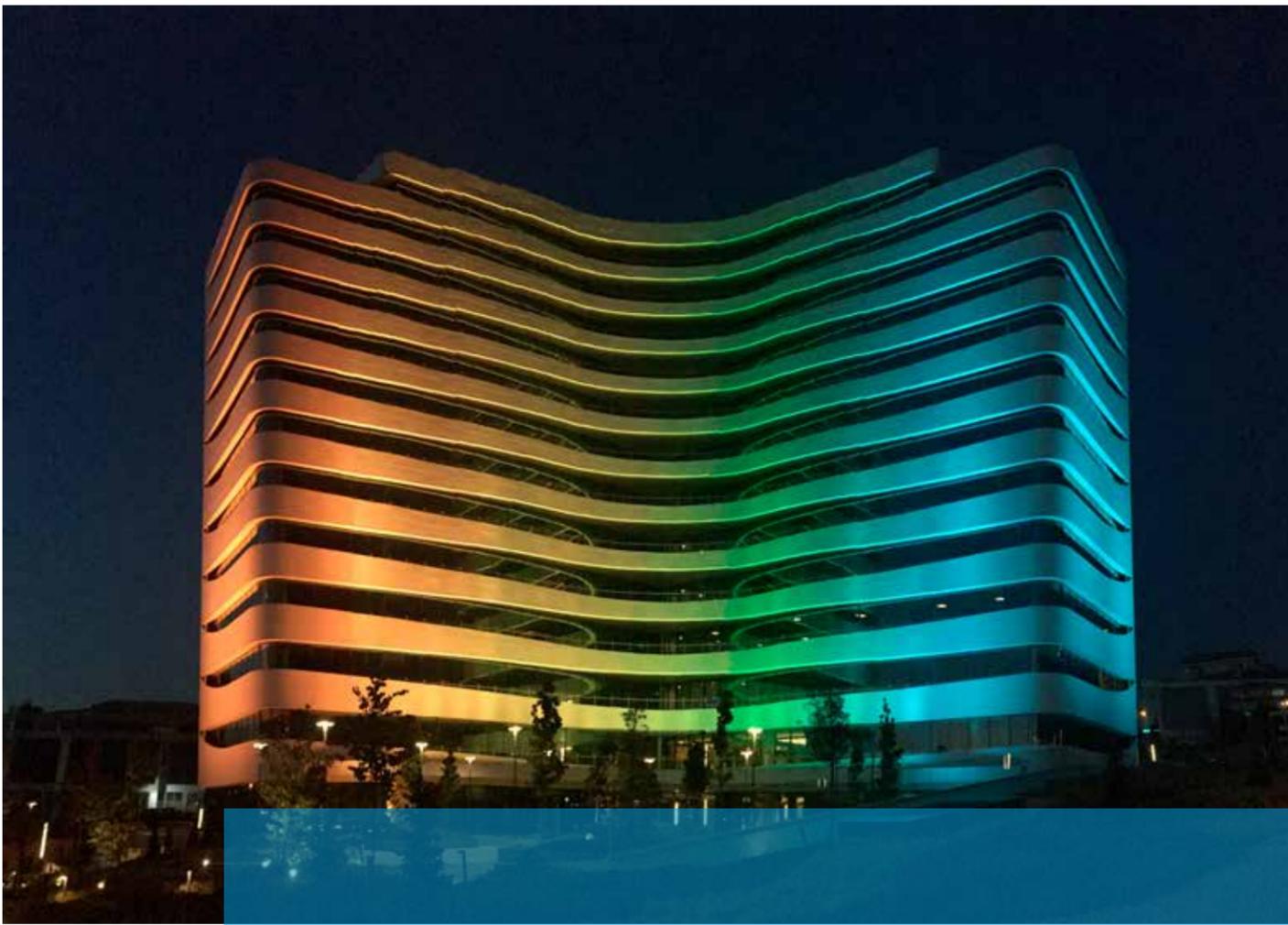
At İÇDAŞ Değirmencik Integrated Facility, we have been managing fresh water topic under the scope of ‘Sustainable Water Management Project’. We supply all our water needs, including fresh water, completely from the sea. In 2016, we reused 375.3 million m³ water after wastewater treatment.

As İÇDAŞ, our perpetual goal is to continue increasing the value we create for our stakeholders while ensuring sustainable growth. Sharing your ideas, suggestions and questions about this report with us will help us create more value for you all.

Regards,

Bülend Engin
CEO





Corporate Profile

As İÇDAŞ, which is the leading private sector steel producer in terms of capacity and one of the largest exporters in Turkey, we have been producing steel since 1970.

Our group companies operate in steel, energy, shipyard, logistics (sea, road), transportation (airway), harbor operations, construction, insurance, mining, agriculture and livestock sectors.

Our Değirmencik Integrated Plant in Biga, Çanakkale includes three steel mills with five and a half million tons/year production capacity, three rolling plants with three million tons/year capacity, three units 405 megawatts thermal plant, shipyard, two docks, a wharf and Turkey's largest private harbor with 30 thousand tons of loading and 60 thousand tons of unloading capacity and their auxiliary facilities.

Besides our Değirmencik Integrated Plan, we operate a two units thermal power station of 1,236 megawatts in Bekirli region of Biga and a 60 megawatts installed capacity of wind power station at Biga.

Products

The steel billets, reinforcing steel and wire rod that we produce in our steel plants and the electricity we generate in our power plants conform the international standards. Steel products are used in construction, automotive, rubber, machine

manufacturing, etc. Electricity generated at the thermal plants is conveyed to entities by means of government transmission network. We usually incorporate the ships produced in our shipyard to our own İÇDAŞ fleet.

Steel billet is the starting point of such rolling products as reinforcing steel, plain bar, commercial bar, and profile and wire rod. It is semi-finished product that is long and continuous casting and has square cross-section with 100 mm-200 mm diameter/length.



Reinforcing steel is a steel bar with ribs, commonly used in reinforcing concrete buildings. It was produced as an alternative to plain bar and substituted it in time.

Wire rod is a semi-finished metal bar wrapped in bobbins, hot rolled from billet, usually has a round cross-section and is cold drawn into wire. It is used to produce welding electrode, steel mesh, wire, bolt, spring etc.



Electricity generated at our Thermal and Wind Power Plants is distributed to end users via Turkish Electricity Distribution Company (TEDAŞ) transmission network. End users include; hotels, industrial companies, shopping malls, business centers, restaurants, schools, associations, residential and government facilities and clients from industries such as fuel oil, IT, steel, finance and investment, construction, cement, food, electronics, logistics, mining, automotive, health, agriculture, textile, transportation.

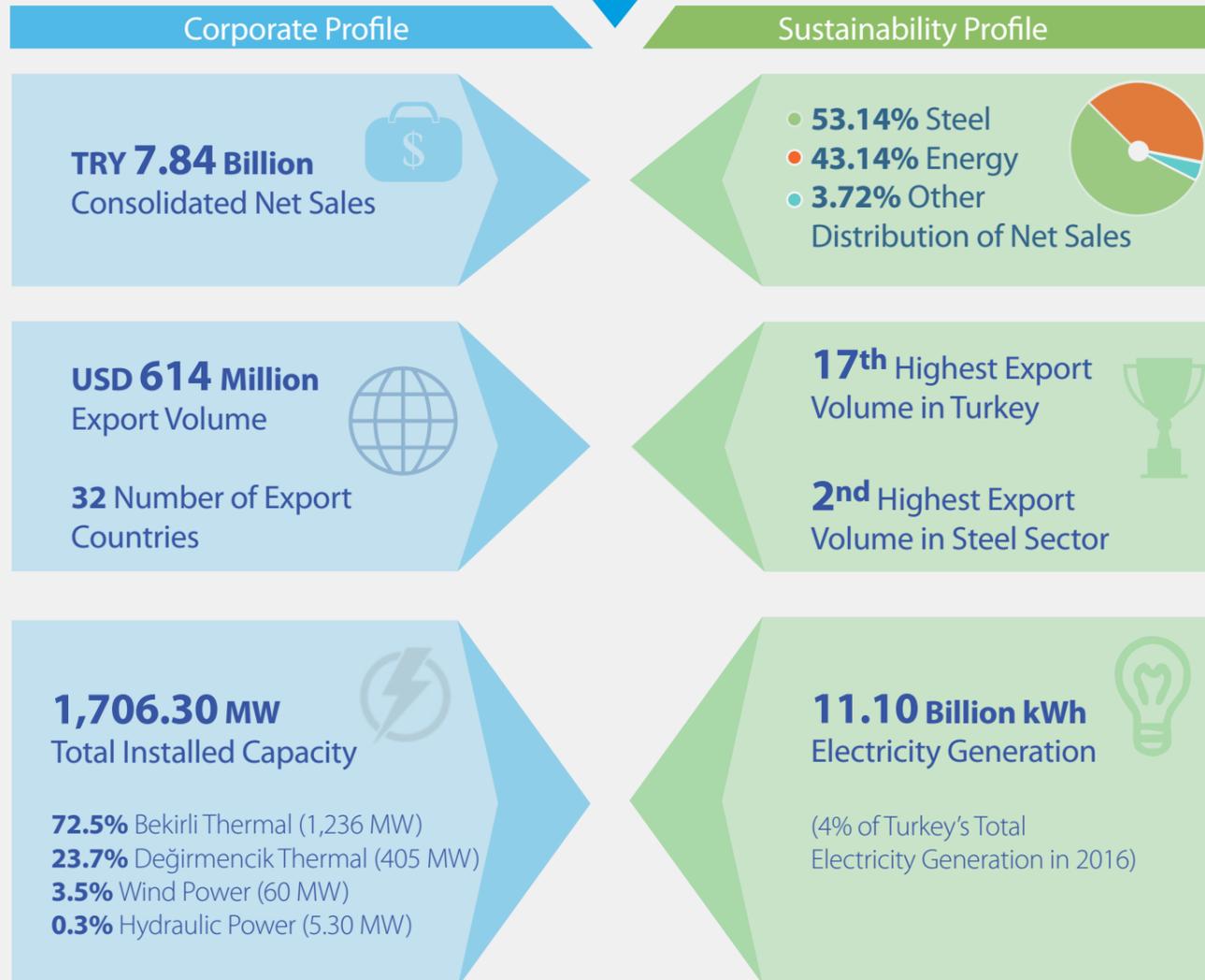
In our shipyard we manufactured one tugboat, 14 ships including chemical tankers and dry cargo ships, where the last one was Türk Yıldızı (Turkish Star) 4 cargo ship and a guiding boat (named Kara Yusuf), completed in 2016. We also started production of 7.500 DWT stainless steel chemical tanker.



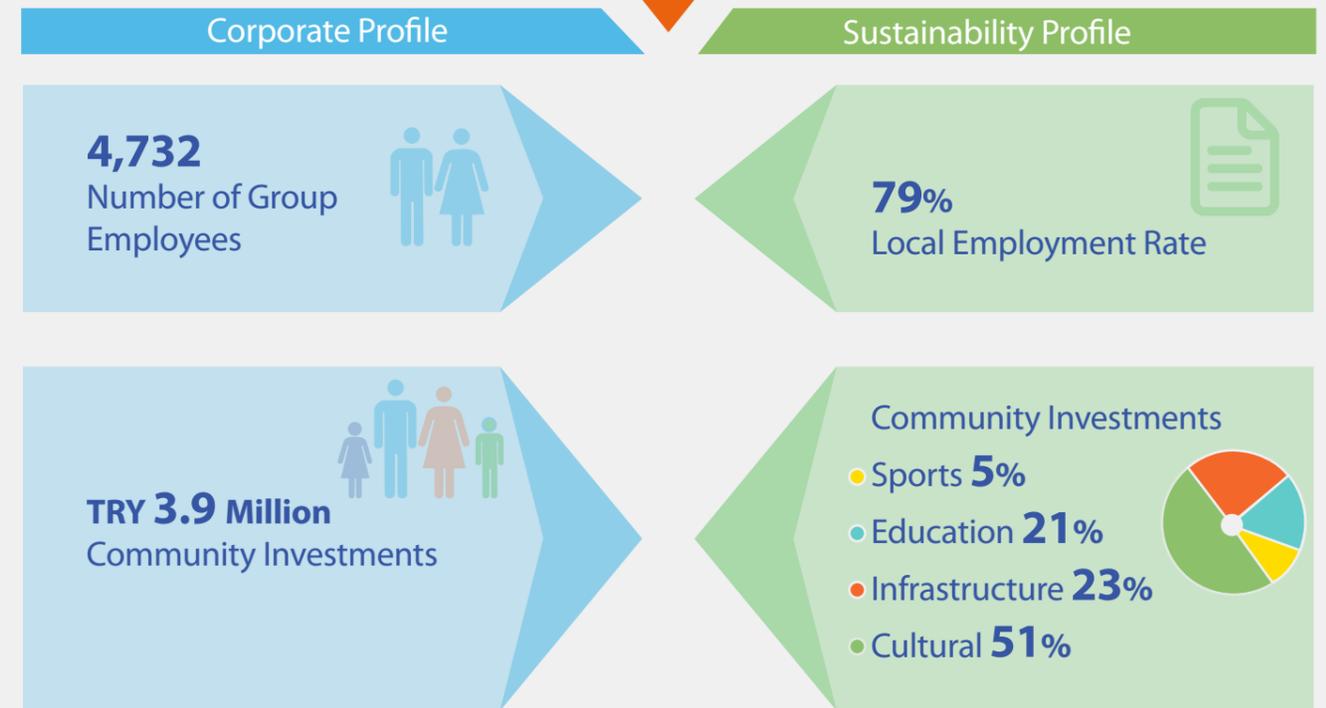


Facts and Figures of İÇDAŞ

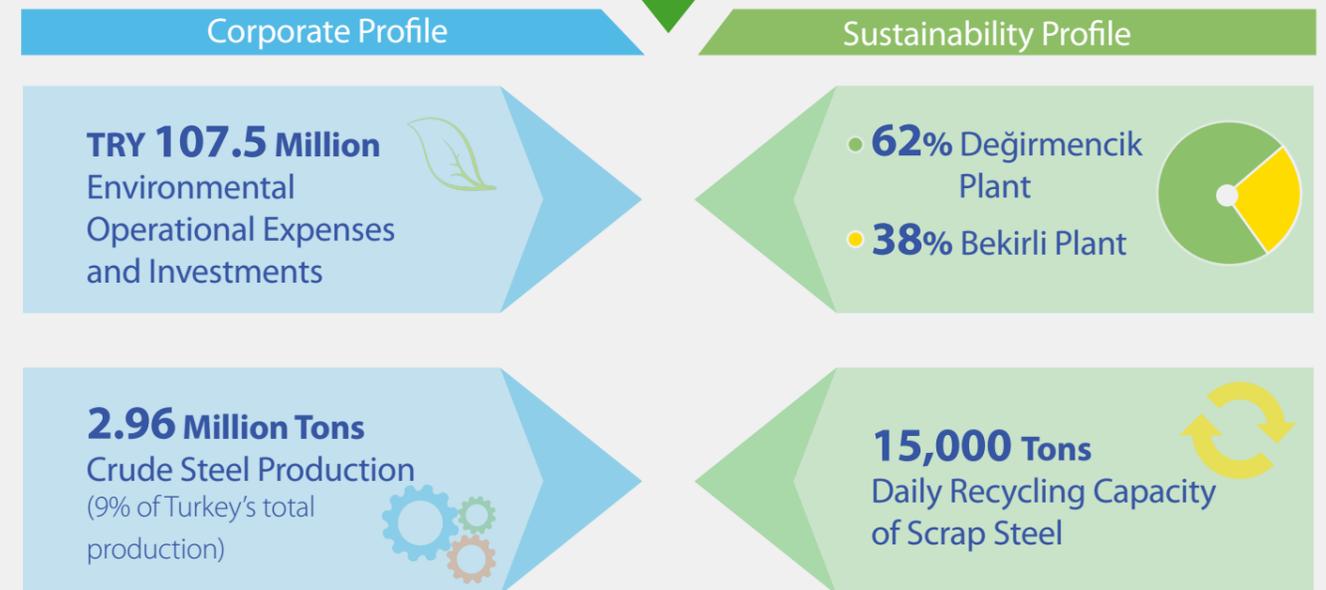
ECONOMIC



SOCIAL



ENVIRONMENTAL



The ratios about Turkey are based on 2016 TÇÜD data.

Group Companies

İÇDAŞ Çelik Enerji Tersane ve Ulaşım San. A.Ş.	Steel, Electricity and Ship Production
İÇDAŞ Elektrik Enerjisi Üretim ve Yatırım A.Ş.	Electricity Generation
İÇDAŞ Elektrik Enerjisi Toptan Satış İthalat ve İhracat A.Ş.	Electricity Sales
ERAS Taşımacılık Taahhüt İnşaat ve Ticaret A.Ş.	Road Transportation
BİGAİR Havacılık ve Taşımacılık Sanayi ve Ticaret A.Ş.	Airway
İÇDAŞ Dış Ticaret A.Ş.	Agriculture and Livestock
İÇDAŞ Sigorta Aracılık Hizmetleri A.Ş.	Insurance
İÇYAPI İnşaat Taahhüt ve Ticaret A.Ş.	Construction

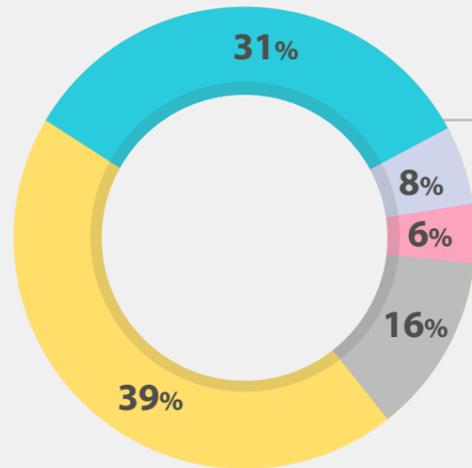
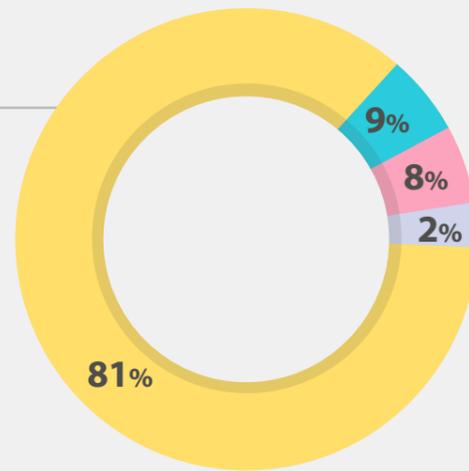
DEMİR SANAYİ Demir Çelik Ticaret ve Sanayi A.Ş. merged with ERAS in 2016.

Customer Profile

Steel Customers

	Number
End-users / Domestic	896
End-users / Export	26
Traders / Domestic	102
Traders / Export	87
Total	1.111

End users: Construction companies, steel mesh, wire producers
Traders: Distributors, Intermediary companies

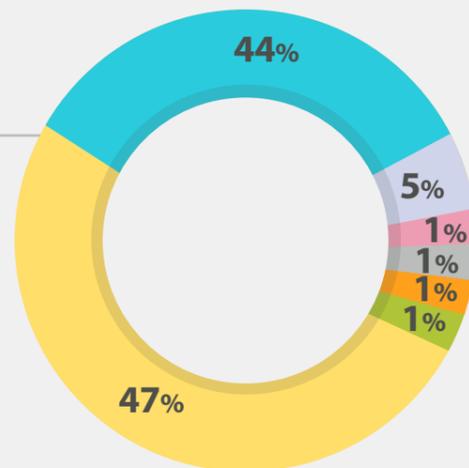


Steel Export Markets

Asia	39%
N. America	31%
S. America	6%
Africa	8%
Europe	16%

Electricity Customers

Finance	1%
Tourism	1%
Food	5%
Textile	1%
Logistics	1%
Industry	44%
Other	47%



STRATEGY AND MANAGEMENT

We run our business in steel and energy sectors with the vision of providing products and services of universal quality and standards and with the awareness of our social and environmental responsibility.

Since the first day of İÇDAŞ, we run many projects to realize our corporate social responsibilities. Today we keep on developing our current and new projects in the light of international initiatives like UN Global Compact and Sustainable Development Goals.

AWARDS

TISK CSR Effectiveness Award

Junior Archeologists Project
Turkish Federation of Employer Associations



MESS OHS Golden Suggestion Award

İÇDAŞ Blue Collar Employees
Turkish Employers' Association of
Metal Industries



Stakeholder View

“

İÇDAŞ is a very important corporate citizen with the projects it has conducted with Çanakkale Onsekiz Mart University and infrastructure aids it has provided to the villages of Biga.

İSMAİL İŞİK, Biga Mayor

”



Corporate Governance

“ **68% of our employees who participated in sustainability survey think that...** ”

İÇDAŞ manages all its business processes in line with corporate governance principles of transparency, equity, accountability and responsibility.

”

İÇDAŞ is a family owned business where Board of Directors are equally responsible for company's economic, environmental, social practices. All members including the founders are experienced industrial leaders of Turkish business community. Their self-evaluation performance criterion is the extent of growth and accomplishment of sustainability targets of İÇDAŞ.

All members of the board have different executive roles in different group companies. There are no members other than family members in the board of directors of all group companies. There are not any committees under the board of directors.

Because of their executive roles, board members are always in touch with each other and manage sustainability risks and opportunities daily. The Board of Directors constantly monitors

company rank in Turkey's first 500 industrial companies list and Turkish Steel Producers Association- TÇÜD's industrial data and reports and thus, makes decisions immediately.

Our companies use SAP system for internal audit and risk management including sustainability risks. The Board of Directors has already identified the current and potential risks and determined the policies regarding these risks. The policy determined to manage sustainability risks can be found in İÇDAŞ Management Policy Book.

Our Discipline Procedure includes principles and rules for all our employees, to prevent actions against employee health, occupational safety, information security and business norms. Either the Discipline Committee or directors and department managers handle complaint cases.



Sustainability Management

As İÇDAŞ management, our objective is to increase sustainable steel and energy production by focusing on environmental management, occupational safety and quality and applying up to date, scientific, efficient and effective business schemes of our innovative management culture. Our sustainability strategy is based on providing clean and healthy environment for all of our employees and the local community in all of our fields of activity and locations.

By signing UN Global Compact in 2012, we elevated the values and principles we embraced since our establishment to a global level of corporate responsibility.

We hereby commit to be a good corporate citizen abiding the principles highlighted in this compact such as respecting human rights and environment, providing healthy and equitable workplace, and awareness of anti-corruption.

Creating value for our stakeholders in all of our operations consists the basis of our sustainability understanding. The principles we determined to explain our sustainability approach clearly to our stakeholders, represent our commitments in managing our sustainability impacts throughout our operations and investments.

Sustainability Principles

- ▶ Determining and using the technologies that is convenient for preservation of environment, prevention and elimination of pollution, developing projects and ensure their implementation,
- ▶ Ensuring that economic decisions are considered together with ecological decisions so as to improve our position in the sector in a balanced and constant manner,
- ▶ Taking the necessary measures by determining the waste management policy related to our establishment in order to dispose of the pollutants caused by our establishment in such a way as to give no harm to the environment and improving our environment performance constantly,
- ▶ Ensuring utilization of natural resources needed in our production within the framework of sustainable development by upholding their protection-usage balance,
- ▶ Reducing CO₂ emissions caused by products and services,
- ▶ Developing operational policies by taking into consideration demands of all implementing agencies and organizations, non-governmental organizations as well as people living around us,
- ▶ Formulating constantly growing and developing performance criteria with management systems and objectives,
- ▶ Preventing environmental accidents and occupational accidents,
- ▶ Abiding fully by national laws and regulation and international conventions that pertain to our sector in terms of environment and conducting any kind of measurements, analyses and controls based on environmental standards and ecological criteria in order to conserve the environment and prevent pollution,
- ▶ Implementing a continuous education program for our employees in order to render the environmental practices effective and increasing environmental awareness.



Stakeholder Engagement

“ 60% of our employees who participated in sustainability survey think that... ”

The communication platforms which employees share their ideas and suggestions with top management are sufficient at İÇDAŞ.

Our stakeholders are those individuals and companies who have impacts on our business with their decisions and actions as well as who are already and will be affected by our operations today and in the future. Stakeholder groups' views about our company may vary due to their different points of interest. As İÇDAŞ, we try to communicate with our stakeholders to inform all of them about our operations and get their opinions using various communication platforms.

The sustainability survey that we conducted in the reporting period by the participation of 700 employees from all our premises again became an essential tool for our employees to evaluate our sustainability performance.

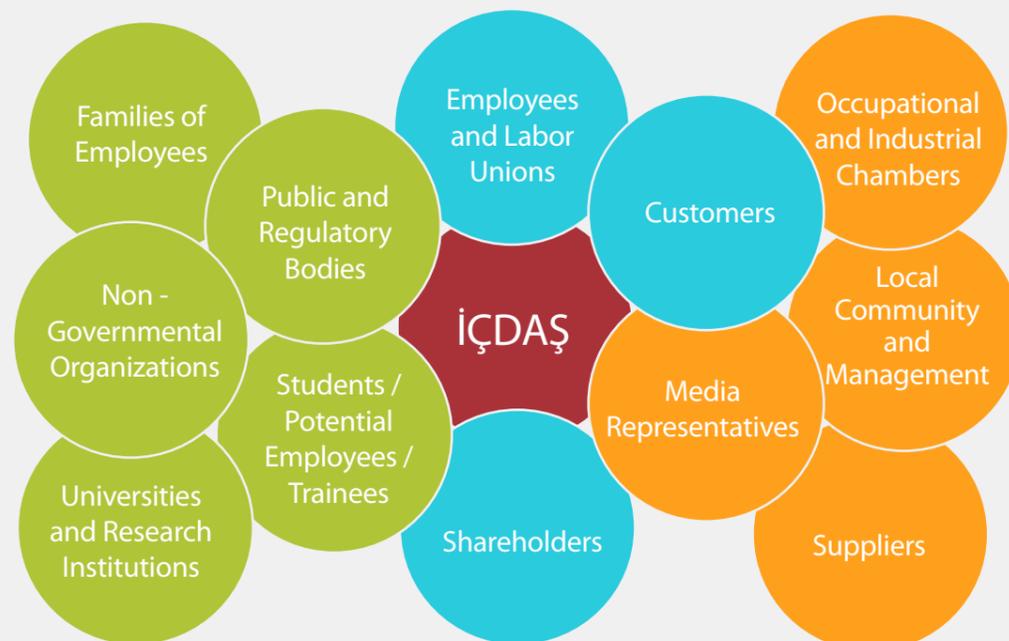
This year we reviewed our strategic topics and our key stakeholders with our Sustainability Project Group, which we have determined through a sustainability identification survey followed by a strategy workshop, with the participation of executives in the previous years.

Key Stakeholders

We have platforms present for communicating with every stakeholder at least once a year. The sustainability survey results show that, 57% of our employees believe İÇDAŞ has sufficient communication platforms for its employees, and 56% believe that İÇDAŞ has sufficient external stakeholder communication platforms where İÇDAŞ can hear ideas / suggestions or expectations of its key stakeholders.

We aim to improve existing platforms and listen to our stakeholders' expectations which are directly related to our operations, on a regular basis, in the next reporting periods. We believe the feedback we will receive will help us shape our sustainability goals.

(GRI 102-42)



Communication Platforms

Stakeholders	Communication Platform	Communication Frequency
Employees and Labor Unions	İÇÖS Suggestion System, Intranet	Continuous
	OHS Meetings	Monthly
	News walls	Continuous
Shareholders	Board Meetings	Weekly
Customers	Call Centre and Customer Portal	Continuous
	Seminars, congresses, exhibitions	A few times a year
	Visits	Continuous
	Product flyers	A few times a year
	Factory tours and information meetings	Once a year
Public and Regulatory Bodies	Face to face meetings	All year around
Local Communities & Management	Face to face meetings	A few times a week
Media Representatives	Face to face meetings	Weekly
	Phone, e-mail, social media	A few times a week
Suppliers	Ethical Supply Chain Policy briefing	Once a year
Occupational and Industrial Chambers	Memberships	Monthly
	Presentations on OHS and environment	A few times a year
Non-governmental Organizations	Memberships	Monthly
Families of Employees	Cultural trips	A few times a year
	Picnics and social activities	A few times a year
Universities and Research Institutions	Factory tour and presentations	A few times a year
	Occupational tutoring	Continuous
Students / Potential Employees / Trainees	Factory tours and presentations	A few times a week
	Presentations on OHS and environment	A few times a week

(GRI 102-43)

Strategic Topics From Stakeholder View

Topics	Employees & Labor Unions	Shareholders	Customers	Suppliers	Media	Local Communities & Management	Public and Regulatory Bodies
Economic Performance	****	****	***	****	**	***	***
Employment	****	****	***	**	**	**	*
Health and Safety	****	****	***	**	****	****	****
Education and Training	****	****	***	**	**	**	*
Local Communities	***	***	*	***	****	****	****
Emissions	**	****	**	**	****	****	****
Biodiversity	**	***	**	*	****	****	***
Energy	***	****	***	*	**	*	***
Water	**	****	**	*	****	***	**
Effluents and Waste	**	****	**	*	****	****	****

(GRI 102-44)

Cooperations for Sustainable Development Goals

Relevant SDG	Project Name	Cooperating NGO or Public Institution	Cooperation Start Date	Cooperation End Date
	Stock Farming, Beekeeping and Sheep & Goat Breeding	Food, Agriculture and Livestock Directorate of Biga District Biga Red Meat Association Çanakkale Beekeepers' Association	2007	In progress
	İÇDAŞ Agricultural Practices	Food, Agriculture and Livestock Directorate of Çanakkale Province and Biga District	2007	In progress
   	İÇDAŞ Sports Club	Turkey Basketball Federation Turkey Chess Federation Turkey Archery Federation Turkey Sailing Federation Turkey Swimming Federation Çanakkale Provincial Directorate of Youth Services and Sports Çanakkale Basketball Provincial Representative Office Çanakkale Chess Provincial Representative Office Çanakkale Sailing Provincial Representative Office Çanakkale Swimming Provincial Representative Office Çanakkale Governorship Biga District Governorship Çanakkale Municipality Karabiga Municipality	2010	In progress
 	Radiation Safety	İÇDAŞ Değirmencik Facility	Continuous	In progress
	İşkur On the Job Training Program	Ministry of Employment and Social Security - İŞKUR	2016	In progress
	Trainings from İÇDAŞ Employees	Biga Vocational School	2013	In progress
 	Biga Science High School	Biga District Governorship and Biga Municipality	2016	In progress
 	UMEM Specialized Vocational Training Centers Project	TOBB and Ministry of Labor and Social Security	2010	2016
	Taking WPP into Operation in Full Capacity	Ministry of Energy and Natural Resources General Directorate of Renewable Energy	2014	2016
 	Generation of Electricity from Cooling Water Discharge	İÇDAŞ Değirmencik Facility	2011	In progress
	Türk Yıldızı (Turkish Star) Project	Turkish Maritime Trade Coaster Fleet	2012	In progress
	Project of Using Steel Slag in Road Construction	Turkish Steel Producers Association (TÇÜD) and Istanbul Technical University (İTÜ)	2012	In progress

Relevant SDG	Project Name	Cooperating NGO or Public Institution	Cooperation Start Date	Cooperation End Date
	The Main Sponsorship of Parion Antique City Excavations	Ministry of Culture and Tourism	2008	In progress
	Apollon Smintheion Excavations Main Sponsorship	Ministry of Culture and Tourism	2011	In progress
	Troya Excavations Main Sponsorship	Ministry of Culture and Tourism	2015	In progress
	Assos Excavations Main Sponsorship	Ministry of Culture and Tourism	2016	2021
	Mehmet Akif Ersoy Museum Renovations	Ministry of Culture and Tourism	2015	2016
 	Monitoring Air Quality via Continuous Emission Monitoring System (CEMS)	Ministry of Environment and Urbanization	2015	In progress
 	Biga District Air Quality Monitoring	Ministry of Environment and Urbanization	2010	In progress
 	Monitoring Cooling Water Discharge by Continuous Waste Water Monitoring System (SAİS)	Ministry of Environment and Urbanization	2012	In progress
 	Artificial Reef and Supporting Biodiversity Project	Çanakkale OnSekiz Mart University	2014	In progress
	Sustainable Turkish Straits System Project (Çanakkale Sea Lovers)	TURMEPA Turkish Marine Environment Protection Association	2016	2018
 	Biga Peninsula Environmental Monitoring Project	TÜBİTAK Marmara Research Center	2010	In progress
 	Monitoring Biodiversity around the Premises	Akdeniz and Selçuk Universities	2013	In progress
 	Biga WPP Ornithological and Wildlife Observation Study	Akdeniz and Selçuk Universities	2013	In progress



Strategic Sustainability Topics

Consolidated results of the strategy survey and the materiality workshop we did with the participation of our executives, and the employee sustainability survey helped us to better understand and evaluate the perception of our managers and employees about our company's sustainability impacts.

As a result of intensive evaluations with our managers during the materiality workshop, we analyzed our material issues under economic, social and environmental topics, prioritized them and prepared İÇDAŞ Materiality Matrix.

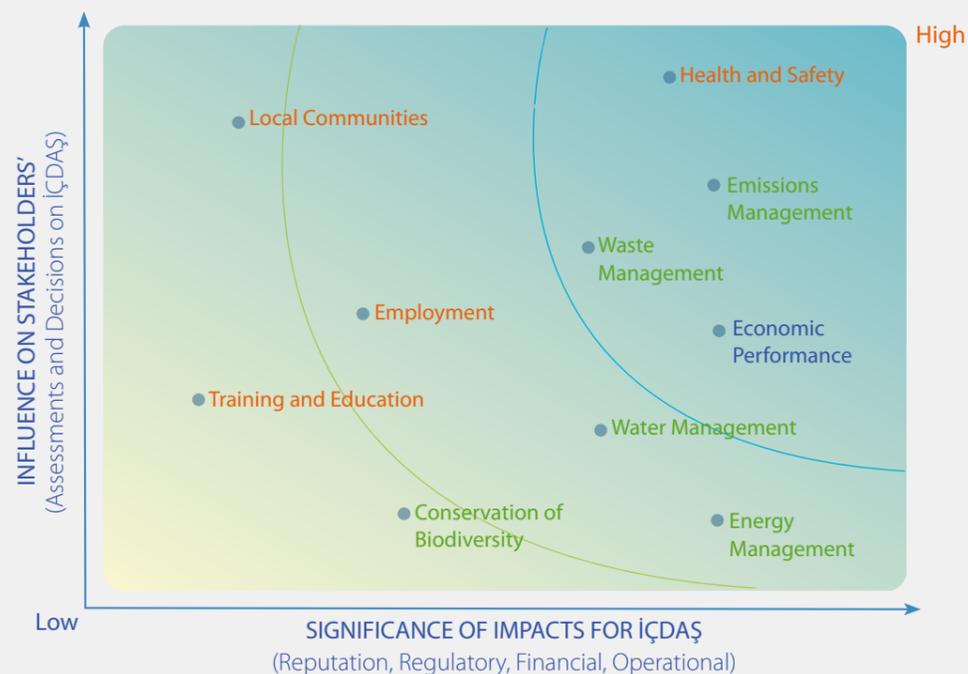
On the right hand top part of the matrix, we placed the issues with high importance for both our company and our key stakeholders and which directly and significantly affect our

company's reputational, regulatory, financial and operational performance. These issues constitute the main topics of this report where we shared our company's performance with relevant data and in detail.

The main objective of forming such a matrix is to clearly identify the strategic issues with regards to their importance and priority for our company as well as our stakeholders, make our plans and set targets concerning these issues accordingly. In the near future, we aim to engage and exchange ideas with wider groups of stakeholders, review our focus issues and develop new targets.

(GRI 102-46)

İÇDAŞ Materiality Matrix



(GRI 102-47)

Boundaries of Material Topics

Material Topics	Topic Boundary		Limitations of Reporting	
	Internal	External	Internal	External
Economic Performance	All İÇDAŞ	N/A	None	N/A
Employment	All İÇDAŞ	N/A	None	N/A
Health and Safety	İÇDAŞ Değirmencik and Bekirli	Subcontractor accident data	None	Only legal responsibilities are fulfilled
Education and Training	All İÇDAŞ	N/A	None	N/A
Local Communities	İÇDAŞ Değirmencik and Bekirli	N/A	None	N/A
Emissions	İÇDAŞ Değirmencik and Bekirli	Subcontractor	None	Emission control of subcontractor vehicles entering facilities
Biodiversity	İÇDAŞ Değirmencik and Bekirli	Neighbor terrains to İÇDAŞ borders	None	N/A
Energy	İÇDAŞ Değirmencik and Bekirli	N/A	None	N/A
Water	İÇDAŞ Değirmencik and Bekirli	N/A	None	N/A
Effluents and Waste	İÇDAŞ Değirmencik and Bekirli	Subcontractor	None	Subcontractors are bound by our waste water and waste management norms for their activities within İÇDAŞ premises

(GRI 102-46)

N/A: not available

Strategic Sustainability Targets

Economic Performance			
Topics	Targets	Target Deadline	Completed / New Targets
Contributions to National and Local Economy	Analyse the economical convenience of local ores and use them in steel production	2019	We continue to work on utilization of local ores.
	Continue with the Türk Yıldızı (Turkish Star) Project to produce coasters	Continuous	In 2016, we completed Türk Yıldızı-4 cargo ship and pilot boat, which we started building in June 2015. We began building 7,500 DWT chemical tanker.
	Build 13,500 DWT general cargo ship	2017	New target
	Increase employment through our local investments	Continuous	We hired 108 new employees.
	Begin integrated management system works in railway transportation	2017	We started in 2016 and plan to complete it in the first quarter of 2017.
	Invest in cement and clinker facilities	2023	We completed the legal permit procedures of facilities.

Social Performance

Topics	Targets	Target Deadline	Completed / New Targets
Occupational Health and Safety (OHS)	Accomplish zero accident target	Continuous	We continue OHS trainings.
	Provide OHS training to 100% of employees	Continuous	All staff recruited in 2016 got OHS training.
	Provide OHS training to 100% of subcontractors	Continuous	All subcontractors employed in 2016 got OHS training.
Employment	Increase employee satisfaction	Continuous	Monitor by satisfaction survey. We continue investments to improve physical conditions.
	Increase the efficiency of İÇÖS Suggestion System	Continuous	832 suggestions are collected in 2016 and 297 of them are realized.
Training and Education	Provide our staff with more than 15 hours of training	2016	We provided 15.93 hours/man of training.
Local Community Engagement	Continue social investments focusing mainly on education, sports and culture	Continuous	We continue sports activities at İÇDAŞ Sports Club and our cultural investments.
	Increase the number of our facility visitors to 15,000 since 2011	2020	In 2016, we had 1,105 visitors. 97% were students and 3% were NGO representatives.
	Continue lectures at Biga Vocational High School	Continuous	In 2016, 12 İÇDAŞ engineers tutored 70 students each week. Lectures included fundamentals of steel and energy as well as environment, occupational safety and quality.
	Introduce 200 young people with swimming, 300 with sailing and 300 with windsurfing each year	Continuous	Exceeded the targets in 2016.
	Increase number of students at the Sports Club	Continuous	Reached 466 students among which 259 are registered players.
	Continue main sponsorship of Parion Excavations	2018	Excavations continue.
	Continue sponsorship of Apollon Smintheion Excavations	2021	Excavations continue.
	Continue sponsorship of Troy Excavations	2020	Excavations continue.
	Initiate Assos Excavations sponsorship	2021	We began to sponsor excavations.

Environmental Performance

Topics	Targets	Target Deadline	Completed / New Targets
Emission Management	Prefer rail and marine transportation instead of road and reduce the use of road transportation	Continuous	We mostly used railway and marine way in 2016 for our logistics activities.
	Complete verification stage of WPP Gold Standard certification process	2016	Completed and verification of 70 thousand tons of CO ₂ sales is done.
	Start verification process of annual activity in order to utilize voluntary carbon markets for WPP project	2017	New target
	Reach 400 thousand planted trees (We revised our target due to the reduction of forestation need).	2023	220,667 saplings were planted before 2016. In 2016, 11,177 saplings were planted.
	Increase renewable energy ratio in our energy generation capacity from 3% to 3.5% by completing Biga WPP Project	2016	A total of 19 turbines became operational by the addition of 7 turbines at the 60 MW WPP in 2016.
	Monitor and broadcast the air quality around our facilities online	Continuous	Data is monitored online by the ministry.
Waste Management	Reduce regularly stored waste amount to 5%	2020	We continue R&D studies to use thermal plant coal ash in gas cement, in cooperation with Onsekiz Mart University.
	Contribute to the study of İTÜ, Ministry of Environment and Urbanization, TÇÜD and KGM (General Directorate of Highways) collaboration to develop alternatives of artificial aggregate use in road construction	2016-2017	We continued to participate in meetings, evaluate the reports and contribute in the studies.
	Make 10 picnic tables, 20 waste basins and 2 ladders from timber waste	2016	We recovered timber waste by making 10 picnic tables, 17 waste basins, 30 garden chairs, and 2 ladders.
	Increase the amount of timber waste to be recovered as solid fuel 10%	2016	We exceeded our target of 10% increase and accomplished 23.6% increase.
	Recover 10% of the steel in arc furnace clinker	Continuous	We exceeded our target of 10% increase and realized a 22.76% recovery rate increase.
	Build the facility and take it into operation in order to dewater the oil sludge and bilge water waste	2016-2017	We established a prototype system in 2016. Since the results were successful, we decided to complete the permit and construction processes in 2017.
	Continue seawater treatment to preserve scarce freshwater sources	Continuous	In 2016, we continued to supply Değirmencik and Bekirli facilities' total need for water from the sea.

Environmental Performance

Topics	Targets	Target Deadline	Completed / New Targets
Energy Management	Keep carbon content in fly ash of Değirmencik Thermal Plant's 3 units under 6%	Continuous	Target reached. 5.09% average is realized by the end of 2016.
	Replacing the present site lighting with economical LED substitutes and accomplishing 30% energy saving in lighting	2016	25% saving is realized. We saved 832 thousand kWh energy and prevented 415 tons CO ₂ emission annually. The saving amount is equivalent to annual electricity need of 500 houses. (TEDAŞ 2013 data)
	Reducing the energy consumption of steel mill 1 arc furnace by 2.5% through regulation system renovation	2016	We took into operation at the beginning of 2016 and saved nearly 5% energy.
	Saving 36 million kWh by reducing the biennial maintenance work of Bekirli Thermal Plant's each mill from 9 days minimum to 4 days, making them operational 5 days earlier.	2016	Target reached. By staff training and maintenance planning revision, the work was completed in 3.5 days
	Saving 8,000 – 9,500 kWh/month water at Bekirli Thermal Plant by reducing the monthly service water consumption by 2,500 m ³	2016-2017	We continue to renovate the technical infrastructure of the parts where service water passes through.
Conservation of Biodiversity	Continue TÜBİTAK MAM Environmental Monitoring Project	2016	In 2016, the first period of 6 years is completed and final report is prepared. Monitoring studies extended to 2021 by a new agreement with TÜBİTAK MAM in 2016.
	Make sure annual reports on biodiversity at Biga region are prepared	Continuous	We prepared 2016 report and published at our website.
	Prepare 2016 biodiversity species inventory, monitor year to year dispersal and identify 10 new species	2016	10 new mammal species including 9 new bat species and 1 otter are added to our regional species inventory list.
	Making ornithological and wildlife observations at WPP fields	2016-2017	Observations done with Selçuk and Akdeniz Universities' academicians in 2016 are reported.
	Build temperature monitoring system for cooling water 1 channel and initiate temperature monitoring process	2016-2017	We started in March 2016. We plan to take it into operation by July 2017.





ECONOMIC PERFORMANCE

At İÇDAŞ our corporate culture is based on fulfilling our environmental commitments while expanding in economic terms.

We believe that besides financial performance, the most crucial factors that lead us to sustainable development are our environmental and social responsibilities.

AWARDS

İÇDAŞ Çelik Enerji Tersane ve Ulaşım Sanayi A.Ş.

9th



İÇDAŞ Elektrik Enerjisi Üretim ve Yatırım A.Ş.

73rd in

Turkey's Largest 500 Industrial Companies Ranking



İÇDAŞ Çelik Enerji Tersane ve Ulaşım Sanayi A.Ş.
ÇİB Turkish Steel Exporters Association

2nd largest exporter award in all products

Stakeholder View

“ Training projects held by İÇDAŞ in vocational high schools in Biga create a significant added value within the scope of intermediate-workforce needed by the regional industry. İÇDAŞ has resolved unemployment issue in the region with comprehensive human resources strategy extending from education to employment. ”

ŞADAN DOĞAN,
Chairman of Biga Chamber of Industry and Commerce

Sustainable Growth and Contributions to Economy

“ 85% of our employees who participated in sustainability survey think that...”

İÇDAŞ creates considerable amount of economic value for its stakeholders (employees, suppliers, local people, government institutions.

”

Today, economic competition is based on various factors such as continuity of production, utilization of clean, eco-friendly technologies and low input costs. Parallel to developments around the world, we aim to expand by investing to sustain our market position with high quality products, to compete and protect ecological balance in order to integrate with the modern world.

Our financial sustainability is crucial for our stakeholders that include our shareholders, employees, suppliers and our local neighbors. The foundation of our environmental and social investments is based on our strong financial structure. We

target those projects that provide employment opportunities, contribute to production and create value for our ecological environment, our culture and human life.

Today, İÇDAŞ is a leading steel, energy and ship producing company of over 7.8 billion TRY turnovers, which uses diversified green technologies as an employer, contractor, investor and innovative technological solutions provider. While İÇDAŞ brings in Turkey considerable amount of foreign exchange through exports each year, it employs 5 thousand people directly and another 5 thousand indirectly to create a family of 10 thousand people economically.

As the First Supporter of Türk Yıldızı (Turkish Star) Project, We Completed the 4th Ship at İÇDAŞ!

The Project is launched in 2012 with the objective of renovating 100 coasters of the Turkish Maritime Trade Coaster Fleet, which is used for freight transport around and nearby Mediterranean and Black Sea coasts. İÇDAŞ decided to contribute to the project with 5 coasters believing that this Project would improve Turkey's global competitiveness. The production of the first four coasters with 30 million USD in

cost is completed at Çanakkale Biga premises. Total budget of the project is 37.5 million USD. Coasters are designed for river transportation as well as marine. It is favorable due to its environmentalist specifications such as fuel efficiency. İÇDAŞ's coasters, which are designed by Turkish engineers, will carry dry cargo, private cargo and containers.



Steel Production

We are the largest private sector steel investor in terms of capacity. Turkey is the 8th crude steel producer in the world. Approximately 9% of Turkey's crude steel production takes place in İÇDAŞ facilities. In 2016, we became the 2nd largest steel exporter in Turkey.

Steel Sales	2016	Ratio
Total Domestic Sales (mt)	1,914,657	56%
Total Export Sales (mt)	1,503,817	44%

Waste steel is not included in sales numbers.

Power Generation

In 2016 İÇDAŞ generated 4% of energy produced in Turkey with 8.42 billion kilowatt-hours in Bekirli and 2.50 billion kilowatt-hours in Değirmencik.

Railway Transportation

İÇDAŞ is a private sector company whose railway fleet is the 2nd largest one in Turkey, with its 176 railway carriages. Our transportation capacity on current railway infrastructure is 350 thousand tons a year and we carry steel scraps collected from many locations in Anatolia through railways. We switched our product and raw material transport activities to railway transportation in order to reduce our costs and to protect environment by means of relatively less emission than road carriage. To accommodate this target and utilize railway efficiently, we established steel centers at five locations (Isparta, Ankara, Konya, Gölcük, Sakarya, Bursa) in Turkey. In 2016, we transported 150,835 tons of steel products and scraps with railways.

Shipyards Activities and Marine Transportation

We create a considerable amount of economic value with our activities in our harbor that has a high docking and load-unload capacity. Train ferry construction is another part of our investment plan. Our ultimate objective with this investment is to reach Bandırma Shipyards directly, shipping from factory to railway and therefore to prevent handling manipulation. Furthermore, direct export from Tekirdağ to Europe will be possible this way.



Our Railway Logistics Operations Obtained Quality Management Certifications!

In 2016, we decided to improve the quality, environment and occupational safety standards of our railway logistics operations in line with the amendments of railway logistics procedures. Our Railway Logistics Management undertook management system audits and improvement works necessary for certification at our Ankara, Konya and Bandırma stations. So, we included our railway logistics activities in our quality management systems and received our ISO 9001, 14001, 18001 certificates.

Results and Gains

Economic: Measurement and monitoring became more systematic since logistics operations totally conform with management systems now. Problem solving process gained speed and productivity increased.

Social: Elevation in occupational safety standards contributed to the safety and security of workplace.

Environmental: Checking environmental impacts frequently resulted in the reduction of environmental impacts caused by operations.

Corporate: Management system certificates received contributed to the corporate reputation of our company.

Completed and Continuing Investments of 2016

Name of Investment	Location	Status	Total Budget	2016 Investment Amount
Liquidated Natural Gas Storage and Gasification Facility	Biga / ÇANAKKALE	Permission stage	€ 800,000,000	€ 100,000
Helvacı Thermal Plant	Biga / ÇANAKKALE	Permission stage	\$ 200,000,000	₺ 150,000
Artificial Aggregate Facility	Biga / ÇANAKKALE	Operational	€ 500,000	₺ 200,000
Solar Power Plant	Biga / ÇANAKKALE	Permission stage	€ 2,000,000	₺ 250,000
Biga Wind Power Plant	Biga / ÇANAKKALE	Operational	\$ 100,000,000	₺ 2,921,570
Railway Transportation – Locomotive Investment	Turkey	Investment stage	€ 11,000,000	₺ 0
7000 DWT Chemical Oil Tank	-	Construction stage	€ 17,000,000	₺ 2,000,000
Türk Yıldızı 4 (Turkish Star 4) 5000 DWT General Cargo Ship	Değirmencik-Biga	Completed	\$ 7,500,000	₺ 10,066,035
Guiding Boat	Değirmencik-Biga	Completed	€ 900,000	₺ 3,454,667
Değirmencik-2 Regular Ash Storage Field	Değirmencik-Biga	Construction stage	\$ 6,500,000	₺ 302,202
Bekirli-2 Regular Ash Storage Field	Bekirli-Biga	Construction stage	\$ 6,500,000	₺ 1,560,300
Tugboat (65 tons towing power)	Değirmencik-Biga	Construction stage	€ 4,750,000	₺ 0
Stainless Steel Chemical Tanker	Değirmencik-Biga	Construction stage	€ 16,000,000	€ 1,500,000



Local Economic Contributions

Total direct investment amount of İÇDAŞ in Çanakkale region is 5.5 billion USD so far where approximately 6.1 million of it was done in 2016. The indirect impacts of these investments on the local community and economy are higher and for longer terms. Giving priority to local recruitment reinforces this impact.

Details of our social and environmental investments, education, sports and cultural support projects and indirect economic impacts are explained in 'Social Performance' section of this report.

Target of Producing Steel from Local Ores

We have been working on more efficient production processes that will be alternatives to scrap because of the shrinkage and pollution in the world and Turkish steel sector. We analyze the economical convenience of local ores to make production with national resources in order to increase the quality of goods and reduce the production cost.

As an environmental investment, we continue our operations on generating electricity from waste heat that comes from high energy consuming processes of electric arc furnace and rolling mill reheating furnace.



Energy Investments

“ 94% of our employees who participated in sustainability survey think that...”

İÇDAŞ should invest in renewable energy sources like wind power plants. ”

Turkey is approximately 70% dependent on foreign resources of energy, where the import volume creates the largest portion of Turkey's foreign trade deficit. Securing energy demand is critical for Turkey's sustainability, as it is for the rest of the world. Population rise, expansion in industrialization and acceleration in urbanization increase energy demand every day.

All these developments besides our need for uninterrupted, high quality energy to continue our seamless operations, increases our sensitivity for secure energy supply and to reduce Turkey's dependence on foreign supply. We continue to invest in coal-based, environment friendly thermal power plants to reduce the dependency on natural gas.

İÇDAŞ Biga WPP (Wind Power Plant) Project

On May 12th, 2012, we gained the right to build a 60 MW wind power plant (WPP) at Biga, Çanakkale by winning the tender of Turkish Electricity Transmission Company (TEİAŞ).

We started construction in 2014 after Çanakkale Nature and Forest Directorate decided that Environment Impact Assessment report (EIA) was not necessary for this Project.

We started to operate the first 12 turbines in 2015. We added 7 new turbines of 3,2 MW each with a 100 million USD investment in 2016. Our target is to generate 192.895.200 kWh energy.

We intended to contribute to local economy by providing job opportunities during the construction and operation processes of the project. İÇDAŞ Biga WPP project is licensed to generate 210 million kWh annually. 113,530 tons of carbon emission reduction will be achieved with this production.

Through İÇDAŞ Biga WPP project, we aimed to preserve the ecological balance as well as diversify our energy production portfolio and start carbon trade. We completed the approval process of Biga WPP Gold Standard certification to take part in the Voluntary Carbon Market



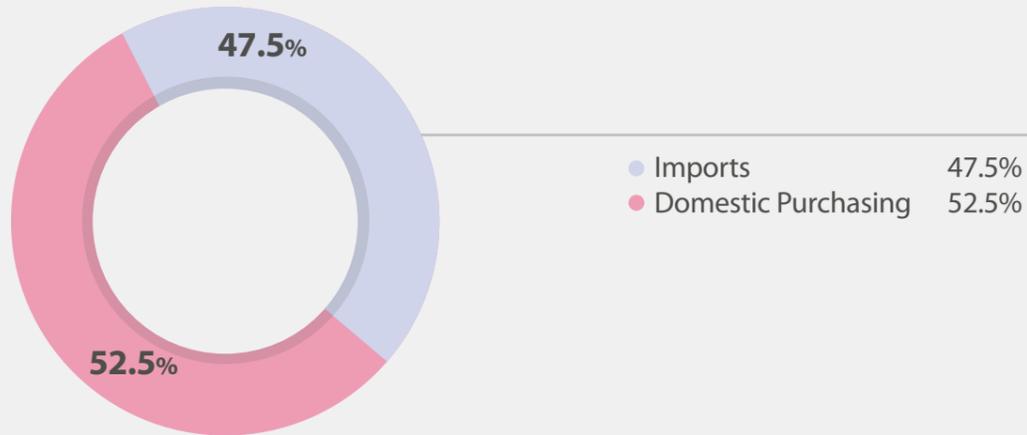


Local Supply Practices

We supply our company needs, especially raw materials from all over the world and Turkey. When it comes to procurement, for İÇDAŞ, 'local' means 'within Turkey'. We defined our local supply policy and selection criteria in our supplier list designation and procurement procedure.

We first check if we can supply the procurement demand from local suppliers if the quality-price ratio is acceptable in

our terms. Scrap and coal are usually imported where fuel, machinery and equipment are usually procured locally. Although the number of domestic suppliers have a greater portion in all suppliers, 47.5% of our supply expenditures are allocated to imports because of the higher cost of goods purchased.



İÇDAŞ Supply Chain Structure	Domestic	Foreign
Total number of suppliers	2,892	275
Locations of suppliers by region or country	Marmara: 2,285 Aegean: 153 Other: 454	Russia, Ukraine, EU, European Free Trade Association (EFTA), USA, China, Colombia, India, Japan, Mexico, Australia, Brazil, Finland, South Korea, Hungary, Pakistan, Croatia
Types of suppliers	Main producers, license owners, auditors, consultants, intermediaries, wholesalers, subcontractors, carriers	Scrap, coal, HBI, pig, iron billet, replacement part suppliers and supervisory companies
Estimated value of payment done to suppliers	TRY 3.08 Billion	TRY 2.83 Billion





SOCIAL PERFORMANCE

At İÇDAŞ, we identified the most important social impacts of our operations as health, safety and development of our employees, and our responsibilities towards the local people living around our facilities. We run our steel and energy production operations with the target of zero accident rate.

İÇDAŞ's employees and the local public including their families, are the primary stakeholders of İÇDAŞ. We manage employee relations through our Human Resources Policy and we take into consideration the priorities of local residents which we name as our 'neighbors', when planning our social and environmental investments.

HIGHLIGHTS

79%
Local Employment Rate
★
47.1%
Workers Represented by a Labor Union
★
3.8%
Improvement in our Turnover Rate

Stakeholder View

“ İÇDAŞ is the stakeholder that we organized the highest number of courses with. As a result of İÇDAŞ's efforts, Biga has been exemplary in Çanakkale within the scope of vocational education.

ERDAL ASLAN,
The District Director of Biga National Education

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Occupational Health and Safety

“ 76% of our employees who participated in sustainability survey think that... ”

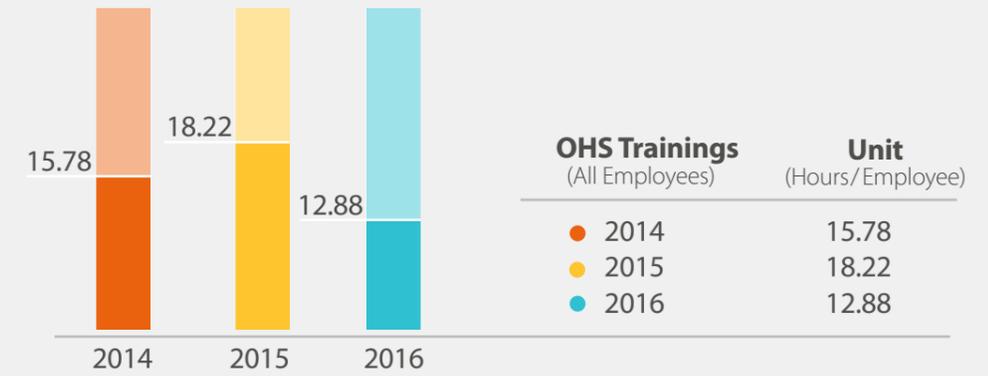
İÇDAŞ takes necessary measures sufficient to oversee and secure health and safety of its employees.

Steel industry is a part of primary metal industry and is considered a “heavy” industry. Constantly moving very heavy and enormous materials and machines from one place to another; being around and dealing with molten metal at 1,800 degrees centigrade, toxic and corrosive materials, scent, smoke and noise may create essential risks on health and safety.

At İÇDAŞ, employee health and safety is among our top strategic priorities. We care about the health and safety of our employees in accordance with our internal Occupational Health and Safety (OHS) Policy and OHS management system implementations. The details of our OHS Policy can be found in İÇDAŞ Management Policy Book.

We apply OHSAS 18001 – OHS Management System as part of our risk management strategies in order to comply with OHS regulations revised during the EU adaptation process. This system enables İÇDAŞ to make sound and consistent risk evaluations, reduce risk of accidents and increase overall performance.

In 2016, we provided 23,150 hours of OHS trainings to our employees where the average was 13 hours/man. The data about our OHS performance is located in ‘Social Performance Indicators’ section of our report.



Radiation Safety

İÇDAŞ is a leading company in its industry due to the investments and measurement systems it undertakes in radiation safety. Our plants receive scrap steel from all over the world on a regular basis. We have a particular systematic control system to recycle scrap steel without incurring risks against the environment and employee safety.

We eliminate the reception of scrap from countries with high contamination risk of explosive materials, chemicals or radioactive waste. We also check and control each stage of the operation from the procurement to the reception and processing.

We procure imported steel only from the licensed steel processing plants. İÇDAŞ Scrap Experts visit and approve the suppliers on a regular basis to control whether the plant is technically qualified for processing scrap. The scrap is embarked after radiation and chemical controls done and supervised by international supervisory bodies.

We have eight Permanent Radiation Measurement Devices: four at the harbor entrance and four at the land entrance. After the check at the entrance, the scrap steel is taken into the scrap store for another check by the experts.

In order to prevent problems that occur by human or equipment errors, scrap steel is checked once again against radiation after the melting process. De-dusting systems include radiation measurement device to detect radiation at this stage. These devices that are present at three of the de-dusting systems constantly monitor melting process.

The probability of failure to detect radiation up to this point is very low after all these control stages. Nonetheless, all steel products are checked once again before leaving the plant. All products are scanned by highly accurate Permanent Radiation Measurement Devices before leaving the plant.





Employee Engagement

“

63% of 6% our employees who participated in sustainability survey think that...

The amount of training and programs (technical and soft skill trainings, career development programs, rotation, etc. İÇDAŞ provides for its employees are sufficient.

”

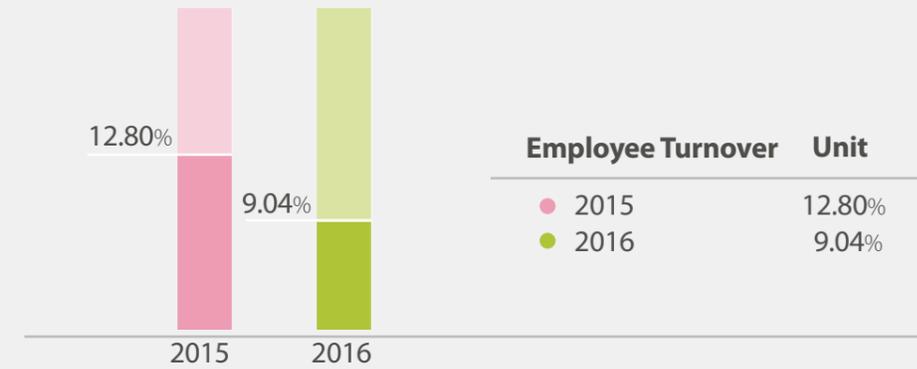
İÇDAŞ Board of Directors defines its employees as its most valuable asset. Our employees are our primary stakeholders in terms of sustainability as they are for all other İÇDAŞ topics. We defined part of our mission about the employees as; 'creating team work, fair attitude, open communication, personal safety and development opportunities by providing safe and effective work environment'. We are determined to maintain this culture.

The know-how, competence, experience and diligence of employees are the leading factors that enable İÇDAŞ to become a major international player concerning the production, capacity and technology it owns today. We aim to improve our operations together with our happy and engaged employees by providing them with personal development opportunities and health and security at workplace.

The percentage of union labor is high due to the facts of the industry being large scale and labor intensive. Meetings held with labor and union representatives are effective platforms to include employees in the decision-making processes.

Fringe benefits to full time employees are; fuel, marriage, maternity, death, child, military service, education, lunch, transportation, shoes, natural disaster, food and cleaning supplies aids, bonus, holiday and annual paid leave.

Services and fringe benefits applied to all employees are; paid sick leave and private medical support clear of charges, zero interest loan once a year, right to receive advance credit, shuttle service for workers, medical center, company dwelling and insurance against accidents. All children can attend sailing club activities free of charge.



İÇDAŞ Suggestion System (İÇÖS)

The most significant communication channel from which the Board of Directors receives the ideas and suggestions of employees is İÇÖS Suggestion System. In 2008, İÇDAŞ Board of Directors initiated İÇÖS to make use of employee suggestions and ideas and to develop the employee – management communication. We announced the purpose, scope, activities of the system and the benefits it will introduce both to the employees and the company.

Employees write down efficiency, OHS, environment, quality improvement suggestions on İÇÖS forms. They then put them in the İÇÖS suggestion boxes at the staff canteens. These

suggestions are collected regularly and discussed at the İÇÖS work unit meetings. Those suggestions applicable for implementation are submitted to İÇÖS executive committee. The committee approves suitable suggestions and starts the preparations for deployment.

A 20-people committee of a work unit and an executive council executes İÇÖS. 832 suggestions are received since the beginning of the system until the end of 2014 and 297 of these, which are mainly related to H&S improvements and labor efficiency, are realized.



Local Employment

We prefer to recruit local people for our Değirmencik Integrated Plant. This approach facilitates the orientation process among employees and increases the quality of life in the region. Today, direct employment from the locals is over three thousand people at İÇDAŞ facilities.

This number expands to six thousand when we consider all the services purchased in the region. The ratio of executive managers to all managers hired from local people was 34% by the end of 2016. We employed 82% of our staff in Değirmencik integrated plant and 71% of our staff in Bekirli power plant from locals.

Local Employment at Çanakkale	Status	2015	2016
Top Managers	Local	21 36%	20 34%
	Other	37 64%	38 66%
Değirmencik Facility	Local	2.851 83%	2.913 82%
	Other	583 17%	657 18%
Bekirli Facility	Local	443 72%	436 71%
	Other	171 28%	181 29%
Total	Local	3,315 81%	3,369 79%
	Other	791 19%	876 21%



Equal Opportunity and Human Rights

Starting from the first day of employment, we try to create equal opportunities for everyone regardless of their gender. We implement equal job –equal pay principle as stated in our İÇDAŞ Human Resources Policy. Salaries are increased each year according to employee performance.

workforce ratio is very low in Turkey likewise the rest of the world.

We don't have operations with significant risks of employing child labor or forced labor. Our principles on human rights and working conditions for both İÇDAŞ and our suppliers are described in İÇDAŞ Management Policy Book.

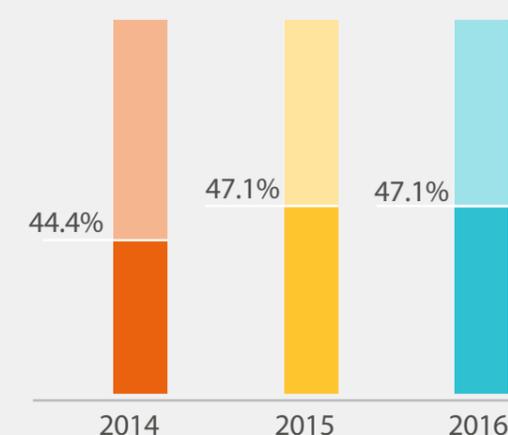
Female workforce consists 3% of our total group workforce. Due to the nature of the steel and energy industries female

Training and Development

In the reporting period, we provided İÇDAŞ staff with 76 thousand 659 hours training on 10 main topics including health, security and personal development. In 2016, women employees received 5.7 hours of training where male employees had 14.1 hours of training.

Average training hours by employee type and other training information is presented in 'Social Performance Indicators' section of our report.

Trainings by Topic	Hours
Health and Safety	23,150
Orientation	18,968
Vocational	18,822
Single Spot	6,167
Information Security	3,402
Quality	2,934
Personal Development	2,025
Environmental, Energy Management Systems and Other	1,191
Total	76,659



Employees Covered by a Collective Bargaining Agreement

Number	Ratio
2,132	44.4%
2,178	47.1%
2,231	47.1%

(GRI 102-41)



Community Engagement

“

81% of our employees who participated in sustainability survey think that...

İÇDAŞ is perceived by the local community as a company that respects the rights of local community, cares about local health and safety, and produces positive outcomes by its activities.

”

As İÇDAŞ, we always intend to protect the rights, benefits and values of local community since the first day of our investments. We support this intention by recruiting most of our executives among local residents. In all our investments and corporate responsibility efforts, our priority is to reach the local people and we respect the culture, traditions and history of our region.

Facility Visits

We began organizing facility visits in 2010 during the months from March to October when we noticed that public did not have enough information about our production and environmental activities, and that there were many requests from the public to make site visits and explore our plants. So İÇDAŞ Media and Public Relations Department started to organize visits regularly.

Our aim is to inform all external stakeholders about İÇDAŞ environment and water management system, social responsibility activities, work environment and innovative

production technology via direct observation method. We also intend to create a positive perception among the various social segments of local community and to maintain and increase the solidarity between İÇDAŞ and the local people.

In the last six years, we hosted 6,900 guests including students from primary schools to universities in Çanakkale region, members of craftsmen chambers, NGO and association members, local and central government representatives, ministers and media representatives. 97% of 1.105 guests we hosted in 2016 were students and 3% were NGO representatives.

We provide information about site visits to media in order to expand this practice to the society. Our aim is to reach 15 thousand visitors in 10 years and create a recognized corporate perception through direct observation in the 10% of local community. We plan to continue this activity with four to six visitor groups monthly for every eight months in the next five years.

Results and Gains

Economical:

In the long term, this activity will help us recruit sufficient number of skilled labor in the region.

Social:

The activity helped to form strong relations between the external stakeholders and the plant managers. It also enabled our internal stakeholders to take part in activities organized by the external stakeholders. We also received requests from stakeholders outside our region.

Environmental:

The most important gain of this activity is its contribution to the public perception of our plants' sensitivities towards environmental values. Every visitor who has witnessed this sensitivity became an ambassador of our company.

Corporate:

Having received an intensive appreciation from the external stakeholders, the activity has had a positive impact on our employees' engagement and work esteem. İÇDAŞ, thanks to its sharing approach, established a great sense of security in its stakeholders while its corporate performance and the value of awards it has won in many fields are better appreciated by public.





Social Investments

“

83% of our employees who participated in sustainability survey think that...

”

İÇDAŞ's social development investments towards the local people around its premises are sufficient.

Since the day it was established, İÇDAŞ have been working on raising the quality of living by providing educational opportunities, improving social life and meeting social needs. We make our social investments in education, sports and culture with our motto 'Healthy-Educated-Social Youth = Strong Society'.

Aiming a society that is educated, healthy, energetic, prosperous and confident due to its thousands of years of cultural heritage, İÇDAŞ continues its training-sports

investments that embraces the youth in the region and supports on conservation of cultural heritage embracing the whole community, with a holistic approach.

We have allocated over 60 million TRY of investments between 2004 - 2015. Our social investments accounted for over 3.8 million TRY in 2016. Our social and environmental infrastructure supports consist of monetary and material donations for building road, mosque, park, transmission lines, etc.

Our Social Support in Local Community and Economy	2016
Social and Environmental Infrastructure	TRY 889,527
Sports	TRY 193,777
Education	TRY 808,911
Cultural	TRY 1,972,458
Total	TRY 3,864,673

Supporting Education

The idea behind our educational investments is the deficiency of regional qualified workforce. 21% of our investments fall under educational category, which includes school and dormitory construction and infrastructural support, student grants, adult education courses and similar projects.

We provided 439 students, where 45% are female, with 885 thousand TRY grants in 2016. Hence, we have provided 4.1 million TRY grants in total to 2,297 students in six years.

Supporting Sports

We intend to encourage the regional youth, which includes our employees and their children as well, to develop as healthy, confident, sportive, competitive individuals with team spirit. With this notion, besides establishing İÇDAŞ Sports Club, we support all kinds of sports and sporting clubs in our region.

Supporting Cultural Development

In order to reveal Turkey's universal values and to introduce our historic and cultural wealth to the world, we support Parion, Smintheion, Troy and Assos excavations, which help develop the history of Anatolian culture.

Activity	Location	Related Stakeholder	Type	2016 Budget
İÇDAŞ Vocational Technical High School	Biga, Çanakkale	Çanakkale Education Administration	Education	TRY 774,367
Lapseki Vocational High School	Lapseki, Çanakkale	Çanakkale Education Administration	Education	TRY 34,544
Sports Sponsorships	Çanakkale	Çanakkale Youth and Sports Administration	Sports	TRY 193,777
Restoration of Mehmet Akif Ersoy House	Bayramiç, Çanakkale	Ministry of Culture and Tourism	Culture	TRY 691,360
Parion Excavations	Bekirli, Çanakkale	Ministry of Culture and Tourism	Culture	TRY 364,512
Apollon Excavations	Gürpınar, Çanakkale	Ministry of Culture and Tourism	Culture	TRY 232,973
Troya (Truva) Excavations	Tevfikiye, Çanakkale	Ministry of Culture and Tourism	Culture	TRY 273,116
Assos Excavations	Ayvacic, Çanakkale	Ministry of Culture and Tourism	Culture	TRY 399,997
Protection of Çanakkale's Cultural Assets	Çanakkale	Governorship	Culture	TRY 10,500
Cancel Scanning Vehicle Investment	Çanakkale	Governorship	Infrastructure	TRY 228,884
Construction of Forest Observation Tower	Biga, Çanakkale	Administration of Forests	Infrastructure	TRY 50,000
July 15 Solidarity Campaign	Çanakkale	Governorship	Infrastructure	TRY 269,305
Grants to Kızılay, Security and Governorship	Çanakkale	Governorship	Infrastructure	TRY 258,980
Organisation of April 23 Children's Holiday	Çanakkale	Governorship	Infrastructure	TRY 42,298
Aksaz Village Health Center	Aksaz, Çanakkale	Aksaz Chief Administration	Infrastructure	TRY 33,500
Bandırma Traffic Administration	Bandırma, Balıkesir	Bandırma Security Administration	Infrastructure	TRY 6,560

Number of Students and Amounts of Grants

Year	Students	2014	2015	2016
Vocational High Schools	Female	16	11	15
	Male	10	11	16
	Total	26	22	31
University	Female	150	145	152
	Male	194	186	182
	Total	344	331	334
Other	Female	28	42	29
	Male	40	44	45
	Total	68	86	74
Total Number of Students		438	439	439
Total Amount of Grants		TRY 865,980	TRY 888,120	TRY 884,727

UMEM Specialized Vocational Training Centers Project

The Union of Chambers and Commodity Exchanges of Turkey –TOBB started the Project UMEM in 2010, after revealing the fact that the most essential issue of private sector was finding skilled labor. The UMEM Project is a mutual public project conducted by TOBB and Ministry of Labor and Social Security.

The purpose of the program is to support unskilled labor to have a career and a job as well as resolving the issue of skilled

labor shortage in the private sector. The target of Ministry and İŞKUR is to get 90% of one million unemployed to have a job in five years' time.

Over 20 UMEM programs took place in İÇDAŞ Biga Vocational and Technical High School by the end of 2015 and under 'Steel Mill Worker, Welding, Rigging, Turnery and Steel Producer' topics. In 2016, there were not any new programs.



Results and Gains

Economical:

249 of 350 certified students started their career in Steel Mill, Rolling Mill, Power Plant, Harbor and Auxiliary Facilities at İÇDAŞ. 207 of them still work for our company.

Social:

This is a project to resolve the most essential social issue of unemployment. Those who are recruited not only had jobs but also gained professional careers.

Corporate:

Our support in the program evoked respect in different segments of the society. İÇDAŞ added another dimension to its social responsibility approach by making unskilled labor in the region to gain professional careers along with jobs.

Biga Science High School

Upon Biga District Governorship's demand to meet the need for a science high school at Biga with 90 thousand population; high school construction of 19 classrooms began on the land allocated by Biga Municipality. The projection is to complete the school in 2018 with a total budget of 21 million TRY.

The school, which will be constructed on a 5,590 squaremeters land will have 3 laboratories, an arts and music room, a library, a gym, a multi-purpose practice room, a shelter and handicapped elevator in addition to the classrooms.



Tutoring of İÇDAŞ Employees at Çanakkale Onsekiz Mart University and Biga Vocational School

We had problems recruiting the regional vocational school graduates since these schools were established overlooking the emerging industries and investments at the region. Private sector also had problems recruiting people with the right skills.

At the end of 2011-2012 term, İÇDAŞ Head Office and Çanakkale Onsekiz Mart University Management agreed to open 'Electricity Generation, Transmission and Distribution' and 'Metallurgy' classes within Biga Vocational School. Starting from the next education term both programs filled their quotas.

A council formed by İÇDAŞ and Biga Vocational School staff

to make current lessons more practical conforming real-world practices. These lessons began in 2013-2014 term. A group of 12 successful engineers who are managers and chiefs at İÇDAŞ teach 11 different occupational lessons. Sometimes practical lessons take place in İÇDAŞ facilities. In 2016, 70 students attended these branch classes.

As İÇDAŞ, being the only large-scale heavy industry enterprise in and around Çanakkale, we prepare lesson contents according to iron & steel and power industry processes. We also provide comprehensive education in working under heavy industry conditions, quality control, occupational safety and environment.



Results and Gains

Economical:

As the program is designed to include many implementations and practical information, we believe the students will adapt their jobs promptly and have higher work efficiency levels.

Social:

We expect that the practice will help students to have an education experience where they can confidently look ahead.

Environmental:

We think that plants run by skilled expert employees will be more effective in protecting the environmental values.

Corporate:

We believe that this practice will contribute to create a more competitive and effective corporate structure throughout the organization by recruiting expert skilled personnel.

İÇDAŞ Sports Club

In 2004, we established a Sailing School at Karabiga in Çanakkale, which has the second longest coastline in Turkey, with the aim to provide opportunities to mass community to do water sports like swimming and sailing, free of charge and under universal standards.

In 2008, we initiated sponsorship support in swimming and established Çanakkale Sailing School in 2010. We consolidated all sportive activities under the umbrella of İÇDAŞ Sports Club in 2011. In 2013, we added the windsurfing activity to our current training activities of sail and swimming. We started chess and basketball branches in 2014.

We set the priority target of the project as supporting the youth of the region to help them raise as healthy, competitive, sportive people with high self-esteem and team spirit. By this means, we intend to reinforce our corporate image, increase



our brand awareness and contribute to the development of tourism and economy of the region.

We received assistance from Turkish Sailing Association, Turkish Swimming Association, Çanakkale Youth and Sports Provincial Directorate, Çanakkale Sailing Provincial Representative Office, Çanakkale Swimming Provincial Representative Office, Çanakkale Governor's Office, Biga District Manager's Office, Çanakkale Municipality and Karabiga Municipality on designating areas for sports activities, regional and international race organizations and logistics matters. Every year, we scan all primary schools to earn swimming discipline talented high potential children in the city with the cooperation of Youth and Sports Provincial Directorate and the National Education Directorate.

At İÇDAŞ Sports Club with a world-class infrastructure, we have a total of 466 students of which 259 are licensed athletes.

Results and Gains

Economical:

As Çanakkale's name rose to prominence in sailing, swimming and windsurfing, it started becoming a city of choice in sports tourism. Today, talented young swimmers settle in Çanakkale in order to continue their studies within İÇDAŞ Sports Club. The success achieved under such disciplines and the rapid developments in the sports infrastructure of the city, resulted in many national and international tournaments to be organized at the region.

Social:

Thousands of young people are introduced to sailing and swimming at İÇDAŞ Sports Club. Some of our students were selected for the national team and represented our country in the international events. While all the coastal cities in our region host sailing tournaments, competitions and shows, our sports people started to participate in domestic and international competitions and come home with significant successes. Accomplishments increased the self-esteem of the children and gave way to bigger successes.

Corporate:

İÇDAŞ Sports Club is the first institution that comes to mind about sailing and swimming in our region. We are proud of all our sports people because of their sportive lives, team spirit and successful results in competitions.

İÇDAŞ Sports Sailing Team's successes until 2016:

- ★ **11 times** first place in Turkey
- ★ **14 times** second place in Turkey
- ★ **33 times** third place in Turkey
- ★ **59 times** first place in the region
- ★ **53 times** second place in the region
- ★ **58 times** third place in the region

Branches	Number of Students		
	Licensed	Amateur*	Total
Sailing-Wind Surf	53	60	113
Swimming	97	116	213
Basketball	44	0	44
Chess	55	25	80
Archery	10	6	16
Total	259	207	466

* Amateur students do not include the ones who were trained for a short period like a couple of months or who were seasonal.



2016 Awards of İÇDAŞ Sports Club

Branches	Names of Students	Awards	Names of Competitions
Swimming	Nilay ERKAL	3rd place in Turkey	Turkish Swimming Federation Turkey Elections
Sailing	Zülal Türkoğlu	2nd place	International Urla Vintage Sailing Competition
Sailing	Buket Aslan	31st place	46th World Championship of Young Sailors-New Zealand
Sailing	Team	Optimist Girls; 1st and 3rd places Optimist Junior; First 5 places Optimist Junior Girls; 1st and 3rd places Optimist Stars; First 4 places Optimist Small Girls; 1st place Laser 4.7 General; First 2 places Techno 293 U-17 General; First 3 places	Çanakkale Sailing Office Republican Cup Sailing Competition
Surf	Team	2 - 1st places 1 - 2nd place 2 - 3rd places	Turkish Sailing Federation
Chess	Yaşar Fatih Ayengin Baran Büyükbozkoyun Ahmet Anıl Alper Ahmet Enes Ergin Yiğit Gürel	1st place – 16 years old 1st place – 15 years old 2nd place – 14 years old 1st place – 13 years old 2nd place – 13 years old	Çanakkale Stars Chess Tournament
Basketball	Dilek Türünz	2nd place in the tournament and 1st place under 12 years old	Çanakkale Women's Chess Tournament
Basketball	Team	5 victories in 7 games	Turkish Basketball Federation 14th Junior Basketball Festival
Basketball	Team	City Champion	Turkish Basketball Federation Çanakkale Office 2016-2017 Season U13 Girls League

Kemer Parion Antique City Excavations Main Sponsorship Kemer Village / Biga / Çanakkale



Following the decision to invest in the region, we started renovating Kemer Village Primary School responding to the request from Kemer Village Administration. When we started laying the foundation, we came up with Parion South Necropolis archaeological findings. We decided to continue school construction in another location and started supporting Çanakkale Museum to continue excavations.

We intend to continue the Parion excavations that started in 2008 as the main sponsor for 10 years and allocate 5 million TRY to Parion to make it a preferred ruins site by tourists and also display the archaeological findings in Parion İÇDAŞ Museum that will be built by İÇDAŞ in Kemer Village.



Apollon Smintheion Excavations Main Sponsorship Gülpınar Area / Ayvack / Çanakkale

The Apollon Smintheion excavation started in 1980. A crew of 30 people led by Professor PhD. Coşkun Özgünel conducts it and the operations are supported and controlled by Ministry of Culture and Tourism. We have been the main sponsors to the excavations since 2011.

We intend to continue Apollon Smintheion Excavations for 10 years; exhibit the archaeological findings on display in a museum with better facilities; setup the ruins so that they will be regarded as a 'must see' tourism destination; and restore Apollon Temple and give it to the world culture. We plan to realize these targets with a 4 million TRY overall sponsorship budget in 10 years period.



Troy Excavations Main Sponsorship Tevfikiye Village / Çanakkale

Troy is the world-renowned asset of Çanakkale region. Apollon Smintheion is a sacred part in Troy and the archaeological finds play a significant role in supporting Troy's historic presence.

Troy, the subject of Homer's Iliada legend, is our region's most famous tourism brand in the world. The excavations have been going on for the last 35 years with difficulties. As İÇDAŞ, we decided to sponsor the excavations for 5 years with 1 million TRY budget in 2014 to end the on-going problems. Our aim is to finish Troy Museum and present this unique cultural heritage to the world in a way it deserves.



Results and Intended Gains

Economic:

Public is highly interested in the archaeological findings from the excavations. Kemer Village attracts around a thousand and Smintheion attracts around 30 thousand visitors each year and thus, economically contributes to the region. In the short term, we plan to increase the number of visitors by 200 thousand people a year following the opening of Troy Museum. Hence, we will contribute to site, tourism and accommodation revenues of Çanakkale.

Environmental:

We intend to be exemplary as an industrial enterprise that cares for our environmental values and cultural heritage. Such practices will help Turkish industrial brands to gain reputation in international platforms.

Corporate:

Support İÇDAŞ gives to archaeological excavations solidifies its corporate image by earning public the cultural assets, scientifically illuminating the regional history, supporting and showing respect to environmental values. We will continue our support in the Parion, Troy and Apollon Smintheion excavations in line with the sponsorship contract in the future excavation seasons.

Social:

In Parion excavations, archaeology department students from all universities in Turkey work voluntarily. They enhance the social life of the region by organizing events both at Kemer Village, Gülpınar Area and at the excavation houses.

Each year, all archaeological findings from Parion excavations are introduced at the Archaeology Meetings organized by Çanakkale Çabisak. Neighborhood schools, NGOs and public officials visit Parion and Apollon Smintheion excavation sites, where they are given information about the work directly by the Excavation Office. Hence, we help develop the social consciousness about our cultural values by these activities.

While Parion Antique City and Apollon Smintheion excavations add on to our knowledge about the antique era life by their scientific input, they will support the regional and national economy as a domestic and international tourist destination. The number of internal and external stakeholders will increase every year to reach 500 thousand with the positive impacts of promotional activities.

Troy excavations will take place with the participation of many archaeology students and lecturers from various universities around the world. Hence, our archaeologists will contribute to Turkey's reputation in archaeological world and development of archaeology science in Turkey by both historical findings and whitepapers they write. We plan to share developments of the excavation process to promote our city through various seminars, conferences, and exhibitions.





Junior Archaeologists Project

As İÇDAŞ, we do not only support archaeological excavations but also raise awareness amongst young generations about our cultural heritage. With this notion in mind, we initiated the 'junior archaeologists' project for children of Çanakkale.

Every year, children from 7 to 17 join the excavations in Parion, Apollon Smintheon and Troy historical sites and make

practices. While acquiring information about the historical sites, junior archaeologists search for historical findings in the 'simulation excavation site' prepared for them.

The project was first implemented in 2014 and 250 children joined until the end of 2016. Junior Archaeologists Project won the Effectiveness Award of TISK CSR Awards in 2016.



Mehmet Akif Ersoy Museum

In 2016, the uninhabitable house of our national anthem poet Mehmet Akif Ersoy at Bayramiç was renovated to become a museum. The architectural plans of the house were completed by Bayramiç Municipality in foundation stage. The construction and refurbishing of the house as a museum was undertaken by our company with a 700 thousand TRY budget. While we contributed to the preservation of the republican period history, Bayramiç economy gained a touristic facility.





ENVIRONMENTAL PERFORMANCE

We manage all our operations and investments within the framework of our environmental policy and with the objective of sustainable growth through energy efficiency, environmental pollution prevention, waste reduction, emissions control and responsible consumption of natural resources.

Since the beginning of our establishment, we have been making our investments to protect human and environmental health in all our production processes, from selecting raw materials to the shipment of our products to the clients, both in our steel facilities and power plants.

HIGHLIGHTS

76.6%

Recycled Waste Rate
Değirmencik Facility



%89.7

Recycled Waste Rate
Bekirli Facility



375.8 million m³

Reused Water Amount/Year

Stakeholder View



İÇDAŞ has a visionary structure displaying sensitivity to ecological issues and offering contributions to cultural development of the region. The biodiversity conservation studies, beekeeping and stock farming activities are some of these important contributions supported by İÇDAŞ in Çanakkale.

ÖMER ŞAHİN,
Çanakkale President of Provincial Council



Environmental Management

Değirmencik is the largest steel facility with arc furnace in our country. We have been recycling thousands of tons of scrap steel by melting it using the most up-to-date technologies and turning it into steel products every day. We control scraps in detail in each stage, from selecting raw and auxiliary materials to receiving it in the facility and processing it. (Information about Radiation Safety Management is located at 'Occupational Health and Safety' section of our report.)

We transport our raw materials by marine transport and railway with the purpose of keeping carbon emissions lower per unit produced. Our manufacturing technology and all our investments are in compliance with European Union's publication of Best Available Techniques Reference

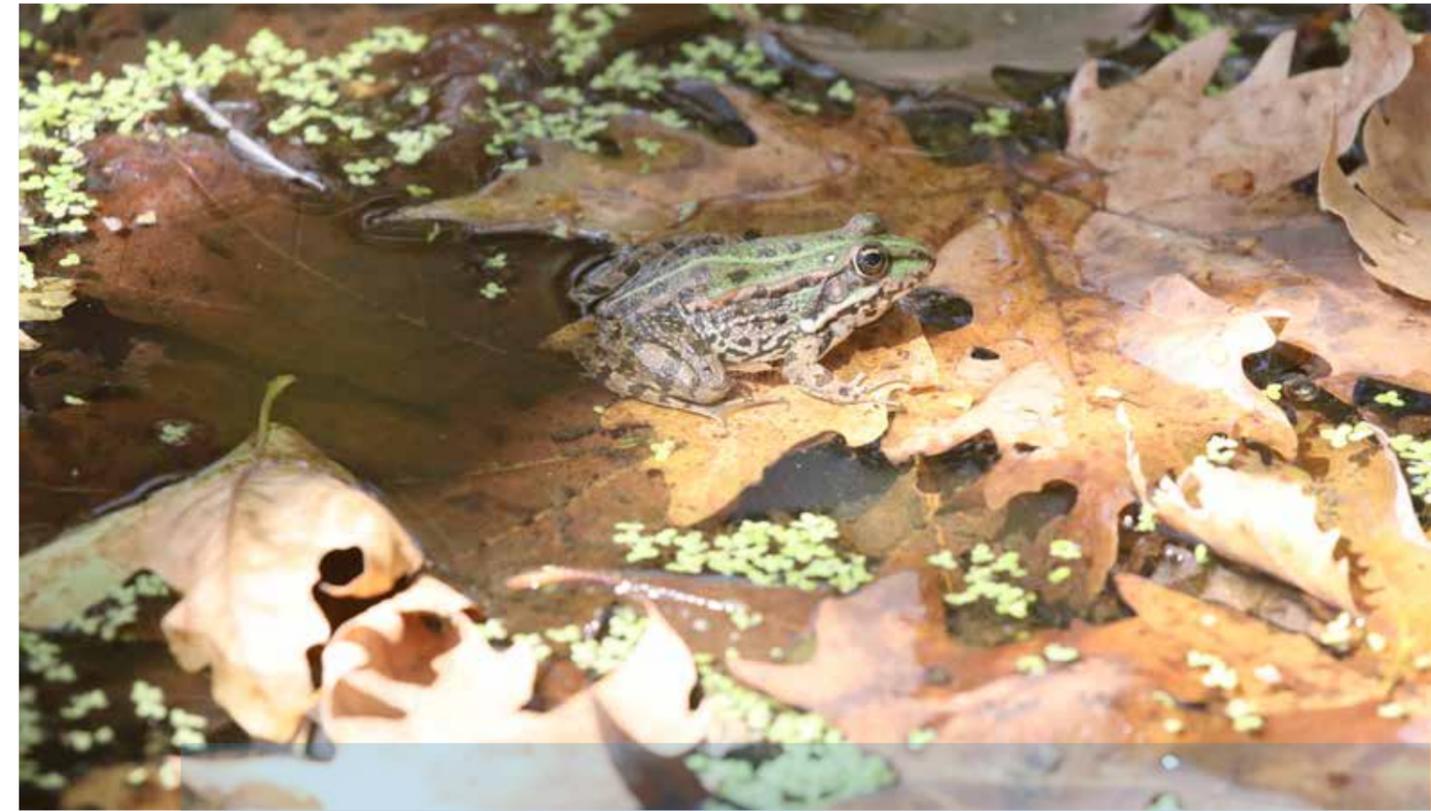
Documents. We use the cleanest and the most environment friendly manufacturing techniques in the world and constantly improve them.

We comply with ISO 50001 Energy Management System principles in practices we undertake for energy saving and efficient use of natural sources. We manage our impacts in steel facilities, power plants, lime facility, shipyard and harbor with ISO 14001 Environment Management System.

In 2016, our total operational costs and investments regarding environmental protection was over 107 million TRY where 67 million TRY was used at Değirmencik and the rest in Bekirli facility.

Operational Costs of Environmental Protection Investments

Emissions and Climate Protection	TRY 95,028,607
Waste Water Management	TRY 5,668,668
Waste Management	TRY 367,387
Preservation of Underground Water and Soil	TRY 996,139
Preservation of Biodiversity	TRY 75,877
Radiation Safety	TRY 18,298
Clean Energy	TRY 3,448,869
Other Environmental Expenses	TRY 1,844,123
Total	TRY 107,447,968



Waste Management

“ 79% of our employees who participated in sustainability survey think that... ”

İÇDAŞ's waste management implementations including waste water, and environmental pollution prevention practices are sufficient.

We regularly analyze waste in our facilities; monitor metal ratios on slag and stack dust and keep records. Every year, we make improvements after comparing per-unit waste we produce with the norms of the EU Best Available Techniques Reference Document.

The most important topic in waste management is the process waste. The process wastes in our plant are; steel mill slag, dust, rolling mill scales and thermal plant ashes. Waste cooking oil, scrap tires, packaging waste and organic waste are other types of waste from our facility.

Our primary goal in waste management is to recycle waste. We comply with the regulations and collect all waste separately, including the ones from ships that call at our port, and we either send them to be accredited recycling facilities or dispose of them. In 2014, we disposed 58.4% of our waste by recycling, 6.4% by reusing and 12.2% by recovering methods.

Our Değirmencik Plant is the largest recycling facility in Turkey in terms of capacity since we recycle over 15 thousand tons of scrap steel a day.



Artificial Aggregate Facility Investment and Project to Use Steel Slag on Road Construction



İÇDAŞ is the first and only steel company that produces artificial aggregates from arc slag complying with EU standards in Turkey.

As steel slag is a type of waste that is disposed by landfilling and with the aim to avoid this environmental pollution, İÇDAŞ arc furnace slag is processed into artificial aggregates that comply with the EU Certificate of Conformity (CE Certificate) after being processed in our artificial aggregate facility.

The aim of this project run by Turkish Steel Producers Association (TÇÜD) members, İstanbul Technical University (İTÜ) and General Directorate of Highways (KGM) with a 4.6 million USD budget, is to add the use of steel slag to the technical specifications of KGM and to make it mandatory.

Within this process, İTÜ continued all scientific works, analyzed the technical suitability of steel slag in its labs and prepared various reports. KGM aims to confirm the results in its laboratories and launch the technical specifications in 2017. TÇÜD members are financing the work.

This project will provide a permanent and effective solution for the most significant waste problem of our country's largest industrial companies. Slag will be used instead of natural aggregate and so natural lands will not be destroyed. In addition, quarry destruction of road constructions will also be decreased.

Results and Gains

Economic:

Creation of slag landfills will be prevented which will increase the cost of storing and make slag a commodity. The cost of labor and machines to produce natural aggregates will be decreased.

Social:

Prevention of environmental pollution will be positive for the communities.

Environmental:

Both waste storages and use of natural aggregates will decrease.

Corporate:

İÇDAŞ, playing an important role in a project which creates value for the Turkish economy, will enhance its reputation.



Water Management

“ 80% of our employees who participated in sustainability survey think that...”

İÇDAŞ's practices on sustainability of water resources management are sufficient. ”

We have been managing water issue on our İÇDAŞ Değirmencik Integrated Plant under 'Sustainable Water Management Project' with a holistic approach since 2007.

In 2012, Ministry of Development, United Nations Development Program (UNDP) and Turkish Business Council of Sustainable Development (TBCSD) have chosen our 'Sustainable Water Management Project' is one of 'Turkey's 24 Best Practices in Sustainable Development and Green Economy'. We enjoyed

the pride of representing our country at Rio+20 Conference in Brazil.

No fresh water source is affected by our consumption, since we withdraw the water we need for all our processes and for utility purposes from the sea. We meet our water requirement of steel facilities by 99% and of our power plants by 98% from the sea.



Sustainable Water Management Project

One of the most important natural resources used in our plant is 'water'. While water is used for cooling steel and maintaining the required quality standards in steel manufacturing, it is also an indispensable element for cooling machinery and equipment in the facility. In energy generation, water is again one of the most fundamental sources. Energy emerged from combustion turns boiler water into superheated steam and the electrical power is generated after the steam moves the turbine and then the generator through the turbine.

Daily fresh water need of the Değirmencik Integrated Plant is 8,000 m³ at full capacity. This volume of water usage in our production processes increases the environmental significance of water from the topics of both conservation of water resources and energy management. Therefore, we have initiated the İÇDAŞ 'Sustainable Water Management Project' in 2007. We monitored many technical and financial parameters at the stages of effective realization and results evaluation.

Within the scope of this project, we aimed to stop using groundwater, which is a limited fresh water source and start using seawater, which is an unlimited water source to meet all needs at the plant. Additionally, we aimed to generate electricity from the cooling water discharged into the sea and establish a fish farm in the discharged water.

Sea Water Treatment Facility

First of the three parts in this project is to treat seawater to obtain fresh water via reverse osmosis method. With this facility, we aim to treat enough water to meet the daily need of 7,000 m³ fresh water of the increased production amount from a daily need of 3,500 m³ in 2006 and to stop groundwater

usage, by shutting down 32 wells.

Total investment cost of the facility is 3 million 650 thousand USD approximately. We decided to go ahead with this investment although the unit cost of treated water is more than that of wells. We generate 12,000 m³ fresh-water per day at the facility. Besides providing conservation of ground waters with this facility, we ensured the more effective usage of the same sources on agricultural fields. Also as an indirect positive impact, the risk of saltwater intrusion of fresh water is reduced.

Fish Farming in Cooling Water Discharge

The second part of the project is fish farming facility. Our goal is to raise 100 thousand bream and sea bass a year via fish farming in cooling water discharge. Besides pioneering fish farming in cooling water discharge in Turkey, we also obtain the entire water requirement of the facility from cooling water, which is 180 m³/hour. Another important purpose of the project is to show how the impact of cooling water to the ecosystem is sustainable. What makes fish farming in cooling water advantageous is that the temperature of the cooling water can be regulated manually for raising different seasonal fish with no additional investment required for providing water.

Initial investment cost of the facility is 150 thousand USD. Since 2011, we have raised 216,000 breams and 167,000 sea bass at the facility.

Power Generation from Cooling Water Discharge

Third part of the project is, Sea Water HPP (Hydroelectric Power Plant) project. (The details of this project are in the 'Energy Management' section of this report.



Waste Water Management and Water Quality Monitoring



The water used in steel manufacturing is recovered and reused after treatment. And the steam used in energy generation is recovered by condensing. Cooling water is the only wastewater that is produced through our processes. A chemical pollution is not expected since the cooling water from the sea cools the process water without contacting it and then it is discharged back into the sea.

We have 14 domestic wastewater discharge units in different locations and 1 car wash wastewater discharge unit in Değirmencik Facilities and 4 domestic, 2 physical and 1 chemical treatment facilities in Bekirli Plant. We have Environmental Permit and License on Waste Water Discharge for all discharge units. Domestic wastewater dirt is removed by municipality sewage truck. Wastewater originated from car wash is discharged into a unit after a process in a physical treatment facility.

'Real-time Remote Monitoring System' is installed at both of the 2 discharge points Değirmencik and one in Bekirli Facilities since cooling water discharge temperature has to be continuously monitored. Dissolved oxygen, pH, conductivity and flow rates are also monitored besides temperature, and results are sent to Ministry of Environment and Urbanization every five minutes.

We have a wastewater laboratory in our premises that is certified by The Ministry of Environment and Urbanization and accredited by Türkak. İÇDAŞ Environmental Control Laboratory has the world-class technology and equipment to make analysis on all parameters it is licensed to.

Results and Gains

Economic:

We don't impose any impacts on local fishermen and the ecosystem because biodiversity at the sea is not affected since cooling water is discharged in accordance with the standards.

Environmental:

Continuous Waste Water Monitoring Station Project is one of our environmental investments. Cooling water obtained from the sea is discharged in compliance with standards. Therefore, no negative impact on the ecosystem incurs. Using sustainable seawater is an eco-friendlier method than using fresh water that is a scarce resource.

Social:

Environment and ecosystem are topics that affect everyone. This system eliminates any possible negative impacts.

Corporate:

We established one of the first Continuous Waste Water Monitoring Stations in Turkey. Our corporate consciousness is our environmental sensitivity. That is why we allocate vast budgets for environmental impacts and investments and take necessary actions accordingly.





Emission Management

“ 76% of our employees who participated in sustainability survey think that... ”

İÇDAŞ's emission reduction projects and other emission preventive efforts it performs with its environmental consciousness, are satisfying.

One of the most important environmental parameters in our energy and steel manufacturing premises is the emission. The Emission Management is a part of the environmental management at İÇDAŞ. It complies with the local regulations and the EU criteria. All emission points in our premises comply with the national limits and the Best Available Techniques internationally.

Besides the stack emission measurements, we regularly measure and report dust emissions in eight stations established along the borders of the premises on a regular basis since 2006, exceeding the 'minimum two points in every two years' requirement by regulations. The dust and smoke filtering system and bag filters used in the steel manufacturing and lime facility have 99.99% efficiency for the dust particles over one micrometer.

Carbon Emissions Monitoring

In 2010, our steel plant has been the first of its kind to calculate its carbon footprint from steel manufacturing. We have been awarded with the Sustainable Steel Certificate from the British CARES institution in 2011 for our practices in sustainability and calculation of carbon footprint.

With the objective of issuing our own greenhouse gas inventory, our 13 employees have received training from Bureau Veritas in May 2012 on ISO14064-1 on Specification with Guidance at the Organizational Level for Quantification

and Reporting of Greenhouse Gas Emissions and Removals topic.

Bureau Veritas inspected 2011 Greenhouse Gas amount in October 2012, and its approval was certified in December 2012. We have been calculating, reporting and managing greenhouse gas emission according to ISO14064-1 framework which we based our calculations on between 2012 and 2014. Since 2015 we calculate our emissions based on the related regulations.

Calculations According to New Regulation

Facility	GHG Amount (tons CO ₂ e)	
	2015	2016
Değirmencik Integrated	2,299,624	2,317,311
Bekirli	2,556,619	3,478,934

Monitoring Air Quality by Continuous Emission Measurement System (SEÖS)



We completed the system we established in Değirmencik and Bekirli Facilities in accordance with Continuous Emission Management Systems Announcement in January 2014 with a 121 thousand 445 TRY budget. The system infrastructure was built back in 2007 so that funnel emissions could be monitored by the Ministry of Environment and Urbanization. Emission is measured continuously using emission measurement devices on the funnels at the steel and thermal

plants and broadcasted real time through the corporate web site (www.icdas.com.tr) including a camera view of the funnel. We submit the emission measurement results to the Environment and Urbanization Provincial Directorate as daily average values, at the end of each month. We continue managing the system that we initiated voluntarily, as a legal liability.





Energy Management

“ 81% of our employees who participated in sustainability survey think that... ”

İÇDAŞ's energy efficiency investments and studies it undertakes with its environmental sensitivity and consciousness, are satisfying.

Steel sector, which has an intensive energy demand, consumes 6% of the total energy consumption of Turkey and its share among all industrial energy consumption is around 15%. These percentages reveal the environmental essence of energy generation and consumption efficiency is very high. Energy efficiency is in compliance with the security measures of energy generation and consumption. Also, a decrease in the emissions as a result of energy efficiency will have a direct positive impact on climate protection.

Electric power use in steel production takes up 65% of total power consumption of İÇDAŞ as well as all the other facilities with arc furnaces. Turkey significantly relies on fossil fuels in electricity generation.

We at İÇDAŞ, have been applying our action plans towards the preservation of energy and natural resources within the ISO 50001 Energy Management System framework, and improvement measures to yield maximum performance as

well as reducing the electricity and natural gas consumption within the facility, while monitoring our overall performance.

We have been working with internationally known specialist companies on projects about the recovery of waste heat in steel mills and rolling mills. We prefer energy efficient products for our plant's illumination.

Our works on energy efficiency gained us the philosophy of producing the same quality product /service with a less energy consumption and CO₂ emission, and as a result, with less cost. We also help reduce our country's dependency on the imported energy by the saving we make. We have the opportunity to be more competitive by pursuing technological developments, continuously searching for the best practice opportunities and reducing our costs.

Generation of Electricity from Cooling Water Discharge



We started to work on building hydroelectricity turbines over the discharge line of the steel plant 2 and the thermal plant's cooling waters in 2008. We launched the facility in 2009 to generate electricity from seawater. In 2011, we invested 15 million USD in 4 hydro energy power plants (HEPP) with 6 thousand KW-installed capacities.

We use non-contact seawater cooling systems for the cooling water used in our products and machinery at our steel plant and for cooling thermal plant steam. We discharge seawater used in cooling process back in the sea. We spend a total of 110 million kWh of electricity annually for pumping the water up to the Thermal Power Plant at 30 meters from sea level, and the Steel Plant at 50 meters from sea level.

Thanks to HEPP, we save economically, socially and environmentally as a result of recovering 25% of this energy. In 2016, the total energy generated by the four HEPPs was 22.7 million kWh which created 4.65 million TRY of economic value for our company.

Considering that the average power consumption per person is 2,490 kWh/year in Turkey, we generate more energy than what 9 thousand people would consume. And instead of drawing this amount from the national power system, we produce it ourselves accommodating conditions of efficiency and without creating emissions while using it in our processes.

Economic Value of Energy Generated by Renewable Sources and Consumed within the Facilities

Facility Name	2014	2015	2016
Steel Facility (HEPP 4)	TRY 1,586,800	TRY 1,268,322	TRY 1,060,367
Energy Plant (HEPP 1-2-3)	TRY 3,929,600	TRY 3,207,867	TRY 3,587,844
Total	TRY 5,516,400	TRY 4,476,189	TRY 4,648,211





Conservation of Biodiversity

“ 77% of our employees who participated in sustainability survey think that...”

İÇDAŞ's activities on conservation of natural life and biodiversity around its premises are sufficient.

”

Our systematic field operations on monitoring biodiversity started with our biologist tracking and photographing the flora and fauna in and around our facilities. First, we started documenting the species in the forest area around our plant and in the fresh water ecosystems.

We have been continuing tracking studies in the terrestrial, aquatic and marine ecosystems surrounding our plants since 2013. This work continues with regular weekly field visits, since our plants are located in an area that neighbors both marine-coast and forest ecosystems.

Biodiversity work in 2016 continued with marine ecosystem, ornithological observation and wild life monitoring studies. We identified that no endemic species exist in our region.

We conduct İÇDAŞ Biodiversity Project to better know the diversity of flora and fauna in the impact area of our plants, to initiate conservation projects regarding these species and to develop biodiversity in order to make ecosystem stronger.

During these studies, we identify the species of flora and fauna, take pictures of each and log them in flora and fauna inventory. Each year, we prepare İÇDAŞ Biodiversity Report.

With this report, leading the way in our industry, we were deemed worthy of Istanbul Chamber of Industry Environment Friendly Practices Award.

İÇDAŞ Biga WPP Ornithological and Wildlife Observation Study



Wind power plants potentially have negative impacts mostly on birds of passage. In addition, habitat losses that occur during the construction stage pose threat on wildlife. Because İÇDAŞ Biga WPP is on the migration route of birds, Ministry of Forestry and Water Management decided on ornithological and wildlife observation to be handled for 2 years starting with construction works. The objective of the project that is conducted between April 11th, 2015 and May 21th, 2017 with a budget of 262 thousand TRY is to observe the impacts of the plant on bird migration and stop the turbines when necessary during migration since they may pose danger on birds. A biologist employed by İÇDAŞ conducted ornithological observation and reported the results of March 1st - May 31st Spring and August 15th - November 15th Fall migration periods.

The ornithological observation results revealed that the birds were more stable in fall than in spring. A scientific report was

prepared during these wildlife observation and bat impact evaluation studies to identify the bat species that do/do not exist in and around Biga İÇDAŞ WPP site, their population, breeding-sheltering-strolling zones and determine impacts of the project on bat species if any and precautions to take. 9 new bat species were spotted and logged in our list in this study. Besides, otter which was photographed by SAD-AFAG is another mammal to enter our list. In total, 10 new mammal species are added to our list. We listed the categories of these species according to European Red List prepared by IUCN (International Union for Conservation of Nature) in our biodiversity report.

Our objective is to add 5 new species to our list every year, collect detailed data, conduct literature studies to photograph and log 10 new species every year that exist in our region.

Artificial Reef and Supporting Biodiversity Project



With its 671 kilometers long coastline, the Çanakkale Province commands 8% of Turkey's entire coastline. It has two islands with 137 kilometers coastline combined that are very rich in terms of fishing zones; the 62 kilometers long Strait of Dardanelles, which is a major fish migration route, and a section of Gulf of Saros which has an extreme importance in terms of fishing resources. Having one of the major gateways to the international waters to the Aegean Sea makes Çanakkale Province one of the most important fishing centers in Turkey.

There are over a thousand strings fishing boats and around ten seine fishing boats actively operating in the region. Also, around a hundred trawling boats along with seine fishing and string fishing boats in similar numbers each come to Çanakkale waters from Marmara and Black Sea in summer months for deep net fishing.

Taking off with the idea that the artificial reef units that could be formed in these regions would be highly beneficial to the professional and hobbyist fishermen, we signed a protocol with Onsekiz Mart University in June 2013 and kick started the project.

The aim of the project was;

- Supporting the regional fishing industry, including professional, hobbyist, small scale and industrial fishing,
- Contributing to the protection and improvement of marine biodiversity,

- Supporting the increase of their population by providing suitable environments for the marine species in the region,
- Establishing feeding and protection zones for certain species,
- Preventing illegal fishing activities.

Under this protocol, the Faculty of Marine Sciences and Technology carried out dives in and around our harbor and prepared a preliminary documentation of the existing biodiversity. Following this, as part of another project called "Fishing in Çanakkale Will Breathe by Expanding Biodiversity" as prepared by the villages in the area, dives were carried out in 17 different areas in Çanakkale waters, and suitable spots for artificial reef zones were determined.

One location by the village of Değirmencik, and two locations by the village of Bekirli were found to be suitable for artificial reef installation. Following the feasibility report released in March 2014, we decided to go ahead with the Artificial Reef Project. After finalizing the legal permit processes, we planned for the descent of 2 thousand reef clusters into the sea, and pressed the button in October 2014. We allocated 750 thousand TRY to the Project, which we completed in July 2015.

In 2016, the underwater recordings of our divers showed the positive outcomes of our project. As the water got cooler fish and other sea animals approached the reefs and both the number of species and population of these animals increased.



TÜBİTAK MAM Biga Peninsula Environmental Monitoring Project

Upon a suggestion from our Project Environment Managerial Unit, we have targeted to monitor the ecosystem in the area a year in advance before the facility was operational, in order to monitor the effectiveness of our precautions to preserve the environment around our Thermal Plant, the construction of which commenced in 2009, and to present it as a scientific data to our stakeholders.

The project, which a kick started on July 1st, 2010, is one of the biggest environmental monitoring projects in our country in terms of its scope and contents. The scope of the project, which is to continue five more years after the plant is operational, covers all our facilities within 40,000-km² areas and extends its borders from Marmara Sea to the Edremit Bay. We chose to have TÜBİTAK (The Scientific and Technological Research Centre of Turkey) MAM (Marmara Research Centre) run the project for we concluded that the extents of the project were vast, and a government backed body would be objective and reliable in managing it. We finance the project that has 895 thousand TRY investment cost.

Having had TÜBİTAK MAM's numerous specialists on board, we have extended the scope of the project beyond the initial emissions' monitoring, and we also started to monitor quality of air, land, surface fresh water, sea water, underground and rain water, plants, emission and water discharges and noise for enabling a comprehensive ecosystem monitoring.

There are monitoring stations in the area from Marmara Sea coast of Biga peninsula to the slopes of the Kaz Mountain. All samples are collected regularly within 3 or 4 days every month by TÜBİTAK MAM staff by visiting stations. Results of the analysis are reported by TÜBİTAK MAM in 6-month periods and presented to us. We present a copy of these reports to the Ministry of Environment and Urbanization as well.

In 2016, air quality observation model which was prepared 6 years ago, is updated. According to this new model 10 new observation stations are established in Lapseki and Biga. Environmental parameters are monitored on a monthly basis at these stations. This monitoring activity will continue for another 60 months and will end by the end of 2021.



Results and Gains

Environmental:

We will ensure the protection of the ecosystem with this project. By the completion of 19,885 analyses on air, land and water quality at Biga Peninsula, very important data will be collected. This is going to be an extensive study on how environmental parameters in the area's ecology will be emitted with their reasons. The study concerns other parts of the ecosystem in the area such as plants, animals and biotic system besides the local people.

Social:

We monitor and observe the living environment of approximately 500 thousand people and secure that they are not exposed to any environmental damage arising from industrial activities.

The project has the characteristics to be implemented on other industrial facilities by adapting it to the local conditions of the facility. The project helped both TÜBİTAK MAM staff and our technical staff to gain new experiences and know-how.

Economic:

Although the project does not contribute directly to our company financially, we believe we will enjoy important environmental and corporate advantages resulting from the project in the long term.

Corporate:

Monitoring ecosystem by an independent public institution creates trust among stakeholders while displaying our self-esteem.

TURMEPA Marine Lovers Project



We are the local supporter of Turmepa's (Turkish Marine Environment Protection Association) work at Çanakkale Strait within the framework of Sustainable Turkish Straits System Project, which was initiated to keep seas clean, preserve marine biodiversity, increase biodiversity and awareness in the region. The project that started in January 2016 and led by İÇDAŞ Environment Management has a budget of 700 thousand TRY. The projected stakeholder population to be impacted positively by the project is approximately 100,000 people.

Turmepa organized events such as meetings, trainings with stakeholders like fishermen at the region, NGOs, and local administrations. Meetings were held with all the fisheries, local administrators, mayors, district governors, Gestaş, Onsekiz

Mart University and NGOs that are based at Lapseki, Gelibolu, Eceabat and central district, which have coasts by Çanakkale Strait and islands such as Gökçeada and Bozcaada. These stakeholders and teachers got training regarding the project. Coast cleaning events were held at districts.

The plan is to build waste receiving facility in all fishermen shelters by the support of Environment and Urbanization Provincial Directorate in 2017. Thus, boats will not discharge their waste into the sea but rather deliver it to these coastal facilities. The Marine Lovers Project is projected to continue until 2018.

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Agriculture and Livestock Farming Activities



When talking about Biga where our Değirmencik plant is located, agriculture, livestock farming and industry come to minds. Because of the industrial investment flow into the area increased at a rapid pace, the local farmers who dealt with agriculture and livestock had some skeptical views towards the industry. Major motivator behind İÇDAŞ's step to agriculture and livestock farming practices is to show the local people that an industrial development that was implemented correctly would not affect the agriculture and livestock farming negatively.

We manage our activities by our Supervisor of Agriculture and Livestock and his team of engineers, technicians, veterinarians and beekeeper expert staff under various titles as Stock farming (2007) Fish Farming (2008), Apiary (2010), Sheep/Goat Breeding (2011) and Agricultural Practices (2007). We consume 80% of our products within the plant.

Stock Farming, Beekeeping and Sheep/Goat Breeding

Location: Değirmencik – Bekirli Villages / District of Biga
Bred animals: Fish, bee, cow, sheep, chicken, goose, turkey, duck
Products: Fish, comp honey, extracted honey, pollen, frame meat, eggs

External stakeholders whom we either get support from or give support to in order to benefit from the national subsidies and to share technical information:

- Food, Agriculture and Livestock Directorate of Biga District
- Biga Red Meat Association
- Çanakkale Beekeepers' Association

Although they fall out of our main business area, we continue our agricultural and livestock practices for their positive economic, social and environmental impacts with increasing investment amounts each year. Livestock farmers, farmers, agricultural hardware and chemical fertilizer vendors, seed vendors and agriculture laboratories are our principal stakeholders who benefit from our activities.

The most difficult part of developing our activities in these fields was to recruit qualified staff. We overcame this issue with internal trainings. We managed to gain the trust of local people with our open-house policy and welcoming them in our facility.

Animal Husbandry Investments (1,000 TRY)	2011	2012	2013	2014	2015	2016
Stock Farming	450	750	776	1.850	806	4200
Beekeeping	35	40	55	60	40	50
Sheep/Goat Breeding	20	40	85	20	80	150



Agricultural Practices

Location: Değirmencik – Biga
Products: Pepper, tomato, apple, melon, watermelon, cabbage, lettuce, eggplant, molasses, grapes, jam, tomato paste

External stakeholders whom we either get support from or give support to in order to benefit from the national subsidies and to share technical information:

- Food, Agriculture and Livestock Directory of Biga District
- Local and national fertilizer companies

Agricultural Practice Investments (1,000 TRY)	2011	2012	2013	2014	2015	2016
Agriculture	150	250	300	100	100	100

Results and Gains

Economic:

We increased the financial funds into the area by supplying raw material from the local breeders. We introduced exemplary gardens in the area.

Social:

We created employment for local people and earned an exemplary facility in the region.

Environmental:

We have enriched the biodiversity in the area.

Corporate:

We have strengthened our company's reputation in public and government eyes.



PERFORMANCE INDICATORS

Economic Performance Indicators

Economic Value Created & Distributed (TRY 1,000)	2016	
	İÇDAŞ ÇELİK ENERJİ	İÇDAŞ ELEKTRİK ÜRETİM
Economic Value Generated (Net Revenues)	6,733,984,294	1,300,085,395
Economic Value Distributed to Stakeholders		
Operating expenses	5,744,601,849	1,076,260,525
Benefits to employees	249,175,858	45,340,925
Benefits to government	380,116,495	77,547,555
Benefits to providers of capital	0	0
Benefits to community	1,591,048	2,628,867
Economic value retained (profit)	358,499,044	98,307,524

Social Performance Indicators

EMPLOYEES							
Employees by Gender	Unit	2011	2012	2013	2014	2015	2016
Male	Number	4,008	4,495	4,672	4,676	4,502	4,608
	Ratio	97.12%	96.70%	96.45%	97.38%	97.36%	97.37%
Female	Number	119	151	172	126	122	124
	Ratio	2.88%	3.30%	3.55%	2.62%	2.64%	2.63%
TOTAL	Number	4,127	4,646	4,844	4,802	4,624	4,732

EMPLOYEES							
By Employment Type	Unit	2011	2012	2013	2014	2015	2016
White collar female employees	Number	84	88	97	91	92	92
White collar male employees	Number	393	452	513	526	515	522
Blue collar female employees	Number	35	63	75	35	30	32
Blue collar male employees	Number	3,615	4,043	4,159	4,150	3,987	4,086
TOTAL	Number	4,127	4,646	4,844	4,802	4,624	4,732
By Contract Type	Unit	2011	2012	2013	2014	2015	2016
Full-time female employees	Number	119	151	172	126	122	124
Full-time male employees	Number	4,007	4,494	4,671	4,675	4,501	4,608
Part-time female employees	Number	0	0	0	0	0	0
Part-time male employees	Number	1	1	1	1	1	0
TOTAL	Number	4,127	4,646	4,844	4,802	4,624	4,732
By Location	Unit	2011	2012	2013	2014	2015	2016
Istanbul (Office, Ambarlı Port, İkitelli) - Female	Number	71	75	79	69	74	74
Istanbul (Office, Ambarlı Port, İkitelli) - Male	Number	314	320	338	332	304	304
Değirmecik - Female	Number	19	28	44	30	30	35
Değirmecik - Male	Number	2,863	3,167	3,380	3,525	3,451	3,534
Bekirli - Female	Number	29	48	49	27	20	15
Bekirli - Male	Number	751	919	840	698	597	594
Rest of Turkey - Female	Number	0	0	0	0	0	0
Rest of Turkey - Male	Number	80	89	114	121	113	126
Ships - Female	Number	0	0	0	0	0	0
Ships - Male	Number	0	0	0	0	0	50
TOTAL	Number	4,127	4,646	4,844	4,802	4,624	4,732

EMPLOYEES			
By Gender	Unit	2015	2016
Women - New hires	People	28	33
	Ratio	6.0%	5.0%
Women - Dismissals	People	35	31
	Ratio	5.1%	5.8%
Men - New hires	People	442	633
	Ratio	94.0%	95.0%
Men - Dismissals	People	647	504
	Ratio	94.9%	94.2%
TOTAL - New Hires	People	470	666
TOTAL - Dismissals	People	682	535
By Location	Unit	2015	2016
Bekirli - New hires	People	26	55
	Ratio	5.5%	8.3%
Bekirli - Dismissals	People	124	59
	Ratio	18.2%	11.0%
Değirmencik - New hires	People	299	417
	Ratio	63.6%	62.6%
Değirmencik - Dismissals	People	413	310
	Ratio	60.6%	57.9%
Istanbul - New hires	People	42	32
	Ratio	8.9%	4.8%
Istanbul - Dismissals	People	48	34
	Ratio	7.0%	6.4%
Rest of Turkey - New hires	People	3	26
	Ratio	0.6%	3.9%
Rest of Turkey - Dismissals	People	11	10
	Ratio	1.6%	1.9%
Ship staff - New hires	People	100	127
	Ratio	21.3%	19.1%
Ship staff - Dismissals	People	86	122
	Ratio	12.6%	22.8%
By Age	Unit	2015	2016
30 Years and below - New hires	People	249	328
	Ratio	52.98%	49.25%
30 Years and below - Dismissals	People	166	147
	Ratio	24.3%	27.5%
30 - 50 Years - New hires	People	186	288
	Ratio	39.57%	43.24%
30 - 50 Years - Dismissals	People	432	312
	Ratio	63.3%	58.3%
50 Years and above - New hires	People	35	50
	Ratio	7.45%	7.51%
50 Years and above - Dismissals	People	84	76
	Ratio	12.3%	14.2%

ALL TRAININGS							
By Groups of Employees	Unit	2011	2012	2013	2014	2015	2016
All Employees	hours/employee	21.89	18.90	21.89	19.43	22.96	15.93
By Gender	Unit	2011	2012	2013	2014	2015	2016
Male	hours/employee	23.4	13.9	9.7	15.1	20.3	14.1
Female	hours/employee	36.5	15	11	4.6	8.2	5.7

OHS TRAININGS							
By Groups of Employees	Unit	2011	2012	2013	2014	2015	2016
All Employees	hours/employee	13.03	12.19	13.6	15.78	18.22	12.88
By Gender	Unit	2011	2012	2013	2014	2015	2016
Male	hours/employee	13.3	8.6	2.7	14.4	11.6	8.2
Female	hours/employee	18.2	6.5	3.1	3.3	7.1	5

TRAININGS HOURS							
Trainings by Topic	Unit	2011	2012	2013	2014	2015	2016
Health and Safety	employee x hours	36,494	29,025	32,835	38,165	36,858	23,150
Orientation	employee x hours	4,336	8,955	13,576	19,264	22,216	18,968
Vocational	employee x hours	20,036	6,227	5,985	25,217	8,749	18,822
Single Spot	employee x hours	52	633	397	376	8,312	6,167
Information Security	employee x hours	0	0	0	0	4,272	3,402
Quality	employee x hours	3,164	2,697	3,020	4,440	2,152	2,934
Personal Developememployeeet	employee x hours	2,240	10,054	24,792	1,944	1,910	2,025
Environemployeeet	employee x hours	1,296	2,061	1,641	855	348	996
Energy Manageemployeeet Systems	employee x hours	0	0	0	0	56	140
Other	employee x hours	0	0	0	0	0	55
Total	employee x hours	67,618	59,652	82,246	90,261	84,873	76,659

OCCUPATIONAL HEALTH AND SAFETY		2013		2014		2015		2016	
Region: Turkey (İÇDAŞ Employees)	Unit	Female	Male	Female	Male	Female	Male	Female	Male
Injury Rate**	Ratio	23.90	17.08	7.79	16.96	5.85	12.33	0.00	18.15
Occupational Disease Rate	Ratio	0	0	0	0	0	0	0	0
Work-Related Fatalities	Nr/yr	0	0	0	1	0	1	0	1
Lost Day Rate	Ratio	4.77	3.39	1.56	3.14	0.40	3.44	0.00	0.88
Absentee Rate	Ratio	1.80	1.67	2.10	1.56	2.86	1.79	2.01	1.69

Only number of accidents are monitored regarding the subcontractors. Other data is not available.

**Accident Frequency: Number of accidents in one million hours worked

AF=Total number of accidents / (Total number of employees x 300 days x 7.5 hrs.) - (Total number of days of absence x 7.5 hrs.) x 1,000,000

1 Fatal accident=7,500 lost days

All first aid level accidents are included within the accident frequency rate. Fatal accidents are included within the accident frequency rate. Lost days are calculated based on calendar days. Lost day count starts the day after the accident.

Environmental Performance Indicators

ENERGY DATA

Secondary Energy Purchased from Non-Renewable Sources and Consumed within the Facilities

Facility Name	Unit	2011	2012	2013	2014	2015	2016
Steel Facility	kWh	2,143,439,395	2,176,757,065	2,316,760,583	2,156,661,166	1,841,771,647	1,967,507,470
	GJ	7,716,382	7,836,325	8,340,271	7,763,918	6,630,378	7,083,027
Değirmencik Power Plant	kWh	315,244,466	313,784,489	314,889,499	320,517,321	288,378,379	291,395,896
	GJ	1,134,880	1,129,624	1,133,593	1,153,862	1,038,162	1,049,025
Shipyard	kWh	1,243,204	2,075,630	1,864,744	1,635,093	1,881,117	1,556,054
	GJ	4,476	7,472	6,713	5,886	6,772	5,602
Değirmencik Auxiliary Facilities*	kWh	185,123,411	207,669,715	206,265,104	209,881,621	203,547,047	208,638,616
	GJ	666,444	747,611	742,548	755,568	732,769	751,099
Bekirli Power Plant	kWh	9,949,283	217,942,309	247,531,240	303,405,988	249,676,817	397,359,342
	GJ	35,817	784,592	891,112	1,092,262	898,837	1,430,494

* Auxiliary Facilities include all facilities in Değirmencik except for steel, energy and shipyard.

Energy Generated by Renewable Sources and Consumed within the Facilities

Facility Name	Unit	2011	2012	2013	2014	2015	2016
Steel Facilities (HEPP 4)	kWh	4,766,000	6,125,000	7,945,000	7,934,000	6,834,000	5,167,000
	GJ	17,158	22,050	28,602	28,562	24,602	18,601
Power Plant (HEPP1-2-3)	kWh	15,300,800	19,366,000	21,201,000	19,648,000	17,284,700	17,483,000
	GJ	55,083	69,718	76,323	70,733	62,225	62,939

Non-Renewable Other Energy Sources

Facility Name	Year	Fuel Oil (GJ)	Gasoline (GJ)
All Facilities	2011	382,575.0	469.0
	2012	454,031.0	535.0
	2013	427,368.0	463.0
	2014	456,163.0	471.0
	2015	480,395.0	436.0
	2016	492,651.2	500.3

Non-Renewable Direct Energy Sources			
Facility Name	Year	Coal (GJ)	Natural Gas (GJ)
Steel Facilities	2011	3,303,058.0	3,403,887.0
	2012	2,213,921.0	3,422,325.0
	2013	2,993,739.0	3,401,405.0
	2014	2,290,834.0	3,314,688.0
	2015	2,454,380.0	3,407,085.0
	2016	977,662.0	3,841,090.8
Değirmencik Power Plant	2011	34,112,750.0	17,169.0
	2012	30,667,457.0	10,708.0
	2013	30,915,214.0	7,599.0
	2014	28,121,666.0	13,398.0
	2015	25,033,111.0	21,628.0
	2016	27,125,106.0	25,139.6
Değirmencik Auxiliary Facilities	2011	696,268.0	110,278.0
	2012	631,904.0	110,560.0
	2013	598,256.0	100,763.0
	2014	604,964.0	103,784.0
	2015	518,311.0	99,614.0
	2016	547,269.0	107,866.9
Bekirli Power Plant	2011	1,810,989.1	2,713.7
	2012	37,968,954.7	118,059.8
	2013	41,315,310.5	107,899.2
	2014	52,410,451.9	400,932.4
	2015	47,857,372.3	145,666.6
	2016	76,498,358.6	128,170.0

WATER AND WASTE WATER MANAGEMENT DATA

Water Taken from Sea to Produce Fresh Water	Year	m ³ /year
Steel Facilities	2011	1,994,780
	2012	1,821,476
	2013	1,692,197
	2014	2,036,897
	2015	2,182,217
	2016	1,728,000
Değirmencik Power Plant	2011	363,945
	2012	411,461
	2013	586,288
	2014	376,687
	2015	422,047
	2016	552,530
Shipyards and Auxiliary Facilities	2011	281,735
	2012	215,727
	2013	349,778
	2014	399,187
	2015	487,076
	2016	435,861
Bekirli Power Plant	2011	450,500
	2012	3,033,077
	2013	2,372,148
	2014	4,114,103
	2015	2,807,999
	2016	2,767,294

Water Recovered to Be Reused*	Year	m ³ /year
Steel Facilities	2014	355,251,280
	2015	334,933,900
	2016	353,714,625
Shipyards and Auxiliary Facilities	2014	20,592,000
	2015	20,160,000
	2016	21,504,000
Değirmencik Power Plant	2014	51,657
	2015	51,179
	2016	59,187
Bekirli Power Plant	2014	49,500
	2015	50,230
	2016	55,030

*Recovered and reused water is the water that is used either for the same or a different purpose after treatment or used for a different purpose without treatment. An example for this is the reuse of cooling water in steel facilities or using waste water to humidify ash. In the calculation of reused water, each cycle is taken into account.

Total Waste Water Discharge (m ³ /year)	Year	Waste Water Discharge*	Cooling Water Discharge
Değirmencik Integrated Facility	2011	406,975	352,261,924
	2012	406,975	444,695,657
	2013	406,975	442,735,730
	2014	406,975	440,391,196
	2015	406,975	385,245,699
	2016	737,613	469,062,960
Bekirli Power Plant	2011	171,017	45,360,000
	2012	189,430	569,400,000
	2013	183,080	551,880,000
	2014	188,383	790,020,600
	2015	153,447	594,865,320
	2016	132,644	1,023,027,840

*Waste water discharge includes domestic, chemical and physical treatment facility discharges. Wastewater is discharged from four separate locations through a canal to the sea after physical treatment. The amount of water discharge is calculated according to the capacities of the treatment facilities. Since the number of treatment facilities is the same, the differences of wastewater amount between years are insignificant.

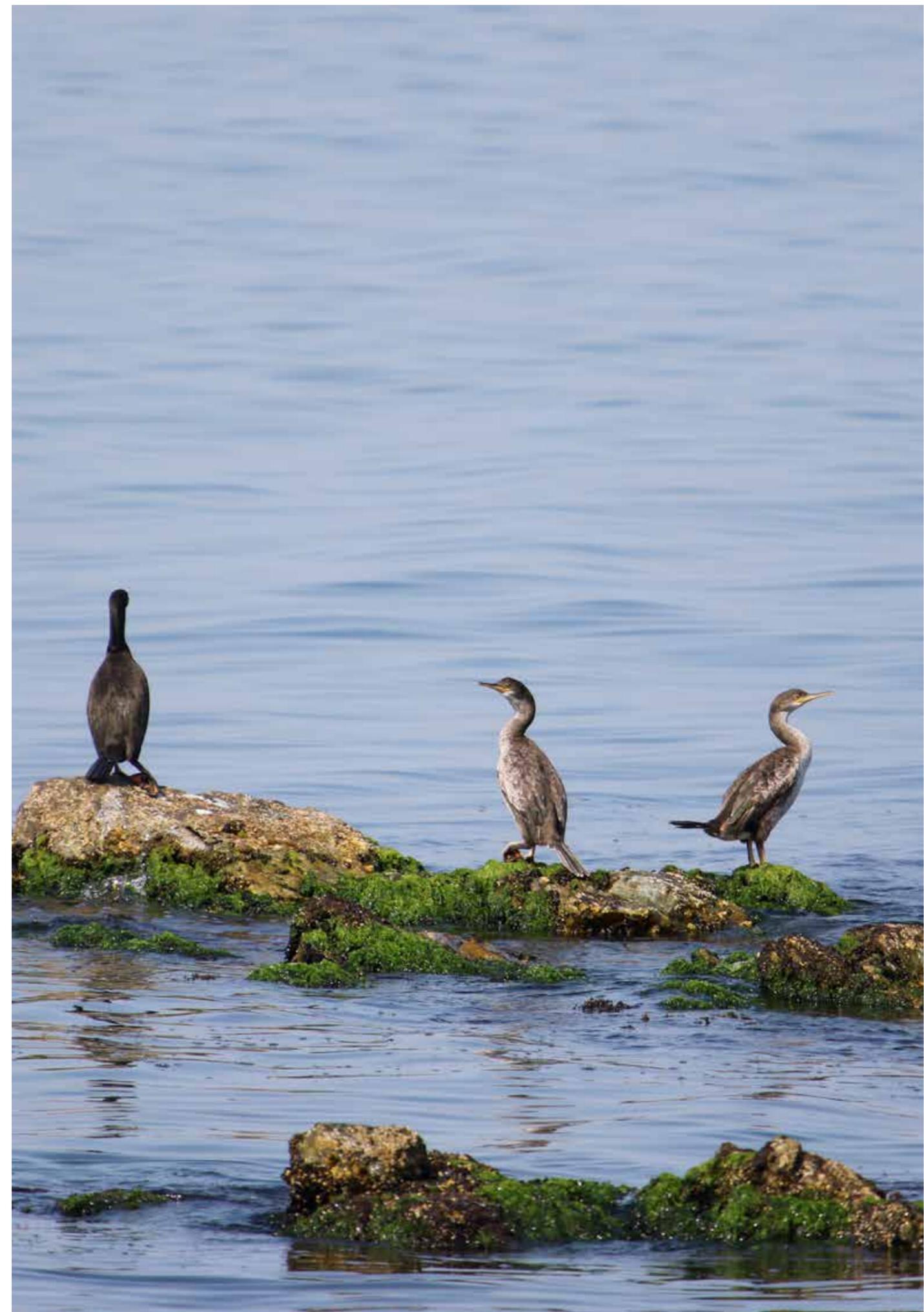
WASTE DATA

Facility Name		2016				
Değirmencik	Unit	Recovered	Ratio	Disposed	Ratio	TOTAL
Hazardous Waste	Tons	55,464	99.9996%	0	0.0004%	55,464
Non-hazardous Waste	Tons	496,906	74.62%	168,984	25.38%	665,890
Total Waste	Tons	552,370	76.57%	168,984	23.43%	721,354
Bekirli	Unit	Recovered	Ratio	Disposed	Ratio	TOTAL
Hazardous Waste	Tons	82.4	99.9297%	0.1	0.0703%	82.5
Non-hazardous Waste	Tons	289,733	89.69%	33,295	10.31%	323,028
Total Waste		289,816	89.714	33,295	10,286	323,110

*The waste which is temporarily stocked in the facility is not taken into account.

Waste Received from Ships

Facility Name		2016				
Değirmencik	Unit	Recovered	Ratio	Disposed	Ratio	TOTAL
Hazardous waste (Bilge water, sludge, waste oil)	m ³ /year	454.1	100%	0	0%	454.1
Non-hazardous waste (Domestic and liquid waste)	m ³ /year	0	0%	727.1	100%	727.1
Bekirli	Unit	Recovered	Ratio	Disposed	Ratio	TOTAL
Hazardous waste (Bilge water, sludge, waste oil)	m ³ /year	79	100%	0	0%	79
Non-hazardous waste (Domestic and liquid waste)	m ³ /year	0	0%	66	100%	66



APPENDICES

Corporate Memberships
Turkish Shipowners' Association
BİSİAD - Biga Industrial Businessmen Association
BSTP - Biga Civil Society Platform
CARES Sustainability Committee
ÇANAKKALESPOR Football Club Association
ÇİB - Turkish Steel Exporters' Association
ÇTSO - Çanakkale Chamber of Industry and Commerce
DTD - Railway Transport Association
DTO - Chamber of Shipping
ENSAR Foundation
EUROFER - The European Steel Association
EÜD - Electricity Producers Association
GAN Turkey - Global Apprenticeships Network
GİSBİR - Turkish Shipbuilders' Association
IREPAS - International Rebar Producers and Exporters Association
IKV - Economic Development Foundation
IAV - Economic Research Foundation
İMMİB - Istanbul Minerals and Metals Exporters' Association
İSO - Istanbul Chamber of Industry
İTO - Istanbul Chamber of Commerce
KOSDER - Coaster Builders and Administrators Association
MESS - Turkish Employers' Association of Metal Industries
MUSİAD - Independent Industrialists' and Businessmen's Association
TÇÜD - Turkish Steel Producers Association
TMD - Turkish Miners Association
TSE - Turkish Standards Institution
TURMEPA - Turkish Marine Environment Protection Association

Publications			
Name	Published at	Prepared by	Date
Importance of Alternative Communication in Disaster and Emergency Management and First Implementation in Turkey in an Industrial Company	8th International OHS Conference	İÇDAŞ OHS Department	May 11, 2016
Employee Centered Risk Management System Modeling	8th International OHS Conference	İÇDAŞ OHS Department	May 08-11, 2016

Integrated Management Systems		
Management System Standard Certifications	Our Facilities	Date
ISO 17025 Laboratory Quality	Environment Control Laboratory, Fatigue Test Laboratory	2012
ISO 14064-1:2009 GHG Emissions	Steel Facilities, Energy Plants, Shipyard, Lime Facility, Harbour	2012
ISO 50001:2011 Energy	Steel Facilities, Energy Plants, Shipyard, Lime Facility, Harbour	2011
ISO 14001:2004 Environment	Steel Facilities, Energy Plants, Shipyard, Lime Facility, Harbour	2005
ISO 18001:2007 Occupational Health and Safety	Steel Facilities, Energy Plants, Shipyard, Lime Facility, Harbour	2005
ISO 9001:2008 Quality	Steel Facilities, Energy Plants, Shipyard, Lime Facility, Harbour	1994
CARES BS 8902:2009 Sustainability	Steel Facilities	2011
CARES BS EN 9001:2008 Quality	Steel Facilities	1998
ISO 14001:2004 Environment	Electricity Generation and Sales	2013
ISO 18001:2007 Occupational Health and Safety	Electricity Generation and Sales	2013
ISO 9001 2008 Quality	Electricity Generation and Sales	2013
ISO 27001 Information Security	İÇDAŞ Çelik Enerji Tersane ve Ulaşım Sanayi A.Ş. (save production units)	2014
Shipyard Facility Security Certificate	Shipyard	2014
CE Certification	Our Facilities	Date
Fly Ash Production - TS EN 450-1:2006	İÇDAŞ Enerji Üretim ve Yatırım A.Ş.	2012
Aggregates Production - EN 12620:2003 and EN 13242:2002	Havdan Aggregate Facility	2012
Production of Steel Slag Aggregates - EN 13242:2004	Steel Slag (Artificial Aggregate) Facilities	2012
Quality Assurance Declaration of Conformity Ready Mix Concrete Production - TS EN 206 - 1:2002 / A2:2006	Bekirli Ready Mix Concrete Facility	2013
G Certificate of Conformity Ready Mix Concrete Productio - TS EN 206 - 1:2002 / A2:2006	Bekirli Ready Mix Concrete Facility	2013
Production of Steel Slag Aggregates - EN 13043:2004	Steel Slag (Artificial Aggregate) Facilities	2015
Production of Steel Slag Aggregates - EN 12620:2003	Steel Slag (Artificial Aggregate) Facilities	2015

IFC Sustainability Standards Conformity Index

Performance standards prepared by International Finance Corporation (IFC) to guide enterprises in managing all environmental-social impacts using Environment and Social Management System throughout the life of the project from planning to operation.

IFC Standards Conformity Index of our strategic topics that we explained in our report in detail is depicted in the following table.

IFC	Performance Standards	Place In Our Report	Page
		Environmental Performance	
PS 1	Assessment and Management of Environmental and Social Risks and Impacts	Emission Management	63
PS 3	Resource Efficiency and Pollution Prevention	Energy Management	65
		Waste Management	58
PS 6	Biodiversity Conservation and Sustainable Management of Living Natural Resources	Water Management	60
		Biodiversity Management	67
		Social Performance	
PS 2	Labour and Working Conditions	Occupational Health and Safety	37
PS 4	Community Health, Safety, and Security	Emission Management	63
PS 5	Land Acquisition and Involuntary Resettlement	Community Engagement	43
PS 7	Indigenous Peoples		
PS 8	Cultural Heritage	Social Investments	45

UN Global Compact Principles

İÇDAŞ is a member of Global Compact. UN Global Compact is an innovative social responsibility approach that suggests universal principles to competitive business world for establishing a mutual sustainability culture. Its vision is 'Sustainable and Comprehensive Global Economy'. Participating in Global Compact is completely voluntary.

Those enterprises that participate in the compact increase their profits in the midterm while in the short term; they enjoy the prestige and pride of having fulfilled their social responsibilities consciously.

Human Rights

Principle 1– Businesses should support and respect the protection of internationally proclaimed human rights.

Principle 2– Businesses should make sure that they are not complicit in human rights abuses.

Labour

Principle 3– Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.

Principle 4– Businesses should uphold the elimination of all forms of forced and compulsory labour.

Principle 5– Businesses should uphold the effective abolition of child labour.

Principle 6– Businesses should uphold the elimination of discrimination in respect of employment and occupation.

Environment

Principle 7– Businesses should support a precautionary approach to environmental challenges.

Principle 8– Businesses should undertake initiatives to promote greater environmental responsibility.

Principle 9 – Businesses should encourage the development and diffusion of environmentally friendly technologies.

Anti-Corruption

Principle 10– Businesses should work against corruption in all its forms, including extortion and bribery.

GRI 102: GENERAL DISCLOSURES 2016		Location of Disclosure
	Organizational Profile	
102-1	Name of the organization	Back Cover
102-2	Activities, brands, products, and services	Pages 7 - 8
102-3	Location of headquarters	Back Cover
102-4	Location of operations	Çanakkale, Turkey
102-5	Ownership and legal form	Corporation
102-6	Markets served	Page 11
102-7	Scale of the organization	Pages 9 - 10
102-8	Information on employees and other workers	Pages 74 - 76
102-9	Supply chain	Page 33
102-10	Significant changes to the organization and its supply chain	Page 33
102-11	Precautionary principle	Page 57
102-12	External initiatives	UNGC
102-13	Membership of associations	Page 82
	Strategy	
102-14	Statement from senior decision-maker	Pages 5 - 6
102-15	Key impacts, risks, and opportunities	Pages 21 - 26
	Ethics and Integrity	
102-16	Values, principles, standards, and norms of behavior	Pages 15 - 16
102-17	Mechanisms for advice and concerns about ethics	Page 15
	Governance	
102-18	Governance structure	Page 15
	Stakeholder Engagement	
102-40	List of stakeholder groups	Page 17
102-41	Collective bargaining agreements	Page 42
102-42	Identifying and selecting stakeholders	Page 17
102-43	Approach to stakeholder engagement	Page 18
102-44	Key topics and concerns raised	Page 18
	Reporting Practice	
102-45	Entities included in the consolidated financial statements	Back Cover
102-46	Defining report content and topic boundaries	Page 22
102-47	List of material topics	Page 21
102-48	Restatements of information	Continuing Projects
102-49	Changes in reporting	No changes
102-50	Reporting period	Page 3
102-51	Date of most recent report	2015
102-52	Reporting cycle	Page 3
102-53	Contact point for questions regarding the report	Back Cover
102-54	Claims of reporting in accordance with the GRI Standards	Page 3
102-55	GRI Content index	Pages 86 - 87
102-56	External verification	None

GRI 103 BOUNDARIES & MANAGEMENT APPROACHES OF MATERIAL TOPICS 2016		Location of Disclosure
GRI 103	103-1 Explanation of the material topics and their boundaries	Page 22
	103-2 The management approach and its components	Listed below
GRI 200	GRI 200 ECONOMIC STANDARDS SERIES	
	GRI 201 Economic Performance, 2016	Pages 29 - 30
GRI 300	GRI 300 ENVIRONMENTAL STANDARDS SERIES	
	GRI 302 Energy, 2016	Page 65
	GRI 303 Water, 2016	Page 60
	GRI 304 Biodiversity, 2016	Page 67
	GRI 305 Emissions, 2016	Page 63
	GRI 306 Effluents and Waste, 2016	Page 58
GRI 400	GRI 400 SOCIAL STANDARDS SERIES	
	GRI 401 Employment, 2016	Pages 39 - 41
	GRI 403 Occupational Health and Safety, 2016	Pages 37 - 38
	GRI 404 Training and Education, 2016	Page 41
	GRI 413 Local Communities, 2016	Pages 43 - 45

GRI 200-300-400 TOPIC SPECIFIC STANDARDS 2016		Location of Disclosure
	GRI 200 ECONOMIC STANDARDS SERIES	
	GRI 201 Economic Performance, 2016	
201-1	Direct economic value generated and distributed	Page 74
201-4	Financial assistance received from government	Page 74
	GRI 300 ENVIRONMENTAL STANDARDS SERIES	
	GRI 302 Energy, 2016	
302-1	Energy consumption within the organization	Pages 78 - 79
	GRI 303 Water, 2016	
303-1	Water withdrawal by source	Page 80
303-3	Water recycled and reused	Page 80
	GRI 304 Biodiversity, 2016	
304-1	Operational sites adjacent to protected areas and areas of high biodiversity value	Page 67
	GRI 305 Emissions, 2016	
305-1	Direct (Scope 1) GHG emissions	Page 64
	GRI 306 Effluents and Waste, 2016	
306-2	Waste by type and disposal method	Page 81
	GRI 400 SOCIAL STANDARDS SERIES	
	GRI 401 Employment, 2016	
401-1	New employee hires and employee turnover	Page 76
401-2	Benefits provided to full-time employees that are not provided to part-time employees	Pages 39 - 40
	GRI 403 Occupational Health and Safety, 2016	
403-1	Workers representation in formal joint management-worker health and safety committees	Pages 37 - 38
403-2	Types and rates of injury, occupational diseases, lost days, and absenteeism, fatalities	Page 77
	GRI 404 Training and Education, 2016	
404-1	Average hours of training per year per employee	Page 77
	GRI 413 Local Communities, 2016	
413-1	Operations with local community engagement, impact assessments, and development programs	Pages 43 - 45



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