

**PORT ENVIRONMENTAL REVIEW SYSTEM (PERS)  
PORT OF BODRUM**



**SEPTEMBER, 2019**



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## Appendix

Appendix 1 Environmental Report

## 1. PORT PROFILE

### 1.1. About PERS

The Port Environmental Review System (PERS) is an initiative for the EcoPorts certification for the European Sea Ports Organization (ESPO) member ports. The PERS methodology is one of the tools of ESPO to demonstrate that the port meets various requirements related to the environmental protection and sustainable development.

The PERS certificate is valid for a period of two years. At the end of this period, the sustainability and environmental protection of the port is reviewed. The Port of Bodrum has decided to cooperate with ECOSLC in November, 2018.

The main environmental objectives in Environmental Code of Practice (2004) which ESPO should aim to achieve are:

- To contribute to the development of a sustainable logistics chain.
- To encourage wide consultation, dialogue and cooperation between port administrations and the relevant stakeholders at local level (port users, public, NGOs)
- To generate new knowledge and technology and to develop sustainable techniques which combine environmental effectiveness and cost efficiency.
- To enhance cooperation between port administrations in the field of environment and facilitate the exchange of experiences and implementation of best practices on environmental issues to avoid unnecessary duplication and enable port administrations to share the costs of environmental solutions.
- To increase awareness of environmental concerns and to integrate sustainable development into ports' policies, by encouraging port administrations to prepare a publicly available environmental policy setting out their strategies and methods of achieving them.
- To encourage port administrations to conduct appropriate environmental impact assessments for port projects and appropriate strategic environmental impact assessments for port development plans to assess, at an early stage.
- To stimulate continual improvement in the port environment and its port environmental management by promoting the use of Environmental Management Information System tools.
- To promote monitoring, based on environmental performance indicators, in order to measure objectively identifiable progress in environmental port practices.
- To promote environmental reporting as a means of communicating environmentally good behaviour to stakeholders.
- To intensify the communication about environmental improvements achieved by various ports.

### 1.2. Bodrum Cruise Port

#### 1.2.1. General Information

Situated on an exquisite peninsula, Bodrum is undoubtedly one of the most attractive coastal cities in Turkey, appealing to both Turkish and foreign holiday makers. Bodrum is located on the Aegean coast of Turkey, and in addition to its luxury tourist destinations, it boasts several major historical sites, including the Castle of Saint Peter, the Museum of Underwater Archaeology, King Mausolos' Mausoleum (one of the seven wonders of the ancient world), and the oldest Roman amphitheatre in Anatolia. The surrounding area is also known for its nightlife, beaches, natural beauties and ancient history. The port is located a brief stroll from the City Center and 36 km from Milas International Airport.

In June 2008, the operation rights of Bodrum Cruise Port, which includes pilotage, tugging, mooring, sheltering, security, fresh water supply, waste collection, passenger terminal management, and provision of diving and bunkering services to the cruise ships and ferries visiting the port was transferred to Global Ports Holding.

Bodrum Cruise Port features a finger pier, which can accommodate two large-sized, or four smaller cruise ships at a time. The world's largest cruise ships, can berth easily thanks to its pier extension in 2011. Apart from the cruise pier, the port boasts quays that can harbour up to 30 mega-yachts, and has three ferryboat ramps. Bodrum Cruise Port provides full terminal services, marine services and auxiliary services. The state-of-the-art terminal building offers diverse facilities including duty free shopping areas, travel agencies and a restaurant.

Bodrum has been an anchorage port for small ships until 2008. Bodrum Cruise Port has invested heavily in port facilities including construction of a terminal building and a pier. Bodrum Port's pier extension to 350 m was also realised in 2015 with the addition of 2 dolphins. Thus, Bodrum itself has become a brand new contemporary and luxury destination for cruise lines. Bodrum Cruise Port is ISPS compliant and holds ISO 9001-14001-18001 certificates. ISPS certification was renewed in 2019 for another 5 years. In late 2015, the port received Green Port accreditation upon approval of the Maritime Transport and Communications Ministry General Directorate of the Merchant Marine and Turkish Standards Institution. Also the BOT agreement of Bodrum Cruise port was extended by another 49 years in 2018.



Figure 1: Port of Bodrum Berthing Plan

### 1.2.2. Technical Information



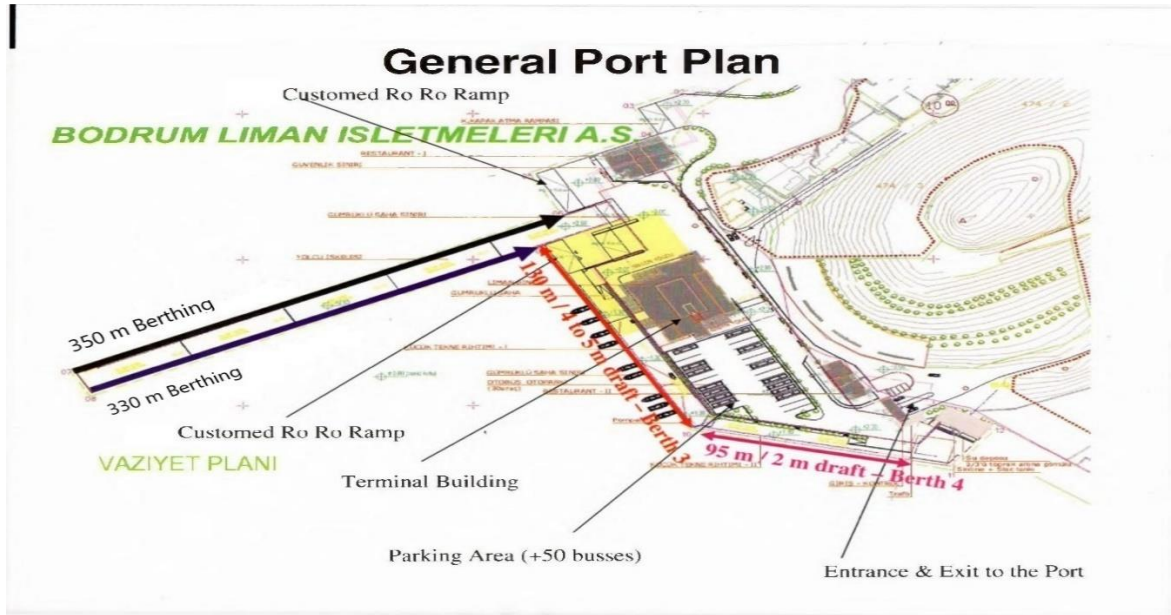


Figure 2: Port of Bodrum Layout

Port Area: 20,206 m<sup>2</sup>

Terminal Building: 1,880 m<sup>2</sup>

Bus Parking Area: 2,300 m<sup>2</sup>

Parking Area: 30 busses

Berths: total number of berths: 4

Total berthing line length: 680 m

Marine Equipment: 1 Tug boat, 1 Pilot boat, 1 Service Boat

Vehicles: 1 Garbage Truck with 1 container

### 1.2.3. Statistics

Turkey is adversely affected by the civil war in Syria which is located at the south of Turkey. And respectable number of passengers was decreased in Turkish cruise market in the last 3 years due to the social, political circumstances. However, as of 2019, it is expected that the market share of Turkey will start to grow again.

It is foreseen that Turkey cruise market will reach its high figures by 2023 and break its own records about the number of passengers and cruise ships from there on.

The statistics of ships / ferries and passengers which call to the Port of Bodrum between 2008 and 2018 is given at the tables below. Despite the fluctuations in the number of passengers until 2016, especially in ferry statistics an increasing trend is clearly observed. The same will surely be observed for cruises after 2019.

BODRUM CRUISEPORT FERRY STATISTICS			
	GRT	No of Calls	Total Passengers
2008	2.726	12	2.854
2009	0	23	4.836
2010	76.373	369	67.963
2011	154.393	641	73.136
2012	172.588	684	87.789
2013	145.953	495	88.399
2014	146.125	500	90.142
2015	196.612	587	104.013
2016	165.801	522	68.708
2017	231.185	668	92.287
2018	269.198	744	112.126

BODRUM CRUISEPORT CRUISE STATISTICS			
	GRT	No of Calls	Total Passengers
2008	2.494.814	169	65.501
2009	1.569.820	89	37.726
2010	1.373.890	92	31.691
2011	1.738.531	82	45.914
2012	1.781.271	132	53.480
2013	1.241.366	115	29.063
2014	1.335.897	82	33.407
2015	2.786.754	92	70.042
2016	2.459.582	44	61.267
2017	1.186.530	24	31.641
2018	1.085.261	23	29.158

Table 1: Ferry and Passenger Statistics by years

## 2. POLICY STATEMENT

### 2.1. Integrated Management System Policy

Bodrum Cruise Port is a port operator within the global cruise sector aiming to be one of the leading companies in “Luxury Cruise Tourism” by pursuing a strategy of differentiation in marketing and supplied services.

With this respect, our main targets are:

- To increase market share among the competitor ports in Eastern Mediterranean by continuously developing differentiated services, to appeal to different potential markets, to carry out intensive promotional and marketing efforts for the very attractive territory it resides in,
- To provide continuous training and education in Occupational Health & Safety and Environment in order to increase awareness and qualification of employees and stakeholders,
- To add new and differentiated services to the existing portfolio in line with the needs and requirements of our customers,
- To use quality materials in our infra & superstructures adequate to Occupational Health & Safety and Environment, and to promote recycling of the used materials,
- To closely follow related technological developments in order to continuously increase our performance related to Quality, Occupational Health & Safety and Environment,
- To prevent accidents at work and injuries, occupational diseases and environmental pollution in line with our Management Policy.

Primarily the top management of Bodrum Cruise Port, and also the employees of the port are responsible for the continuous improvement of the system and its performance and to ensure customer satisfaction by maintaining the conformity and sustainability of the Quality, Occupational Health & Safety and Management Systems.

## 2.2. Environmental Policy

### 2.2.1. Introduction and Purpose

The purpose of this Environmental Policy ("Policy") is to explicitly state Global Ports Holding PLC ("GPH PLC" or the "Company"), Global Ports Holding A.S. ("GPH AS") and their respective affiliated company-Bodrum Cruise Port (unless stated otherwise, "Group" or "GPH" covers GPH PLC, GPH AS and Bodrum Cruise Port) approach to environmental awareness and practices.

With this Policy, our Group aims to ensure compliance with environment-related laws and regulations, international regulations, and the legal regulations and ethical principles in the countries where it operates, as well as to determine relevant responsibilities and rules.

### 2.2.2. Scope

The Group expects all its affiliates and joint ventures to act in accordance with this Policy.

This Environmental Policy covers the following individuals and organizations:

- The Group's Board Members,
- The Group's executives and employees,
- The Group's subsidiaries, jointly controlled entities and affiliates including their employees,
- The third-party service provider companies, consultants, lawyers, persons and institutions working for or with the Group, including external auditors, contractors, agencies and similar parties.

### 2.2.3. Responsibilities

#### 2.2.3.1 Board of Directors

The Board of Directors is responsible for approving the Policy, along with supervising the determining and operating notifications, examinations, and enforcement mechanisms for non-compliance with rules and regulations.

#### 2.2.3.2 Senior Management

Senior Management is responsible for implementing the Policy.

Senior Management is also responsible for enforcing and auditing policy-related practices, as well as for taking necessary measures to ensure the compliance of employees and external service providers with this document, and reporting infractions to the Compliance and Internal Auditing Department for inspection.

Senior Management consists of the Chief Executive Officer and other C level officers of the Group as indicated in the organizational chart.

#### 2.2.3.3 Legal Department

The Legal Department evaluates the policy with regard to its relevance and areas requiring improvement, and submits suggestions to Senior Management.

#### 2.2.3.4 Employee

Employees are responsible for:

- Adherence to and compliance with the Group's policies, regulations and procedures,
- Working in compliance with the current legislation,
- Notifying the Compliance and Internal Audit Department in cases where conduct, activities or practices that are in breach of the Policy are encountered.



#### 2.2.3.5 External Service Providers and Joint Ventures

It is mandatory for external service providers, suppliers and joint ventures to ensure compliance with the principles set out in this Environmental Policy, and other relevant regulations.

#### 2.2.3.6 Corporate Communications Department

This Policy is published on the corporate portal. The Corporate Communications Department is responsible for its publication.

#### 2.2.3.7 Human Resources Department

The Policy set out herein is distributed to the entire staff; the Human Resources Department is responsible for its distribution.

#### 2.2.3.8 Investor Relations Department

The Investor Relations Department is responsible under this policy for the organization of the Group's relationships with institutional investors, portfolio managers, analysts, and current and potential shareholders; and undertaking public disclosure practices for all interested parties in a simultaneous and transparent manner. The Investor Relations Department is responsible for publishing this Policy on the Company website.

### 2.2.4. Monitoring, Audit and Improvement Process

The Policy is regularly reviewed by the Remuneration Committee while the practices are continuously monitored, and relevant assessments are reported annually. The Policy was adopted for Bodrum Cruise Port on June 2019.

### 2.2.5. Environmental Policy Statement

***Bodrum Cruise Port is deeply aware of the importance of fulfilling corporate social responsibilities associated with environmental sustainability and development when pursuing corporate growth. Therefore, it follows the environmental policies in formulating its own environmental policy statements. By making these statements, the Bodrum Cruise Port promises to comply with environment-related regulations and supervisory standards, as well as propose improvement goals and action plans for major port-related environmental concerns and topics.***

***Our Environmental objectives are as follow:***

- **Support the development of a sustainable transport network, recognising that the Port is essential node of transports.**
- **Reduce the pressure we put on environmental resources.**
- **Reduce our carbon footprint by at least 5% per year as we work towards a carbon neutral port.**
- **Prevent pollution and improve local air quality.**
- **Adapt to climate change.**
- **Preserve and promote the local character and historic assets of the port.**
- **Contribute to global improvements by contributing to the UN Sustainable Development Goals.**

**In order to achieve our Environmental objectives, to the best of our ability we will:**

- **Abides by the principles and guidance of the European Bank of Reconstruction and Development with respect to Environmental and Social Policy, as published from time to time, insofar as the same are compatible with the operations of a public listed company.**

- Carries out its port activities in accordance with the environmental legislations and international standards.
- Is committed to managing and reducing the environmental impacts of its business activities and continuously improving its environmental performance. Comply with all applicable legal and other requirements to which the Port subscribes as a minimum standard, including the principles of the European Sea Port Organisation Green Guide, the Port Marine Safety Code and the International Safety Management Code for marine operations.
- Aims to reduce its greenhouse gas emissions to minimize its impact on climate change.
- Carries out activities to reduce its air emissions.
- Aims to lower the water consumption and use of natural resources while using them in the most efficient way in all its operations. The Port treats and discharges water emissions (wastewater) in accordance with legal obligations.
- Conducts activities to assess, reduce and recycle waste resulting from our activities at the source, and dispose of them as required by relevant legislation.
- Conducts activities to reduce energy use and increase energy efficiency in all stages of its operations.
- Give due consideration to the environment and applicable sustainable development goals and the needs of our customers at all stages of the organisation's planning and decision-making process taking into account whole life costs where possible.
- Is aware of the importance of stakeholders, adopts the principle of informing all stakeholders of our environmental policy, approach and performance through reports and announcements. The Bodrum Cruise Port organizes training to raise awareness among our employees and suppliers.
- Monitors and audits our environmental performance through the Environmental Management System. The Port continuously monitoring operations, identify areas for improvement, and set targets.
- Ensures stakeholder participation, by consistently enhancing its environmental performance through feedback shared at annual meetings or current communication channels regarding environmental policy and activities.
- Engage effectively with staff and interested parties, including port partners, contractors and suppliers and the wider community to create cooperation in maintaining, reviewing and improving Environmental performance across the Port.
- Works in accordance with best practices in the industries in which the Global Ports Holding operates.
- Create clear and easily understandable Environmental policies and procedures.
- Demonstrate leadership to inspire good environmental practices and deliver improvements.
- Create a culture that is environmentally and socially aware and responsible and seeks to deliver continual improvement in the environmental performance of the organisation.
- Ensure that all employees are trained, informed and competent with appropriate levels of supervision.
- Ensure that all structures, ships, equipment, materials, substances and services are purchased/ designed to meet or exceed relevant quality and safety standards and to

improve the sustainability of the operation, taking into account the full life cycle of the product, and are maintained to ensure high levels of environmental performance and service delivery.

- Maintain a high level of preparedness to cope with any incident in the Port liable to cause harm.
- Identify and review incidents and near misses, customer complaints, non-conformances, opportunities, best practice, times when things have gone right, new and emerging technology and other high performing businesses to apply and share learning.
- Provide suitable facilities and arrangements for staff welfare.
- Provide suitable resource and expert advice to implement this policy.
- Monitor, review, benchmark and audit the environment management system on a periodic basis.
- Communicate externally about our significant environmental aspects and impacts and environmental performance through the annual Corporate Social Responsibility (CSR) report and the Port of Dover website.

Port Manager is responsible for ensuring compliance with, and audit of this policy.

Environmental performance will be reviewed on a monthly basis and this policy annually.

Environmental objectives are integrated into the department plans of the port. The Head of Department is responsible for the delivery of these objectives.

Certain named management appointees have other specific delegated environmental responsibilities as detailed within the documentation of the management system.

All staff are responsible for complying with relevant environmental protocols and actively engaging in improving delivery of service and the safety and sustainability of the Ports that are in control for all.

This statement along with the arrangements and procedures associated with it are available to all staff via the Intranet. This statement is also publicly available on the website.

Signed: Aziz GUNGOR  
Regional Director-East Med Ports



**Date: 03/06/2019**  
**Approved by the Board on 15/06/2019**

## 2.3. Mission and Values

### 2.3.1. Mission

- **Best Operating Model:** Create the best operating model for the port and continuously improve
- **Best Partner/Service Provider:** Be the best partner to cruise lines, firms, B2B partners, etc.
- **Best Customer Experience:** Provide the best customer experience, both in port and on land
- **Best Expansion Capabilities:** Achieve the best M&A and induction capability in the sector, and the best value creation program for the public

### 2.3.2. Values

- **Leadership and Professionalism:** Clear direction, fairness, motivation, inclusive leadership, cultivating a high-performance environment
- **Teamwork and Collaboration:** Learning culture, pushing each other for the better, focus on the real prize
- **Getting it done:** Execution, resourcefulness, taking initiative, corporate entrepreneurship, ownership
- **Integrity:** Honesty, transparency, open communication

## 3. ENVIRONMENTAL ASPECTS AND LEGAL REQUIREMENTS

The Port's environmental aspects and risks are mainly focused around natural resource, water, energy consumption, emissions, air and water pollution, natural disasters, handling of hazardous waste and effluents and impacts on marine ecosystems due to noise and vibration. The Company responds these aspects and risks in a systematic and proactive manner in line with its environmental management systems.

To foster environmental sustainability, the port manages environmental matters in line with laws and regulations where the port operates, international environmental standards and the port's Environmental Policy. The top management supervises determining and operating notifications, examinations, and enforcement mechanisms for non-compliance with rules and regulations regarding the Environmental Policy.

Environmental aspect is an element of the port's activities or services that interacts or can interact with the environment. An environmental aspect that can cause a significant environmental aspect is the one that has or can have one or more significant environmental impact(s).

### 3.1. Environmental Regulations

Vessels visiting the Ports are regulated by international conventions and norms, such as the *International Convention for the Prevention of Pollution from Ships (MARPOL73/78)*, *London Dumping Convention* and the *International Convention on the Control of Harmful Anti-Fouling Systems to Ships*.

Activities at the Ports is largely governed by domestic regulations. GLOBAL PORTS hold a range of approvals and licences under environmental legislation, and these set a range of requirements, including reporting to regulators such as Ministry of Environment and Urbanization.

As described above, legal and other requirements are considered when assessing risk and when setting actions to manage risk. A series of monitoring programs are in place to ensure compliance with legislative requirements.

Bodrum Cruise Port have commitment to meeting relevant environmental legislation and regulations (as described in the Environmental Policy) and meeting other voluntary or contractual environmental obligations to which it subscribes, including the requirements of the Lease between Bodrum Cruise Port and related State Government.

Bodrum Cruise Port has set out the procedure for identifying and tracking its environmental obligations in [EGE-PRS007 Yasal İşlemler Prosedürü](#) (Legal and other requirements Procedure).

Bodrum Cruise Port track legal requirements within environmental legislation through a sophisticated database. This [Legal Register](#) is available to all Bodrum Cruise Port employees via management systems documentation. The Legal Register covers Federal legislation and is updated continuously by the law department.

Key domestic&national regulations that are applicable to Bodrum Cruise Port are presented in Table below.

MESLEKİ SAĞLIK & GÜVENLİK VE ÇEVRE İLE İLGİLİ YASAL VE DİĞER ŞARTLAR			
KANUNLAR			
TÜZÜKLER			
YÖNETMELİKLER			
KARARLAR			
TEBLİĞLER			
GENELGELER-YÖNERGELER VE NİZAMNAMELER			
TSE TARAFINDAN KABUL EDİLEN İŞÇİ SAĞLIĞI VE İŞ GÜVENLİĞİ İLE İLGİLİ STANDARTLAR			
ÜLKEMİZİN ONAYLADIĞI ULUSLARARASI SÖZLEŞMELER			
ÜLKEMİZİN ONAYLADIĞI ULUSLARARASI PROTOKOLLER			
A – KANUNLAR			
NO	KANUN ADI	R.G. SAYISI	R.G. TARİHİ
1	Anayasa (İlgili Maddeler)	17863	9/11/1982
2	<a href="#">Çevre Kanunu (İlgili Maddeler)</a>	<a href="#">18132</a>	<a href="#">11/08/1983 26/04/2006</a>
3			
4			
5	Su Ürünleri Kanunu (İlgili Maddeler)	13799 - 25702	04/04/1971 - 16/01/2005
6	<a href="#">Kıyı Kanunu (İlgili Maddeler)</a>	<a href="#">20495</a>	<a href="#">17/04/1990</a>
7	İş Kanunu (İlgili Maddeler)	13943 - 25134	01/09/1971 - 22/05/2003
8	<a href="#">Deniz İş Kanunu (İlgili Maddeler)</a> (Kıdem tazminatı değişik 1.mad 17/10/1980) (kıdem tazminatı değişik 2.mad 10/12/1982)	<a href="#">12586</a>	<a href="#">29/04/1967</a>
9	Sosyal Sigortalar Kanunu ve Genel Sağlık Sigortası Kanunu (İlgili Maddeler)	11766 11779 26200	29,30,31/71964- 01/08/1964 16/06/2006
10	Borçlar Kanunu (İlgili Maddeler)	359	29/04/1926
11	Türk Ceza Kanunu (İlgili Maddeler)	320 25611	13/03/1926 12/10/2004



12	Belediye Kanunu (İlgili Maddeler)	1471 -	14/04/1930 09/07/2004
13	Umumi Hıfzısıhha Kanunu (İlgili Maddeler)	1489	06/05/1930
14	Telsiz Kanunu (İlgili maddeler)	2813	05/04/1983
15	Telsiz kanununda Değişiklik Yapılması Hakkında Kanun	25874	13/07/2005
15	Limanlar Kanunu (kanun No :618)	95	20/04/1925
16	Karasuları Kanunu (Kanun No :2674)	17708 25672	29/05/1982 16/12/2004
17	Denizde Can ve Mal Koruma Hakkında Kanunu (Kanun No :4922)	6333 25166	14/06/1946 12/07/2003
18	Gemi Sağlık Resmi Kanunu (kanun No: 2548)	17510	06/11/1981
19	Türk Ticaret Kanunu (İlgili Maddeler)	9526	04/02/1957
<b>B – TÜZÜKLER</b>			
NO	TÜZÜĞÜN ADI	R.G. SAYISI	R.G. TARİHİ
1	İşçi Sağlığı ve İş Güvenliği Tüzüğü	14453	19/02/1973
2	Parlayıcı, Patlayıcı, Tehlikeli Maddelerle Çalışan İşyerlerinde ve İşlerde Alınacak Tedbirler Hakkında Tüzük	14752	24/12/1973
3	Denizde Çatışmayı Önleme Tüzüğü	16273	29/04/1978
4	Sağlık Kuralları Bakımından Günde Ancak 7,5 Saat veya Daha Az Çalışması Gereken İşler Hakkında Tüzük	Iptal edilmiştir	27/07/1984
5	İş Teftiş Tüzüğü	16788	28/08/1979
6	Hazırlama, Tamamlama ve Temizleme İşleri Tüzüğü	14474	12/03/1973
7	Türk Bayrağı Tüzüğü	18697	17/03/1985
<b>C – YÖNETMELİKLER</b>			
NO	YÖNETMELİĞİN ADI	R.G. SAYISI	R.G. TARİHİ
1	Gayri Sıhhi Müesseselere Ait Yönetmelik	22416	26/09/1995
2	İş Yeri Hekimlerinin Çalışma Şartları İle Görev ve Yetkileri Hakkında Yönetmelik	17037	04/07/1980
3	İşyeri Sağlık Birimleri ve İş Yeri Hekimlerinin Görevleri ile Çalışma Usul ve Esasları Hakkında Yönetmelik	25318	16/12/2003
4	İş Sağlığı ve Güvenliği Yönetmeliği	25311	09/12/2003
5	İşyeri Bina ve Eklentilerinde Alınacak Sağlık ve Güvenlik Önlemlerine İlişkin Yönetmelik	25369	10/02/2004
6	Çalışanların İş Sağlığı ve Güvenliği Eğitimlerinin Usul ve Esasları Hakkında Yönetmelik	25426	07/04/2004
7	Sağlık Kuralları Bakımından Günde Ancak 7,5 Saat veya Daha Az Çalışması Gereken İşler Hakkında Yönetmelik	25434	15/04/2004

8	Güvenlik ve Sağlık İşaretleri Yönetmeliği	25325	23/12/2003
9	Elektrik İç Tesisat Yönetmeliği	18565	04/11/1984
10	Hava Kalitesinin Korunması Yönetmeliği	19269	02/11/1986
11	Su Kirliliği Kontrolü Yönetmeliği	25687	31/12/2004
12	Gürültü Yönetmeliği		23/12/2003
13	Katı Atıkların Kontrolü Yönetmeliği	20814	14/03/1991
14	Katı Atıkların Kontrolü Yönetmeliğinde Değişiklik Yapılması Hakkında Yönetmelik	24736	25/04/2002
15	Tehlikeli Kimyasallar Yönetmeliği	21634	11/07/1993
16	Tıbbi Atıkların Kontrolü Yönetmeliği	21586	
17	Tehlikeli Atıkların Kontrolü Yönetmeliği	22387	27/08/1995
18	Radyasyon Güvenliği Yönetmeliği	23999	24/03/2000
19	Gemilerden Atık Alınması ve Atıkların Kontrolü Yönetmeliği	25682	26/12/2004
20	Çevresel Etki Değerlendirmesi Yönetmeliği	23028	23/06/1997
21	Su Ürünleri Yönetmeliği	22223	10/03/1995
22	Kıyı Kanunu'nun Uygulanmasına Dair Yönetmelik	20594	03/08/1990
24	Kıyı Kanunu'nun Uygulanmasına Dair Yönetmelikte Değişiklik yapılması hakkında yönetmelik	25418	30/03/2004
25	Toprak Kirliliği Kontrol Yönetmeliği	24609	10/12/2001
26	Türk Arama ve Kurtarma Yönetmeliği	24611	12/12/2001
27	Kılavuzluk ve Römorkörcülük Hizmetleri Teşkilatları Yönetmeliği	24672	15/02/2002
28	Kılavuz Kaptan Yeterlikleri Hakkında Yönetmelik	23217	31/12/1997
29	Kişisel Koruyucu Donanımların İşyerilende Kullanılması Hakkında Yönetmelik	25370	11/02/2004
30	İş Ekipmanlarının Kullanımında Sağlık Ve Güvenlik Şartları Yönetmeliği	25370	11/02/2004
31	İlk Yardım yönetmeliği	24762	22/05/2002
32	İlk Yardım Yönetmelinde Değişiklik Yapılmasına Dair Yönetmelik	25406	18/03/2004
33	Sabotajlara Karşı Koruma Yönetmeliği	20033	28/12/1988
34	Atık pil ve Akümülatörlerin Kontrolü Yönetmeliği	25569	31/08/2004
35	Atık pil ve Akümülatörlerin Kontrolü Yönetmeliğinde Değişiklik Yapılmasına Dair Yönetmelik	25744	03/03/2005
36	Kişisel Koruyucu Donanım Yönetmeliği	25368	09/02/2004
37	Ekranlı Araçlarla çalışmalarda Sağlık ve Güvenlik Önlemleri Hakkında Yönetmelik	25325	23/12/2003
38	Su Kirliliği Kontrolü Yönetmeliği	19919	04/09/1988
39	Binaların Yangından Korunması Hakkındaki Yönetmelik	2002/4390	09/06/1958

D – KARARLAR			
NO	KARARIN ADI	R.G. SAYISI	R.G. TARİHİ
1	2872 Sayılı Çevre Kanunu'nun 20, 21 ve 22 Maddelerinde Yer Alan Para Cezalarının Arttırılmasına İlişkin Bakanlar Kurulu Kararı	23420	01/08/1998
E – TEBLİĞLER			
NO	TEBLİĞİN ADI	R.G. SAYISI	R.G. TARİHİ
1	Su Kirliliği Kontrolü Yönetmeliği İdari Usuller Tebliği	20106	12/3/1989
2	Su Kirliliği Kontrolü Yönetmeliği Suda Tehlikeli ve Zararlı Maddeler Tebliği	20106	12/3/1989
3	Su Kirliliği Kontrolü Yönetmeliği Teknik Usuller Dair Tebliği	20748	07/01/1991
4	Motorlu Kara Taşıtlarının Egzoz Emisyonlarının Ölçüm ve Denetlenmesine İlişkin Tebliğ	21383	22/10/1992
5	Çevrenin Korunması Yönünden Kontrol Altında Tutulan Madde ve Atıklara İlişkin Tebliğ	24625	29/12/2001
6	Çevrenin Korunması Yönünden Kontrol Altında Tutulan Madde ve Atıklara İlişkin Tebliğde Değişiklik Yapılmasına Dair tebliğ	24752	11/05/2002
7	Çevrenin Korunması Yönünden Kontrol Altında Tutulan Madde ve Atıklara İlişkin Tebliğde Değişiklik Yapılmasına Hakkında tebliğ	24855	23/08/2002
F – GENELGELER-YÖNERGE VE NİZAMNAMESLER			
NO	GENELGENİN ADI	SAYI	TARİH
1	Katı Atıkların Düzenli Depolanması	B 19 0 ÇKÖ 0 08 00 001/07296	11/08/1992
2	Katı Atıkların Düzenli Depolanması	B 19 0 ÇKÖ 0 08 00 001/ÖKM-332	03/05/1993
3	Katı Atık Depo Alanları	B 19 0 ÇKÖ 0 08 00 001/M-0085	17/05/1993
4	Katı Atık Depo Alanları	B 19 0 ÇKÖ 0 08 00 001/0554-1846	13/03/1995
5	Çöp Geri Kazanım İstasyonları	B 19 0 ÇKÖ 0 04 00 001	04/09/1998
6	Çevre Kirliliği Kontrolü	B 19 0 ÇKÖ 0 00 00 00/116-317	14/01/1999
7	2872 Sayılı Çevre Kanunu'nun uyarınca(20, 21 ve 22 Maddeler)verilecek idari para Cezalarına İlişkin Genelge	25717	25717
7	Katı Nitelikli Atıkların Bertarafında Temiz Teknolojilerin Kullanılması	B 19 0 ÇKÖ 0 08 00 001/871-2194	22/03/1999
8	Entegre Katı Atık Yönetimi	B 19 0 ÇKÖ 0 04 00 001	26/07/1999
9	Gemi Adamları Sağlık Yönergesi	24472	24/07/2001
10	Gemi Sicili nizamnamesi	9526	04/02/1957
11	Hava Kirliliği Kontrolü	B.18.O.ÇYG.0.02.00 .02/5534	26/05/2005
G – TSE TARAFINDAN KABUL EDİLEN İŞÇİ SAĞLIĞI VE İŞ GÜVENLİĞİ İLE İLGİLİ STANDARTLAR			

NO	STANDART NO	STANDART
1	<b>TS 7248</b>	Emniyet ile ilgili renkler ve işaretler
2	<b>TS 3974</b>	İş yerinde Kaza Önlemede Uyarıcı Kartlar-Özellikleri ve Kullanma Alanları
3	<b>TS 2775</b>	Tüm Vücudun Titreşim Etkisi Altında Kalma Durumunun Değerlendirilmesi İçin Kı lavuz

### E – ÜLKEMİZİN ONAYLADIĞI ULUSLARARASI SÖZLEŞMELER

NO	KANUNUN ADI	R.G. SAYISI	R.G. TARİHİ
1	<i>42 Numaralı Milletlerarası Sözleşmeye Katılmaya Dair Kanun</i>	6234	16/02/1946
2	<i>81 Numaralı Milletlerarası Çalışma Sözleşmesinin Onanması Hakkında Kanun</i>	7689	22/12/1950
3	<i>95 Sayılı Milletlerarası Çalışma Sözleşmesinin Tasdikine ve Bu Sözleşmeye Katılmamıza Dair Kanun</i>	10641	28/10/1960
4	<i>94 Sayılı Sözleşmenin Tasdikine ve Bu Sözleşmeye Katılmamıza Dair Kanun</i>	10686	21/12/1960
5	<i>100 Sayılı Milletlerarası Çalışma Sözleşmesinin Onaylanmasının Uygun Bulunduğuna Dair Kanun</i>	12484	22/12/1966
6	<i>119 Sayılı Milletlerarası Çalışma Sözleşmesinin Onaylanmasının Uygun Bulunduğuna Dair Kanun</i>	12611	02/06/1967
7	<i>Sosyal Güvenlik Asgari Normları Hakkındaki Sözleşmenin Onaylanmasının Uygun Bulunduğuna Dair Kanun</i>	13922	10/08/1971
8	<i>127 Sayılı Çalışma Sözleşmesinin Onaylanmasının Uygun Bulunduğuna Dair Kanun</i>	14384	07/12/1972
9	<i>26 Sayılı Çalışma Sözleşmesinin Onaylanmasının Uygun Bulunduğuna Dair Kanun</i>	14583	03/07/1973
10	<i>Avrupa Sosyal Güvenlik Sözleşmesinin Onaylanmasının Uygun Bulunduğuna Dair Kanun</i>	15655	23/07/1976
11	<i>142 Sayılı Uluslararası Çalışma Sözleşmesinin Onaylanmasının Uygun Bulunduğuna Dair Kanun</i>	21433	12/12/1992
12	<i>138 Sayılı Sözleşmenin Onaylanmasının Uygun Bulunduğuna Dair Kanun</i>	22243	27/01/1998
13	<i>159 Sayılı Sözleşmenin Onaylanmasının Uygun Bulunduğuna Dair Kanun</i>	23751	10/07/1999
14	<i>Dünya Kültürel ve Doğal Mirasının Korunmasına Dair Sözleşme</i>	17959	14/02/1983
15	<i>Uzun Menzilli Sınırlarötesi Hava Kirlenmesi Sözleşmesi</i>	17996	23/03/1983
16	<i>Avrupanın Yaban Hayatı ve Yaşama Ortamlarını Koruma Sözleşmesi (Bern Sözleşmesi)</i>	18318	20/02/1984
17	<i>Ozon Tabakasının Korunmasına Dair Sözleşme (Viyana Sözleşmesi)</i>	22155	28/12/1994
18	<i>Tehlikeli Atıkların Sınırlar ötesi Taşınımının ve Berterafının Kontrolüne İlişkin Bazel Sözleşmesi</i>	21935	15/05/1994
19	<i>Avrupa Kültür Anlaşması</i>	9635	17/06/1957

### J – ÜLKEMİZİN ONAYLADIĞI ULUSLARARASI PROTOKOLLER

NO	PROTOKOLÜN ADI	R.G. SAYISI	R.G. TARİHİ
1	<i>Avrupada Hava Kirlenmelerinin Uzun Menzilli Aktarımlarının İzlenmesi ve Değerlendirilmesi İçin İşbirliği Programının (EMEP) Uzun Vadeli Finansmanına Dair 1999 Uzun Menzilli Sınırlarötesi Hava Kirlenmesi Sözleşmesi Protokolü (Cenevre Protokolü)</i>	18820	23/07/1985
2	<i>Ozon Tabakasını İncelten Maddelere Dair Montreal Protokolü</i>	22155	8/12/1994

3	Biyogüvenlik Protokolü	22860	7/12/1996
4	Ozon Tabakasını İncelten Maddelere Dair Montreal Protokolü Değişikliği	22419	9/09/1995

### 3.2. Environmental Aspects Related to Each Division

GLOBAL PORTS identify and prioritises management of environmental impacts associated with activities it undertakes through the GLOBAL PORTS Risk Register as discussed above. ISO 14001 uses terminology to describe the identification of risk (“environmental aspects and impacts”) and this is used in the procedure housed within GLOBAL PORTS’s EMS. For simplicity, the term “environmental risk” is used in this chapter.

GLOBAL PORTS has set out the procedure for developing and updating environmental risk and the process for identifying the issues that are significant within the context of the Port in Procedure **PS008 Çevre Boyut ve Etki Prosesi (Environmental Aspects and Impacts Process)**. The environmental risk assessment process includes consideration of the probability of an event and its consequences, as per *AS/NZS ISO 31000 Risk Management*. Based on likelihood and consequence, the environmental risks are ranked in the register as extreme, high, significant, moderate or low. GLOBAL PORTS’s aspect and impact risk register is provided in the table below.

ÇEVRE ETKİLERİ DEĞERLENDİRME FORMU						
FORMU DOLDURAN	Çevre Ekibi	NCELEME YAPILAN YER			Tüm İletme Sahası	
FORMU ONAYLAYAN	Aziz Güngör					
DOLDURULMA TARİHİ	11-01-2019					
DEĞERLENDİRİLEN DÖNEM ARALIĞI	Ocak- Temmuz					
(A) RİSKİN OLMA SIKLIĞI	(B) RİSKİN ETKİSİ	(C) BOYUTUN YASAL GEREKSİNİMİ				
1= Nadir 2= Düşük İhtimal 3= Muhtemel 4= Yüksek İhtimal 5= Kaçınılmaz	1= önemsiz 2= önemi az 3= önemli 4= çok önemli 5= felakete yol açabilen	1= Yasal bir gereksinimi yok 3= Yasal bir gereksinimi var RİSK ÖNCELİĞİ 1= Önemi Yüksek 2= Orta 3= Önemi Düşük				
ÇEVRE BOYUTU (Nesne-Canlı-Proses)	ETKİLERİN TARFI	OLMA SIKLIĞI PUANI	RİSK ETKİ PUANI	YASAL GEREKSİNİM	RİSK DEREJESİ	RİSK ÖNCEL
		(A)	(B)	(C)	(A)*(B)*(C)	
X-Ray cihazlar <sup>2</sup> ve elektronik aletler	Radyasyon yayması <sup>2</sup> , insan sağlığına tehlikeye düşmesi	1	3	3	9	3
Sintine Atıklar <sup>2</sup>	Denizi kirlenmesi.	2	3	3	18	2
Gürültü	Çevreyi rahatsız etmesi (Ses kirliliği, insan sağlığına)	1	1	3	3	3
Çöp alımı hatalar <sup>2</sup>	Gemilerden çöp alınırken, hatalı manevralar sonucunda, çöpün dökülme riski ile denizin veya çevrenin kirlenmesi.	1	2	3	6	3
Depolama hatalar <sup>2</sup>	Birbirleri ile tehlikeli etkileşime girmeleri sonucu, yangın, patlama, hava kirliliği meydana getirirler.	2	3	3	18	2
Fazla Kâğıt sarfiyat <sup>2</sup>	Çevre kirliliğine ve doğal zenginliklere zarar.	2	1	1	2	3



Kimyasal atıklar	Yazıcılarda kullanılan kartu ların, bo kutuların ve boya kutuların radyasyon ve kimyasal zehirlenme yapabilece i, tehlikeli atıklar	3	3	3	27	1
Aydınlatma	Aydınlatma malzemelerinin atıkların çevre kirlili ine etkisi	3	3	1	9	3
Sıvı ve katı atıklar	Deniz araçlarındaki ve iskele üzerindeki kalıntı ve atıkların çevreyi kirlilemesi.	2	2	3	12	2
Bacalardan çıkan gazlar	Deniz araçlarının bacalarından çıkan gazların havayı kirlilemesi.	3	3	3	27	1
Yakıt sızıntıları	Deniz araçlarına yakıt ikmali yapılırken olu acak sızıntılar sonucu veya meydana gelen kazalar sonucu deniz kirlili inin olu ması.	3	4	3	36	1
Atık ya lar	Deniz kirlili inin olu ması.	2	3	3	18	2
Kimyasal atıklar	Deniz araçlarında ve i letmede kullanılan pil, akü v.s. nin bo ald ında geli i güzel atılması ile çevreyi kirlilemesi	2	3	3	18	2
Temizlik malzemeleri	Kullanılan kalitesiz ve yanlış temizlik malzemelerinin kalıntı bırakması.	2	2	3	12	3
Do al afetler	Sel, deprem, yangın, patlama	3	5	3	45	1
Patlayıcı ve yanıcı maddeler	Ya am mahallerine konulan patlayıcı, yanıcı ve kirlileci maddeler.	2	3	3	18	2

### 3.3. Environmental Performance Indicators

GLOBAL PORTS has identified the following environmental performance indicators that relate to its significant environmental aspects, policy and key environmental objectives:

- Annual number of regulatory non-compliances that are the obligation of GLOBAL PORTS
- Annual environmental incidents arising from GLOBAL PORTS operations
- Annual number of community complaints per annum arising from GLOBAL PORTS operations
- Annual amount of port recyclable waste by recycled type
- Total annual fuel consumption and associated CO<sub>2</sub>e emissions

Significant environmental aspects are determined by applying one or more criteria:

1. Bodrum Cruise Port promotes sustainable development and exercise control over their activities by applying environmental protection policies to their operations.
2. This has been achieved by developing an environmental management system (ISO 14001) that implements management and control methods that prevent or minimize damage to the environment.

The scope of services in Bodrum Cruise Port is limited to cruise ships, ferries and mega yachts. There is no loading or unloading activity for other type of vessels.

### 3.4. Environmental issues in the port operation primarily include the followings:

- Energy management (3.4.1)
- Air emissions (3.4.2)
- Waste management (3.4.3)
- Climate change resilience (3.4.4)
- Noise (3.4.5)

#### 3.4.1. Energy Management

The Port of Bodrum is engaged in environmental and energy efficiency issues. It is appointed as an energy champion with agreed key targets, responsibilities and authority and provide the resources necessary to deal efficiently with the port's energy issues. This is essential to avoid the "when everyone is responsible, often no one is responsible" scenario. It then needs to develop an in depth understanding of the port's present and expected energy consumption. Only then can accurate measurements, comparisons and follow-ups be implemented. As the old adage goes, "you can't manage what you don't measure."

The Port of Bodrum considers an Energy Management which recognizes that proper procedures for measuring and following up results are as important as being able to plan and implement.

The aim of Energy Management is to maximize profits, while minimizing costs and increase the port's competitiveness.

For example, it addresses all aspects such as bringing together employees that affect energy performance. Often such employees are physically and organizationally far apart from those making decisions. A 'top down' communication of energy management commitment as part of the desired organizational culture helps galvanize support.

Another aspect of energy management is to map and analyse energy usage. This provides data to assess measures and decide on goals for energy efficiency that are challenging but still achievable.

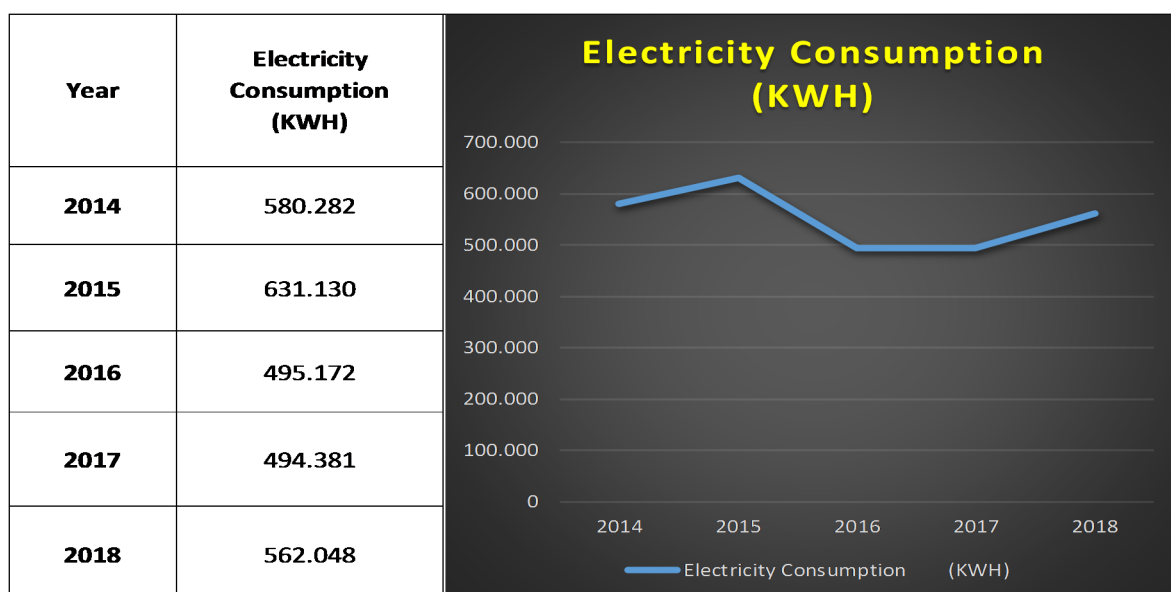


Table 2 Electricity Consumption by years

#### **3.4.1.1. Measuring Energy Consumption in Terminals**

The analysis of energy consumption requires a detailed understanding of the portions of the port's energy bill represented by the different operations. To be able to identify the energy consumption levels and profiles of different operations, an activity-based cost approach is adopted because this approach makes it possible to:

- Determination which area of operation is consuming what amount of energy; and
- Establish a set of detailed indicators.

The following energy activity clusters have been considered here: lighting, buildings and cooling. Time is another important factor when it comes to measuring energy consumption and setting indicators for energy efficiency because of:

- The seasonality;
- Variations in the dwell time of different operation (turn-around or daily passengers) types;
- Ship calling patterns, all which can trigger significant variations and peaks in energy consumption.

Even though the literature on energy consumption in ports is quite limited, some work has been done on the energy consumption of specific types of port operations.

#### **3.4.1.2. Creating a Strategy for Sustainable Energy Modernization**

Ensuring reliability throughout that modernization of the electric system requires a combination of policy, process and technology-driven solutions. The Port of Bodrum works closely with local authorities, regional and agencies to develop a long-term strategy.

1. Sustainable Energy Modernization (SEM)
  - SEM Evaluation
  - SEM Plan
2. Profitable sustainability
  - Economic Factors: CAPEX / OPEX
  - Political Factors
  - Environmental Factors
  - Social Factors

#### **3.4.2. Air Emissions**

Air emissions are generated from land- and sea-based sources during port and terminal activities. During the construction phase, land-based activities may result in combustion emissions from the use of vehicles, equipment, and engines (such as trucks, excavators, barge-moving tugs, etc.) to undertake dredging, excavating, paving, material transport, and building construction activities.

During operations of a cruise port, combustion exhaust emissions result mainly from diesel engines used for the propulsion of cruise ships, and ship-based auxiliary engines and boilers for power generation. In addition, combustion exhaust emissions are generated from land-based activities involving the use of vehicles.

Other sources of air emissions include volatile organic compound (VOC) emissions from waste oil storage tanks and waste transfer activities, in addition to dust emissions from operational phase activities (vehicle traffic on unpaved roads).

The management of air emissions resulting from the cruise port activities was mentioned under section 3 (Environmental Aspects and Legal Requirements).



### Greenhouse Gases

		Unit	2015	2016	2017	2018	Please use this area to provide any additional information. If the data is not available or inapplicable, please indicate.	
Scope 1	1a	DIESEL CONSUMPTION - COMPANY VEHICLES - IT	litre	1731	1616	1984	2.400	
	1b	GASOLINE CONSUMPTION - COMPANY VEHICLES - IT	litre					
	1c	DIESEL CONSUMPTION - TRUCK / BOATS - IT	litre	7513	3725	19732	2896	
	1d	LNG (Liquefied natural gas) consumption - lorry/truck/forklift etc	kg					
	1e	CNG (Compressed natural gas) consumption - lorry/truck/forklift etc	kg					
	2a	NATURAL GAS	m3					
	2b	FUEL OIL	litre					
	2c	SOLID FUEL (please indicate the type and unite)	kg					
	2d	LPG(Liquefied petroleum gas)	kg					
	3a	REFRIGERANT GASES - R22 (leak/year)	kg	0	0	0	0	
	3b	REFRIGERANT GASES - R410A (leak/year)	kg	0	0	0	0	
	3c	REFRIGERANT GASES - R407A(leak/year)	kg					
	3d	REFRIGERANT GASES - R40A(leak/year)	kg					
	3e	REFRIGENT GASES - R134A(leak/year)	kg					
	4a	CO2 FIRE EXTINCTION SYSTEM	kg				138	
4b	HFC 227 EA FIRE EXTINCTION (leak/year)	kg				0		
4c	SF6	kg						
5	GENERATORS (Diesel consumption)	litre	1.016	466	1.255	1.000		
6								
Scope 2	6a	ELECTRICITY CONSUMPTION	kWh	631.131	495.174	494.379	562.048	
	6b	STEAM, HOT WATER ETC PURCHASE FROM THIRD PARTY	kWh					
<b>GHG Reduction</b>								
10	RENEWABLE ENERGY (please indicate the type)	kWh						

**Table 3: Greenhouse Gases Usage by years**

#### 3.4.2.1. Air Emissions from Combustion Sources

The primary emissions from combustion exhaust sources are sulphur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), particulate matter (PM), and greenhouse gases such as carbon dioxide (CO<sub>2</sub>). Depending on the fuel type and quality, other substances such as heavy metals, unburned hydrocarbons and other VOCs may be emitted in smaller quantities, but may have a significant influence on the environment due to their toxicity and/or persistence.

Recommended air emissions management strategies relevant to port and terminal operations include:

- Application of air quality management procedures (including for GHG emissions) for ship operations while in port areas, such as:
- Validate ship engine performance documentation and certification to ensure compliance with combustion emissions specifications (including NO<sub>x</sub>, SO<sub>x</sub>, and PM), within the limits established by international regulations, and as noted in the HSE Guidelines for Shipping.
- Require use of low-Sulphur fuels in port, if feasible, or as required by international regulations.
- When practical and without affecting the safety of vessel navigation, use reduced ship propulsion power in port access areas.
- For appropriately configured vessels, including port tugs during idling periods, use shore-based power in port where it is available.

- Application of air quality management procedures to avoid, minimize, and control combustion emissions, including GHG emissions, related to land-based port activities, including:
- Where practicable, design port layouts and facilities to minimize travel distances and transfer points, for example from ships' off-loading and on-loading facilities to storage areas, and to avoid/minimize re-storage and reshuffling of cargo.
- Where practicable, upgrade land vehicle and equipment fleets with low emission vehicles, including use of alternative energy sources, and fuels/fuel mixtures (e.g., vehicle and equipment fleets powered by electricity or compressed natural gas, hybrid locomotives, etc.).
- Maintain operation equipment (e.g., cranes, forklifts, and trucks) in good working condition to reduce air emissions.
- Encourage reduced engine idling during on- and off-loading activities.

#### 3.4.2.2. Bodrum Cruise Port CO2 emissions

Bodrum Cruise Port is required to disclose GHG emissions pursuant to the Companies Act 2006 (Strategic Report and Director's Report) Regulations 2013. The calculations on GHG emissions data, which cover the Scope 1 and 2 GHG emissions, have been conducted by an independent consultancy in accordance with the GHG Protocol control approach using IPCC 2006 emission factors, AR5 GWP values, the International Energy Agency and the World Resources Institute emission factors and local fuel data (net calorific value and density), where possible. As stated in the table below, during the GHG reporting period (1 January – 31 December 2018), the port's Scope 1 and 2 emissions (location-based) totalled 574.8 tonnes CO<sub>2</sub>e.

Table 4 Bodrum Cruise Port CO<sub>2</sub> emissions

(in tonnes CO <sub>2</sub> e)	2018	2017
<b>Scope 1</b>	<b>16,8</b>	18,9
<b>Scope 2</b>	<b>284,7</b>	252,6
Location-based		
<b>Scope 1 and 2, total</b>	<b>301,5</b>	271,5
Location-based		
<b>Carbon intensity</b>		
per full-time equivalent employee	<b>10.53</b>	8.92
per sqm facility area	<b>0.0015</b>	0.0011

#### 3.4.3. Waste Management

The type and amount of solid and liquid wastes associated with port operations may vary significantly depending on the nature of port operations and the types of ships serviced. Wastes originating at the port may include inert solid waste from cargo packaging and from administrative offices, as well as hazardous or potentially hazardous waste associated with maintenance operations, such as painting, scrap metal, used lubricating oils and engine degreasing solvents. Wastes originating from ships may include oily sludge (addressed above under "Wastewater"), inert materials such as food packaging, and food waste. Specific pollution prevention, minimization, and control recommendations for ship generated wastes received by port facilities are outlined below.

##### 3.4.3.1. Ship Generated Wastes

Port of Bodrum facilities provide adequate means of receiving and managing effluents and wastes to meet the needs of visiting cruise ships that the port is designed to service. The



provision of waste reception facilities is developed in coordination with the Turkish Ministry of Environment according to the commitments to the MARPOL Convention as port states. Port waste reception facilities provide adequate capacity to receive ship-generated wastes, including appropriately sized and located receptacles, and the capacity to deal with seasonal fluctuations.

### 3.4.3.1.1. Solid Waste

- Information is available for ship owners and agents to identify waste reception facilities and acceptable handling procedures at Port of Bodrum;
- Discharge of any waste from cruise ships and ferries is prohibited while on the port in accordance with MARPOL and Turkish regulations;
- A collection and recycle plan is developed for ship-generated waste for ships alongside, consistent with the International Maritime Organization (IMO) Comprehensive Manual on Port Reception Facilities.
- Safety net between ship and waste container is used to prevent waste falling to the sea surface.
- Food waste from cruise ships delivered to Port of Bodrum is managed according to the regulations intended to produce energy or fertilizer on Municipality Waste Collection Area.
- Port requirements include rendering of food waste as fertilizer or energy and separation of cardboard, glass and iron as recycle material.

Number of Ships	DRY WASTE m <sup>3</sup>												Total	Recycle
	1	2	3	4	5	6	7	8	9	10	11			
	Plastic	Food Waste	Domestic Waste	Cooking Oil	Incinerator	Operational	Animal Carcass	Fishing Gear	Electronic Waste	Cargo waste (harmless)	Cargo waste (harmful)			
82	107.21	104.9	0	0	0	128.9	0	0	0	0	0	341.01	236.11	
92	70.5	57.7	0	0	0	237	0	0	0	0	0	365.2	307.5	
44	164.3	79.9	0	0	0	396.6	0	0	0	0	0	640.8	560.9	
24	107.25	101.75	0	0	0	268.15	0	0	0	0	0	477.15	375.4	
23	94.31	75.56	0	0	0	162.04	0	0	0	0	0	331.91	256.35	

Table 5 Solid Waste Statistics by years

### 3.4.3.1.2. Liquid Waste

Ship generated liquid waste at the port typically include large volumes of hazardous materials, as well as waste oil, residual fuels, lubricants and other hazardous substances used in cruise ship activities. Spills may occur due to equipment failure (e.g., pipelines, hoses, flanges), or improper operating procedures during disposal, and involve waste oils or residual fuels.

**Table 6 Liquid Waste Statistics by years**

Year	Number of Ships	LIQUID WASTE		
		Bilge Water	Sludge	Total(m3)
<b>2014</b>	82	6.80	66.51	<b>73.31</b>
<b>2015</b>	92	112.40	134.60	<b>247</b>
<b>2016</b>	44	236.50	90	<b>326.50</b>
<b>2017</b>	24	208.43	26	<b>234.43</b>
<b>2018</b>	23	300.42	16	<b>316.42</b>

Waste oil treatment facilities in Port of Bodrum is located with consideration of natural drainage systems and the presence of environmentally-sensitive areas/receptors (e.g., aquaculture projects and beaches, etc.). Siting of the facility includes provisions for physical separation/distance to avoid and minimize adverse impacts.

Waste oil treatment facilities constructed away from traffic zones and include protective mechanisms to protect storage areas from vehicle accidents. Covered and ventilated temporary storage area is designed to facilitate collection of potentially hazardous leaks and spills, including the use of sloped surfaces to direct spill flows, and the use of catch basins with valve systems to allow spills and releases to enter a dead-end sump from which spilled materials can be pumped/recovered. Where hydraulic equipment is used over or adjacent to water or other sensitive receptors, biodegradable hydraulic oils is used.

Bodrum Cruise Port includes secondary containment for above ground liquid storage tanks and tanker truck loading and unloading areas.

**3.4.3.2. Wastewater (Port Sewage, Storm water, and Ship Wastewater)**

Liquid effluents associated with land-based activities in ports and terminals (such as construction activities, vehicle maintenance and washing, fuel and waste oil storage and transfer, etc.) include storm water, wash water and sewage. Ship-generated effluents include sewage, ballast water (from cruise ships), bilge water, and vessel cleaning wastewater. Wash water from land- and sea-based activities may contain oily residues. Ship sewage and wastewater contains high levels of BOD, total suspended solids, and coliform bacteria, and typically low pH levels (due to chlorination). Bilge water may contain elevated levels of BOD, COD, dissolved solids, oil, and other chemicals that accumulate as a result of routine operations.

Storm water and sewage from port facilities should be managed according to the recommendations provided in the GPH HSE. Additional recommendations specific to storm water and wastewater from port facilities include the followings:

- Avoid installing storm drainage catch basins that discharge directly into surface waters;
- Install filter mechanisms (e.g., draining swabs, filter berms, drainage inlet protection, sediment traps and sediment basins) to prevent sediment and particulates from reaching the surface water;
- Install oil/grit or oil/water separators in all runoff collection areas;
- Regularly maintain oil/water separators and trapping catch basins; and
- Manage recovered, contaminated solids or liquids in accordance with the general and hazardous waste guidance in the GPH HSE.

Port operators should provide collection, storage, and transfer and/or treatment services, and facilities of sufficient capacity and type for all wastewater generated by vessels at the port in accordance with MARPOL and national regulations, including the followings:

- Oily waste and wastewater should be collected in barges, vehicles, or central collection systems and storage tanks. The capacity of oily waste collection should be established based on applicable MARPOL provisions.
- Wastewater with noxious chemicals from bulk tank cleaning should be collected through appropriate on-site or off-site treatment prior to discharge. Incompatible substances should not be mixed in the collection system. Treatment methods should be established based on the effluent characteristics.
- Ports should provide ship operators with details on the pertaining ballast water management requirements, including the availability, location, and capacities of reception facilities, as well as with information on local areas and situations where ballast water uptake should be avoided.

Port facilities that conduct cleaning or repair of ballast tanks should be equipped with adequate reception facilities able to prevent the introduction of invasive species. Treatment technologies may include those applied to other effluents accepted in port reception facilities or more specific methods such as filtration, sterilization (e.g., using ozone or ultraviolet light), or chemical treatment (e.g., biocides).

Sewage from cruise ships are collected by truck and treated off-site according to the methods provided in the waste management plan.

#### **3.4.3.3. Spill Prevention and Control Planning**

Bodrum Cruise Port prepared a spill prevention, control, and countermeasure plan consistent with the IMO Manual on Oil Pollution Section II—Contingency Planning, which:

- Identifies areas within the port zone and nearby vicinity that are sensitive to spills and releases of hazardous materials and locations of any water intakes (e.g., cooling water for shore-based industries);
- Outlines responsibilities for managing spills, releases, and other pollution incidents, including reporting and alerting mechanisms to ensure any spillage is reported promptly to the Port Authorities;
- Includes provision of specialized oil spill response equipment (e.g., containment booms, recovery devices, and oil recovery or dispersant application vessels, etc.); and
- Includes regular training schedules (twice in a year) and simulated spill incident and response exercises for response personnel in spill alert and reporting procedures, the deployment of spill control equipment, and the emergency care/treatment of people and animals impacted by the spill.

Waste Reception Facility is equipped with containment basins in area with a high risk of accidental releases of waste oil or hazardous materials (e.g., bilge water or sludge). Waste oil dispensing equipment is equipped with “breakaway” hose connections that provide emergency shutdown of flow should the connection be broken by movement. The equipment is inspected prior to loading/offloading activities to ensure all components are in satisfactory condition.

#### **3.4.4. Climate Change Resilience**

The Port is aware of the risks that climate change may pose to its operations and regards contributing to the global efforts to tackle climate change among its primary environmental responsibilities. To reduce its impact on climate change, the port tracks its energy consumption

and GHG gas emissions, invests in energy efficiency and renewable energy sources, deploys low or zero emission vehicles and raises awareness among its employees and other stakeholders.

Port and terminal facilities are vulnerable to the direct and indirect impacts of climate change. For example, in addition to potential changes in water levels and inundation risks resulting from alterations to coastal processes and seabed/coastal geomorphology caused by port infrastructure development, a port operation may in future be exposed to more damaging storms or a higher mean sea level than has historically been the case as a result of climate change, which may impact the viability of port operations. Critical port and vessel related activities (in particular ship movement and mooring, loading and unloading, and dredging activities) and the port's supply chain infrastructure (road and rail movement, intermodal hubs) may be vulnerable to risks related to climate variability such as increased intensity of rainfall, flash floods, heat waves, storms and storms surge, and high wind speeds.

Given these risks, projected future climate change-related impacts and the development of adaptation measures to enhance resilience should be assessed in the design phase of new port projects (and significant port expansions), to allow for the identification, analysis, and evaluation of climate change vulnerabilities and risks as part of the consideration of project alternatives, design, and siting. In addition, changing climate conditions should be evaluated on a regular basis during the operational phase of port projects. Design and operational issues for consideration as part of climate change adaptation planning include:

- Designing port-related infrastructure (e.g., buildings, quays, berths, bridges, foundations, slopes, embankments, breakwaters, storm water drainage) to increase climate resiliency in the context of changing sea levels, and more extreme weather events;
- Selecting or replacing cargo handling, storage, transport equipment (e.g., considering crane stability, enclosing material stockpile bays, location of electrical equipment, corrosion protection) and reviewing cargo transport routes (e.g., avoiding flood prone areas, improving on-site drainage systems and maintenance) to increase climate resiliency in the context of changing climate conditions and events (e.g., increased lightning, precipitation, floods, wind speeds, temperatures);
- Assessing the contribution of port construction and operation to incremental climate change impacts on habitats of high biodiversity value and rare, threatened or endangered species found in the vicinity of the port; identifying opportunities to improve the adaptive capacity of such species and habitats.

#### **3.4.5. Noise**

High underwater noise and vibration levels are generated from ship traffic and operational phases. Noise from these activities adversely impact aquatic habitats and the health and behaviours of aquatic life, including fish, marine mammals, and sea turtles. Environmental parameters that determine underwater sound propagation are site-specific, and aquatic species can be impacted differently depending on their sensitivity to underwater sound frequencies. Assessments is conducted to identify where and/or when underwater noise has the potential to impact aquatic life significantly and to identify appropriate mitigation measures.

There are some measurements to prevent, minimize, and control underwater noise from offshore pile driving and dredging during operational phases of the port.

While the underwater noise from vessels in the vicinity of the port is related to ship and propeller design, the noise related to environment friendly cruise ship is low degree. However, the emergency act plan includes the establishment of low power propulsion zones near the port. That also improve air emissions, occupational safety, and avoid ship strikes with marine mega fauna.

## 4. RESPONSIBILITIES AND RESOURCES

### 4.1. GPH Headquarters and Bodrum Cruise Port Organization Structures

Global Ports Holding (GPH) has a well-defined operating model that relies on four distinct pillars: organization, governance, functions and technology. The proprietary GPH operating model centralizes management for every major structure's operations within its enterprise and is based on operational and commercial synergies to promote maximum efficiency. There are significant differences (from concessions to legislation) among the operations of each of GPH's ports, and this is why, there is no single operating model which covers all ports and headquarters.

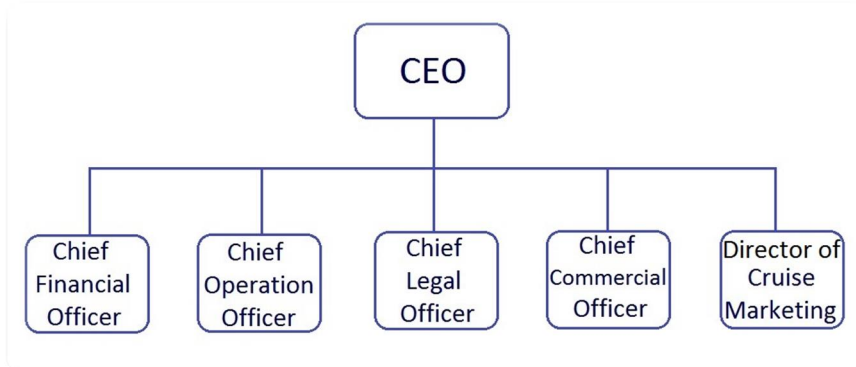


Figure 3 GPH Organization Structure

The operating model's pillars are defined in harmony within GPH's consolidation agenda: potential synergy, service opportunities and operational efficiency. As such, GPH headquarter operations and port operations are able to share and combine best practices.

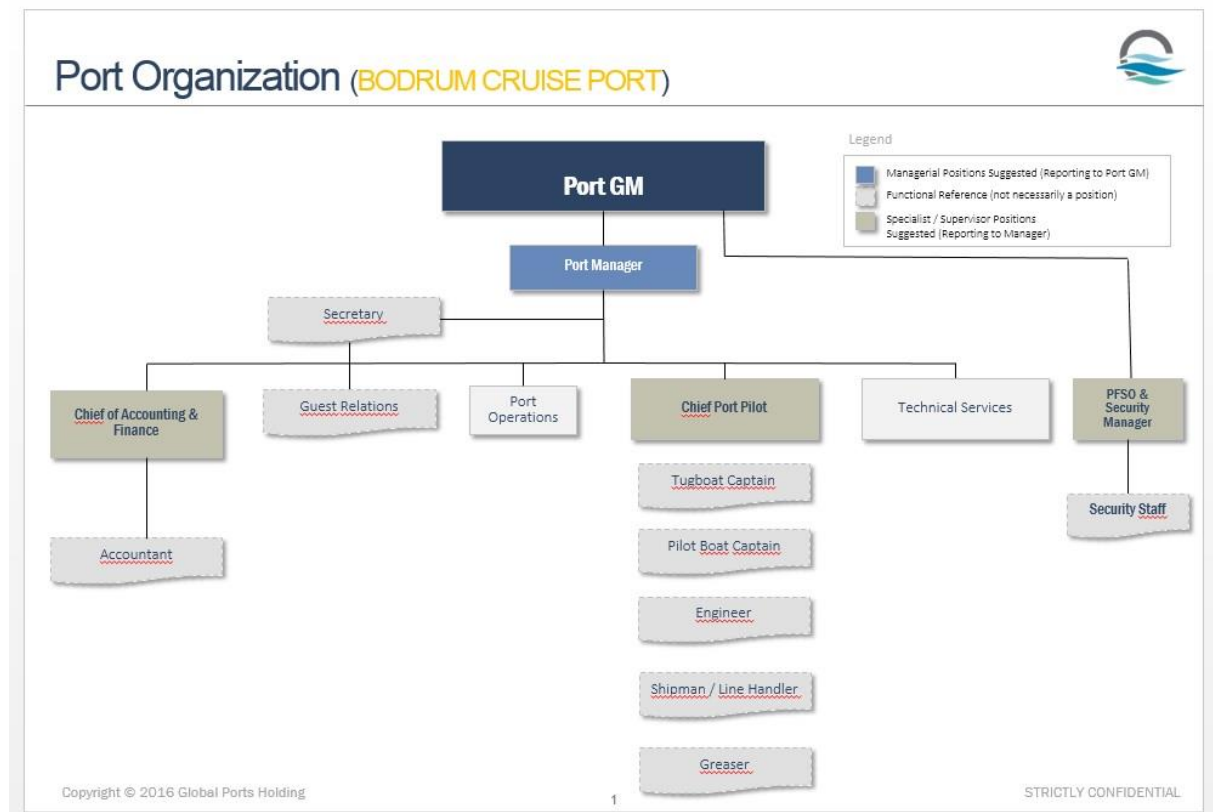


Figure 4 Bodrum Cruise Port Organization Structure



#### 4.2. Responsibilities of Departments on Environmental Activities

The below table refers those liabilities affecting the environment at Bodrum Cruise Port, which are specified in the requirements of PERS certification. These are tasks that may cause, control or minimize environmental impacts when defined. And that may cause environmental impacts if control was lost, or may conclude in a breach of environmental policy guidelines or regulations.

**Table 7 Environmental Responsibilities of Key Personnel**

TASK	JOB TITLE	DEPARTMENT
Port Operations (Dredging)	<b><i>There is no any operation to be specified under this section.</i></b>	
Port Operations (Navigation)	Chief Pilot	Pilotage
Port Operations (Shipping)	<b><i>There is no any operation to be specified under this section.</i></b>	
Port Operations (Terminals)	Port Manager	Management
Cargo Handling Operations	<b><i>There is no any operation to be specified under this section.</i></b>	
Jetty/Wharf Management	Chief Pilot	Pilotage
Site Management	Port Manager	Management
Strategic Planning	General Manger	Top Management
Supplies acquisition	Chief Pilot/ Security Manager	Pilotage / Security Department
Licensing/Permits	Port Manager	Management
Quality Management	Assist. Operation Manager	Operation Department
On site Contractor Management	<b><i>There is no any operation to be specified under this section.</i></b>	
Emergency Planning	Chief Pilot	Pilotage
Waste Management	Port Operation	
Marina / Slipway management	<b><i>There is no any operation to be specified under this section.</i></b>	
Environmental Document Management	Assist. Operation Manager	Operation Department
Environmental Data Management	Assist. Operation Manager	Operation Department
Soil pollution assessment	Environmental Consultant	Independent Consulting Company
Air Quality monitoring	Environmental Consultant	Independent Consulting Company
Energy and Carbon Footprint monitoring	Human Resource Director	GPH Head Office
Water Quality monitoring	Environmental Consultant	Independent Consulting Company
Noise management	Environmental Consultant	Independent Consulting Company
Vehicular Management of Terminal traffic	Operation Manager	Operation Department

## 5. CONFORMITY REVIEW ON LEGAL REQUIREMENTS AND POLICY

*Table 8 Conformity Review Table*

Facility Area	Significant Environmental Issues	Impact Explanation	Legal Requirements	Control/ Preventive Actions	Index Item	Calculation Method	Target 2019	Value	Indicator Presentation (Calculation Details)	
Climate change resilience Water usage									2017	2018
Offices	water consumption and waste water	Causes to overconsume the natural resources, waste water pollution. In case of waste water overflowing soil pollution may occur.	water pollution control regulation soil pollution control regulation	water consumption and the quantity of the waste water are monitored on a daily basis	Water Pollution Control Regulation Art. 25 a	150 lt. /day /person 150*15=2250 L/day 2250*365/1000=766,5 m <sup>3</sup> /year	821,25 m <sup>3</sup> / year		Office based water consumption: 932,5 m <sup>3</sup> /year	Office based water consumption: 746,5 m <sup>3</sup> /year
port operations	water consumption and waste water	Causes to overconsume the natural resources, waste water pollution. In case of waste water overflowing soil pollution may occur.	water pollution control regulation soil pollution control regulation	water consumption and the quantity of the waste water are monitored on a daily basis.	Water Pollution Control Regulation Art. 25 a	Monitoring of water meters	5000 m <sup>3</sup> / year		Passenger based water consumption: 3267,5 m <sup>3</sup> /year	Passenger based water consumption: 5055,5 m <sup>3</sup> /year
port operations	sludge, bilge water and waste oil	In accordance with MARPOL 73/78 convention annex-v, vessel generated hazardous waste contaminating, leaking out to the sea, soil will damage the vegetation and sea ecosystem	hazardous wastes control regulation waste oil control regulation MARPOL 73/78 convention	collected and stored in separate areas, following dewatering process sent to the disposal facility. the max. waste storage time is 6 months	Regulation on Waste Collection and Waste Control from Ships Art. 6 b	The day of the cruise on the sea*ship main machine power	After dewatering process planning to get 303 m <sup>3</sup> / year		Sludge: 26 m <sup>3</sup> /year Bilge Water: 208,43 m <sup>3</sup> /year Waste Oil: 0 m <sup>3</sup>	Sludge: 16 m <sup>3</sup> /year Bilge Water: 300,42 m <sup>3</sup> /year Waste Oil: 0 m <sup>3</sup>
Air emissions										

offices	emission of air conditioners	It has a negative impact on ozone layer	regulation on the reduction of ozone depleting substances	the minimum level of consumption is achieved. atmosphere friendly air conditioner gases will be used. filter change and annual maintenance will be done	Article 16, paragraphs 1 and 2, of the Regulation on the substances that dilute the ozone layer	Measurement of the missing refilled gas volumes.	0 m <sup>3</sup>	0 kg	6 kg
port operations	dust	The dust caused by the repair and maintenance works raises the air pollution and damage human health.	air pollution control regulation	dust measurements are made on annual basis. proper personal protective equipment (PPE) are used	Personal exposure dust measurements should comply the relevant regulation.	Personal exposure dust measurements are performed.	5,0 mg/m <sup>3</sup>	0,095 mg/m <sup>3</sup>	0,14 mg/m <sup>3</sup>
port operations	environment emissions	Damages human health		annual volatile organic compound (VOC) measurement are done.		VOC Measurements	5,0 mg/m <sup>3</sup>	0,095 mg/m <sup>3</sup>	0,14 mg/m <sup>3</sup>
marine operations	environment emissions	Damages human health		annual volatile organic compound (VOC) measurement are done.		VOC Measurements	5,0 mg/m <sup>3</sup>	0,095 mg/m <sup>3</sup>	0,19/m <sup>3</sup>
<b>waste management</b>									
offices	toner, cartridge (hazardous waste)	Waste toners, plastic and metal pieces used by the office equipment cannot be disposed by nature and cause pollution	soil pollution control regulation hazardous waste control regulation	they are collected in separate location and sent to disposal facilities.	Regulation on Waste Management Art 9 b, g, h	The used toner and cartridges are handled to the supplier. Records are formed and kept.	6 pcs toner /year	3 pcs HP printer toner 1 pcs Canon printer toner	3 pcs HP printer toner 1 pcs Canon printer toner

offices	power supplies, batteries and their wastes	Any leakage that may occur through waste batteries will harm vegetation directly, moreover the potential of hazardous wastes to contact with fire will make on explosive effect and harm human health.	waste battery control regulation soil pollution control regulation hazardous waste control regulation	they are collected in separate location and sent to disposal facilities.	Regulation on Control of Waste Batteries and Accumulators, Article 13 subparagraphs a, b and c	The pen batteries are collected and handled to TAP. Waste accumulators are the licenced waste collecting companies. Record are formed and kept.	200 pcs pen alkali battery 2 pcs 80 Amper accumulator	300 pcs pen battery 6 ea. 210 Amp. battery	200 pcs pen battery 2 ea. 210 Amp. battery
offices	fluorescent wastes	Wastes due to the installation of fluorescent lamps cause to environmental pollution, and should the soil have contaminated by these wastes the soil pollution occurs.	hazardous waste control regulation soil pollution control regulation	fluorescent lighting is not used anywhere in the port. the led lighting conversion was provided throughout the port facility in 2016	Regulation on Waste Management Art 9 b, g, h	All fluorescent illumination units will be changed to LED units. There will be only use of LED, no waste fluorescent	0	0	0
port operations	paint cans, plastic glue boxes, silicone tubes	When the soil contaminates with the paint cans used during the repairs & maintenance works, plastic glue boxes and silicone tubes, the vegetation gets damaged, at the same time it causes environmental and visual pollution	hazardous waste control regulation soil pollution control regulation	collected in a separate area and sent to recycling facilities.	Regulation on Waste Management Art 9 b, g, h	The empty containers of paint and thinners used for maintenance works are handled to waste processing companies by company car, since the deliveries are under 50 kilograms. .	10 kg	0	0

port operations	paint, thinner, solvent and similar chemical materials and their wastes	The painting materials used during the repair and maintenance contaminates to the soil, damages the vegetation.	hazardous waste control regulation water pollution control regulation soil pollution control regulation	collected and stored in separate areas, wastes sent to disposal facilities.	Regulation on Waste Management Art 9 b, g, h	The empty containers of paint and thinners used for maintenance works are handled to waste processing companies by company car, since the deliveries are under 40 kilograms.	0	0	0
port operations	packages, thread wastes and uniforms contaminated with oil	Cause to soil and environmental pollution when they are not discarded properly	hazardous waste control regulation soil pollution control regulation	collected and stored in separate areas, wastes sent to disposal facilities.	Regulation on Waste Management Art 9 b, g, h	The waste and contaminated cloth material is handled to related waste bins.	1 kg	0	0
port operations	painted plastic, package and paper wastes	Packaging wastes of materials used during the maintenance	soil pollution control regulation	collected in a separate area and sent to recycling facilities.	Regulation on Waste Management Art 9 b, g, h	The empty containers of paint and thinners used for maintenance works are handled to waste processing companies by company car, since the deliveries are under 50 kilograms.	0	0	0
port operations	metals contaminated with oil	Oil contaminated metals arising from the repair and maintenance, cause environmental pollution in case of contamination with soil causes soil pollution	hazardous waste control regulation soil pollution control regulation	collected and stored in separate areas, wastes sent to disposal facilities.	Regulation on Waste Management Art 9 b, g, h	There are no oil contaminated metallic wastes. The maintenance is performed by approved service suppliers.	0	0	0

port operations	solid wastes	Wastes defined in MARPOL 73/78 convention, annex-v cause sea and environmental pollution in case of they are disposed into the sea	water pollution control regulation soil pollution control regulation MARPOL 73/78 convention	wastes are collected from ships in 9 categories and sent to recycling / disposal facilities	Regulation on Waste Management Art 9 b, g, h	Ship-originated packaging waste and other solid wastes are sent to licensed recycling companies. The amounts are recorded.	Plastic wastes: 100 m <sup>3</sup> /year Food wastes: 200 m <sup>3</sup> /year Operational wastes: 170 m <sup>3</sup> /year	Plastic wastes: 107 m <sup>3</sup> /year Food wastes: 102 m <sup>3</sup> /year Operational wastes: 268 m <sup>3</sup> /year	Plastic wastes: 94 m <sup>3</sup> /year Food wastes: 176 m <sup>3</sup> /year Operational wastes: 162m <sup>3</sup> /year
marine operations	paint cans	When the soil contaminates with the paint cans used during the repairs & maintenance of marine vehicles, the vegetation gets damaged, at the same time it causes environmental and visual pollution	hazardous waste control regulation solid waste control regulation	stored in a separate area and sent to recycling facilities.	Regulation on Waste Management Art 9 b, g, h	the empty paint containers used for painting and maintenance of the sea vessels are handled to waste processing companies by company car, since the deliveries are under 50 kilograms.	1 kg	2 kg	5 kg
marine operations	paint, thinner, solvent and similar chemical materials and their wastes	The painting materials used during the repair and maintenance of marine vehicles contaminates to the soil, damages the vegetation and sea.	hazardous waste control regulation water pollution control regulation soil pollution control regulation	stored in separate area, sent to disposal facilities.	Regulation on Waste Management Art 9 b, g, h	The empty paint containers used for painting and maintenance of the sea vessels are handled to waste processing companies by company car, since the deliveries are under 40 kilograms.	1 kg	2 kg	5 kg

marine operations	packages, thread wastes and uniforms contaminated with oil	Cause to soil and environmental pollution when they are not discarded properly	hazardous waste control regulation water pollution control regulation soil pollution control regulation	stored in separate areas, wastes sent to disposal facilities.	Regulation on Waste Management Art 9 b, g, h	The waste and contaminated cloth material is handled to related waste bins.	0	0	0
marine operations	engine filters	Cause to environmental pollution and damage human health	hazardous waste control regulation	stored in separate areas, wastes sent to disposal facilities.	Regulation on Waste Management Art 9 b, g, h	There is no used filter waste. The maintenance of the sea vessels are performed by approved service suppliers. The service supplier performs service on spot and take all the wastes with them. They are responsible of the disposal of all the wastes formed during the service operation.	0	0	0



marine operations	metals contaminated with oil	Oily metals arising from the repair and maintenance, cause environmental pollution in case of contamination with soil & sea causes soil & sea pollution	hazardous waste control regulation soil pollution control regulation	collected and stored in separate areas, wastes sent to disposal facilities.	Regulation on Waste Management Art 9 b,g, h	There are no oil contaminated metallic wastes. The maintenance of the sea vessels are performed by approved service suppliers. The service supplier performs service on spot and take all the wastes with them. They are responsible of the disposal of all the wastes formed during the service operation.	0	0	0
hazardous waste reception facility	hazardous waste	In case of contamination of hazardous wastes in soil and sea, soil and water pollution occur. On the other hand, when the hazardous wastes are placed properly within the port area it than cause to environmental and visual pollution.	hazardous waste control regulation water pollution control regulation soil pollution control regulation	in order to prevent hazardous waste contamination in to the soil and water, canals constructed by isolating floor where the hazardous wastes placed. the rain water is prevented to spread around by isolating the roofs.	Regulation on Waste Management Art. 13 1.,2., and 3. subparagraphs	Hazardous wastes are likely to be stored in grate systems and concrete floors. The Ministry will be sent to licensed disposal / recovery companies via the waste collection system in 6-month periods.	15 m <sup>3</sup> (After dewatering)	15 m <sup>3</sup>	17 m <sup>3</sup>

marine operations	oil spill	Causes to soil, environmental, visual and water pollution. It has on huge impact on human health and marine pollution.	Hazardous waste control regulation water pollution control regulation soil pollution control regulation law on emergency response and compensation for damages	In case of emergency, necessary equipment is provided in port and personnel are provided with regular trainings There are 3 containers within the port for sea pollution emergency response. The total floating barrier length is 2000 meters. Emergency response plan is provided and approved by ministry for five years period.	Regulation on Waste Management Art. 9 k Regulation on Control of Soil Pollution Article 6 a, b and ç	Emergency response plan approval date: 30.12.2015 In case of any change in the plan, it shall be submitted to the Ministry for re-approval.	At the same time, there is a 3rd party service contract with emergency companies, which are authorized for intervention.	No emergency situation occurred.	No emergency situation occurred.
<b>Noise</b>									
marine operations	engine room noise	The noise arising from the marine vehicles will affect the human health in the interaction area	noise regulation.	noise measurement is made. proper PPE is provided.	Quarterly ratio of noise levels satisfying related regulations	Daily ratio of noise levels (measured at the noise monitoring station in the port) that satisfy related regulations The port is classified into the Regulated Areas of Category D in general area Noise Control Criteria: Detailed regulations 75 dB during the day (7 am-8 pm); 70 dB during the evening (8-11 pm); 65 dB during the night (11 pm to 7 am of the following day)	Daytime equivalent energy sound levels: quarterly achievement rate of 100% Evening Leq: quarterly achievement rate of 100% Night-time Leq: quarterly achievement rate of 100%	Daytime Leq 100% Evening Leq 100% Night-time Leq 100%	Daytime Leq 100% Evening Leq 100% Night-time Leq 100%
<b>Energy Management</b>									

offices	electricity consumption	Causes to over consume natural resources		required trainings are provided to the personnel. making smart use of lighting by using photo sensor switches in toilets and similar areas. led lighting solutions are used throughout the port facility. electricity consumption is monitored on a daily basis.		Annual electric consumption	25000 kwh/year	26890 kwh	20786 kwh
port operations	electricity consumption	Causes to over consume natural resources		it is monitored on a daily basis		Annual electric consumption	480.000 kwh	494.152 kwh	562.000 kwh
marine operations	electricity consumption	Causes to over consume natural resources		it is monitored on a daily basis		Annual electric consumption	15.000 kwh	58872 kwh	14745 kwh
marine operations	fuel consumption	Cause to depletion of natural resources	air pollution control regulation	tug boat, pilot boat and mooring boat are used for marine operations and emergency causes, unnecessary usage is avoided		annual fuel consumption	8000 litres	21716 litres	5296 litres

Bodrum Cruise Port strives to do business responsibly and aims to integrate environmental sustainability to the core of its business strategy. The Port is aware of the environmental risks inherent within the business and committed to manage and reduce environmental footprint caused by its activities.

The Port's environmental impacts and risks are mainly focused around natural resource, water and energy consumption, emissions, air and water pollution, handling of hazardous waste, effluents, dredging and impacts on marine ecosystems due to noise and vibration. The Port responds these impacts and risks in a systematic and proactive manner in line with its environmental management systems.

To foster environmental sustainability, the Port manages environmental matters in line with laws and regulations where the Company operates, international environmental standards and the Company's Environmental Policy. The Headquarter of GPH supervises determining and operating notifications, examinations, and enforcement mechanisms for non-compliance with rules and regulations regarding the Environmental Policy.

### **5.1. Environmental Impact Assessment Legislation**

The Ministry of Environment and Urbanization, dated 15.10.1998 and numbered 2796-8645, stated that activity of the Waste Reception Facility is not within the scope of the EIA Regulation.

There is an environmental impact assessment positive decision for the cruise port activity. Date: 22.02.2011 and number: 2116.

### **5.2. Environmental Permit and License**

Waste Reception Facility is subject to Environmental License. The Environment and Urbanization Directorate issued an environmental license subject to the current waste reception facility for 5 years with the letter dated 31.08.2015 and numbered 55411.

#### **5.2.1. Water and Waste Water Management**

In 2014, seawater samples were taken during the period of 15.03.2014 in order to determine sea water quality within the scope of coastal facility risk assessment and emergency response plans. Analyses were made to the laboratory authorized by the Ministry. In the results of the analysis, it was seen that the limit values determined in Table 4 were obtained except for the ammonia parameter. In 2020, there will be detailed study and analysis related to sea water quality.

The amount of water used for social purposes are given in the table above. It was accepted that all of the water turned into wastewater. Domestic wastewater is delivered to the municipal sewerage system. 07.08.2017 dated and 2017/350 numbered channel connection letters were received from Mugla Municipality.

The wastewater from the separation is treated in the chemical treatment plant and sent to municipal sewerage system.

#### **5.2.2. Emission Management**

Bodrum Cruise Port is aware of the risks that climate change pose to its operations and regards contributing to the global efforts to tackle climate change among its primary environmental

responsibilities. To reduce its impact on climate change, the port tracks its energy consumption and GHG gas emissions, invests in energy efficiency and renewable energy sources, deploys low or zero emission vehicles and raises awareness among its employees and other stakeholders.

The Port is required to disclose GHG emissions pursuant to the Companies Act 2006 (Strategic Report and Director's Report) Regulations 2013. The calculations on GHG emissions data, which cover the Scope 1 and 2 GHG emissions, have been conducted by an independent consultancy in accordance with the GHG Protocol control approach using IPCC 2006 emission factors, AR5 GWP values, the International Energy Agency and the World Resources Institute emission factors and local fuel data (net calorific value and density), where possible. As stated in the table below, during the GHG reporting period (1 January – 31 December 2018), the Port's Scope 1 and 2 emissions (location-based) totalled 301.5 tonnes CO<sub>2</sub>e.

### 5.2.3. Waste Management

'Cruise Port and Waste Reception Facility' is operated by Bodrum Cruise Port. The information regarding the transactions carried out within the scope of the waste reception facility has been examined under the title of Coastal Facility in the internal inspection report.

The Waste Reception Facility Project Report and the Waste Management Plan were approved for the first time on 29.01.2015. The Waste Management Plan is submitted to the Ministry every three years in accordance with Article 6 / § of the Waste Collection and Waste Control Regulation.

Waste oil analysis is carried out in laboratories authorized by the Ministry. According to the analysis report dated 27.10.2018, waste oil was determined as the first category.

In the Waste Reception Facility (from wastewater treatment), contaminated sludge (19 08 13), contaminated rag (15 02 02) and contaminated waste are likely to form in the barrel (15 01 10). These wastes are deposited in hazardous waste temporary storage area in a sealed container, separate from the other wastes. It is sent to the licensed disposal facility in accordance with the provisions of the relevant Regulation.

Domestic wastes (20 01 08) and packaging wastes (15 01 01, 15 01 02, 15 01 07) are formed in the offices located in the port. It is collected in closed bins placed at various points in the offices and picked up by Bodrum Municipality sub-contractor company (Tem-Cev). Changing the print cartridges and maintenance of the electronic equipment is carried out by the authorized service, therefore, the storage is not performed at the port. Equipment and vehicles of the port are maintained by the subcontractor. For this reason, there hasn't been waste at the port and temporary storage is not performed.

The food is provided from the outside by food card. Therefore, there is no vegetable waste oil at the port.

Therefore, there is no medical waste at the port.

Temporary storage permit for hazardous waste was prepared by the Provincial Directorate of Environment with the letter dated 23.05.2019 and numbered E.27811.

An Industrial Waste Management Plan was prepared for the port for 2019-2022 and submitted to the Directorate of Environment and Urbanization and approved on 10.04.2019.

The waste declaration for 2018 was made on the environmental information system on 10.01.2019. The waste declaration is given in Annex-12. The declaration of waste oil has been notified to the Directorate of Environment and Urbanization in writing on 10.01.2019.

#### **5.2.4. Noise Management**

The port is exempted from noise permission under the Environmental Permit and License Regulation. However, the measurement of sound exposure on person is done at least once a year by Bodrum Cruise Port. The measurement results are below the ILO limit values.

#### **5.2.5. Soil Pollution Management**

The port is covered by the Regulation on the Control of Soil Pollution of Hazardous Waste. The Activity Prior Information Form from the annexes of the regulation was filled out by the Ministry of Environment and Urbanization on the Integrated Environmental Information System and submitted to the Directorate of Environment and Urbanization.

#### **5.2.6. Chemicals Management**

Iron (III) chloride and polymer are used in the chemical treatment plant of the port. MSDS forms belonging to chemicals are kept in the file. Chemicals are stored on the concrete floor where the chemical treatment plant is located. The waste reception facility has a locked door, which prevents unauthorized access. The chemical declaration of the enterprise is made through the system. The facility is out of scope.

### **6. ENVIRONMENTAL REPORT**

The report is prepared by the environmental consultancy company, and not less than once in each subsequent year. The report is issued in at least in 2 copies one of which is given to the Bodrum Cruise Port environmental representative and is stored in the file in the Port. The other copy is kept by environmental consultancy company.

The report consists of a total of 17 pages and includes the year of 2018 data's. Please review the report in appendix 1 as Bodrum Cruise Port Environmental Report. The report contained year of 2019 data will be prepared in February 2020.

## 7. BEST PRACTISES

<b>Port:</b>	Bodrum Cruise Port (Port of Bodrum)
<b>Country:</b>	Turkiye
<b>Contact Person</b>	Haluk HIZLAN
<b>Position</b>	Port Manager
<b>E-mail</b>	halukh@bodrumcruiseport.com
<b>Environmental issue:</b> Energy Consumption, Carbon Footprint, Waste Management	
<b>Relevance to the 5 Es framework of the ESPO Green Guide:</b>	
<b>Exemplify, Enable, Engage</b>	
<b>Install the LED lighting and change the world!</b>	
<p>Standard lighting fixtures in the passenger terminal will be replaced by led fixture in 2019. The led project will be a start-up for Bodrum Cruise Port. For this project 7.000 Euro budget will be used in 2019.</p>	
<p>It was decided to use LED instead of sodium-vapor lamps used on the port area in 2019. The led fixture has 100W power, 14000 lumens and 6500K Light colour. The cost of the project was 3000 Euro and completed in July 2019.</p>	
<p>Bodrum Cruise Port has started to use led lighting. The LED installing project, which started in 2019, will be completed in 2020 throughout the port.</p>	
<b>Links:</b>	
<a href="https://www.acklighting.com/urunler-detay.aspx?id=876">https://www.acklighting.com/urunler-detay.aspx?id=876</a>	
<a href="https://www.lamptime.com/tr/urun/profesyonel-proje-ktor-led-aydinlatma-200w">https://www.lamptime.com/tr/urun/profesyonel-proje-ktor-led-aydinlatma-200w</a>	
<a href="http://www.nisaluce.com/?product_cat=led-paneller">http://www.nisaluce.com/?product_cat=led-paneller</a>	





Figure 5 LED lighting for outside



Figure 6 Led lighting on the pier

<b>Port:</b>	Bodrum Cruise Port (Port of Bodrum)
<b>Country:</b>	Turkiye
<b>Contact Person</b>	Ugur KUZAKCI
<b>Position</b>	Deputy of Port Operations Manager
<b>E-mail</b>	ugurk@bodrumcruiseport.com

**Environmental issue:** Waste, Carbon Footprint

**Relevance to the 5 Es framework of the ESPO Green Guide:**

**Exemplify, Enable, Engage, Encourage**

**We respect environment / The Waste Reception and Separation Facility:**

First of all, Bodrum Cruise Port built up a facility for separation of oil and water named as Waste Reception Facility in 2013. But the facility was operated for 4 years' time period by subcontractor. The aim was to eliminate the ship generated sludge and bilge water without damaging the nature.


The facility was started to be operated directly by Bodrum Cruise Port in 2018. The separator was renewed and the automation system was added to the facility.

Under the MARPOL 73/78 ANNEX-I, bilge water and sludge are separated from the water by physical processes after picked up from the cruise ships. The ship's waste is discharged to the truck with providing a connection hose by the port. The waste is discharged to raw material storage tanks at the treatment facility.

The wastes were in the tanks are sent to the heaters by means of the pump. The purpose of heating increases the efficiency in the separator. After the heater, the waste comes to the separator. In the separator, physical separation is realized by using the density difference of oil and water. The separated water is collected in a tank and sent to the chemical treatment. The dewatered waste is stored in a different tank to be sent to the licensed recycle facility.



**Figure 5 Waste Reception Facility and Waste Reception Truck**

<b>Port:</b>	Bodrum Cruise Port (Port of Bodrum)
<b>Country:</b>	Turkiye
<b>Contact Person</b>	Haluk HIZLAN
<b>Position</b>	Port Manager
<b>E-mail</b>	halukh@bodrumcruiseport.com
<b>Environmental issue:</b> Sea Side Protection Against to Oil Spills	
<b>Relevance to the 5 Es framework of the ESPO Green Guide:</b>	
<b>Exemplify, Enable, Engage</b>	
<b>Installing Fuel &amp; Oil Barriers during the Yachts' Fuelling Operations</b>	
<p>Bodrum cruise port is very convenient for the Mega Yachts and hence a fuelling operation is carried out frequently at the port throughout the summer period, too. To avoid environmental risks and hazards in the case of a potential malfunction or accident, Bodrum Cruise Port has started to use" professional marine oil barriers" to avoid these risks and protect the environment. The project started in 2019.</p>	
	
<b>Figure 8 Usage of marine oil barriers at Bodrum Cruise Port</b>	

## 8. ANNEXES

### 8.1. APPENDIX 1: ENVIRONMENTAL REPORT

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