

The Greek Privatization Program as a lever for navigating ports' sustainability transition

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Abstract:

Greece places particular emphasis on achieving sustainable development and is strongly committed to the implementation of the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs). In fact, the National Growth Strategy of Greece adopted in May 2018, is in line with the overall themes and provisions of the SDGs. Sustainable development is also an integral part of the mission and mandate of the Hellenic Republic Development Asset Fund (HRADF). HRADF's undergoing privatization processes provide an opportunity to implement strategic decisions with long term impact which apart from the widely recognized economic potential and fiscal advantages of privatization - under the right conditions - can also yield concrete environmental benefits and contribute to sustainable development.

Sustainable operation is essential for ports in particular, as they have always grown on a mutual benefit with the cities they are located and adjacent to. HRADF's portfolio includes 10 Port Authorities, established in the form of sociétés anonymes, the port of Alexandroupolis, Corfu, Elefsina, Heraklion, Igoumenitsa, Kavala, Lavrion, Patras, Rafina and Volos respectively until 2062-2063 (exact duration of the concession agreement varying per relevant Port Authority S.A.). HRADF holds 100% of the share capital of the aforementioned Port Authorities S.A.s. Ports are at the crossroads of supply chains. As clusters of transport, energy, industry and blue economy, they add great value and are at the service of the Greek economy and society. Under the right conditions, they can be a key strategic partner in the country's effort towards achieving sustainable development.

Towards these objectives, the Hellenic Republic Asset Development Fund cooperated closely with the European Bank for Reconstruction and Development (EBRD) which retained Global Sustain to support the development of a digital tool for assessing the sustainable performance of its portfolio assets (ESG Rating Tool) using performance indicators (KPIs). The scope of this ESG Rating Tool is the integration of ESG/Sustainability considerations into the privatization process with a view to enhance transparency, help attract responsible investors, and eventually, lead to more sustainable outcomes. To the best of our knowledge, it is one of the few (if not the only) cases in the world, where a privatization fund is trying to integrate sustainability into its processes and the first public organization in Greece to develop its own digital ESG Rating Tool.

The ESG Rating tool is based on the best international practices and frameworks and is in alignment with the Sustainable Development Goals (SDGs) and the environmental and social performance requirements of major funding and investment institutions. The tool allows the user to rate and monitor performance of the assets on Environmental, Social and Governance criteria, while it generates an ESG Analysis and rating report with specific recommendations for further improvement upon which HRADF and other interested parties (e.g. Port Authorities, potential investors) may be advised. This initiative supports Port Authorities S.A.s included in HRADF's portfolio on taking a leadership role to enforce the ongoing paradigm shift towards a competitive, secure, sustainable and inclusive port sector.

Introduction

The Hellenic Republic Asset Development Fund was established on the 1st of July 2011 and operates pursuant to the provisions of Law 3986/2011, under the Medium-Term Fiscal Strategy Framework 2012-2015 (MTFS)¹. The MTFS was part of the Greek National Restructuring Plan, designed to face the multilateral crisis experienced by the country since 2011. One of the measures implemented by the Greek government in order to control public debt is the privatization plan. In close cooperation with the Greek Government, HRADF, a public sector owned fund, promotes the implementation of privatizations in the country, having full responsibility for the application of the respective policy.

Privatizations are considered an important policy, not only for their contribution in increasing public revenue and reducing public debt, but, more importantly, as a means to attract FDI for the upgrade of acquired assets, open up regulated markets and improve the business environment. To this effect, the privatizations program has been present in all three Economic Adjustment Programs for Greece (2010, 2012 and 2015) and also constitutes an integral part of the Enhanced Post Program Surveillance framework that Greece is under since the expiration of the 3rd Economic Adjustment Program in August 2018. Almost 20% of Foreign Direct Investment (FDI) inflows come from privatizations and therefore the continuation of the relevant program will have a significant contribution to FDI (as stated in the Governor's of Bank of Greece Report for 2019²). The economic effect of a number of privatizations is expected to be multi-dimensional, going far beyond the revenues from the sale transaction. It is noted that, since its establishment in 2011, TAIPED has made use of more than 9 billion euros in state assets with the benefits for the economy estimated to have exceeded 20 billion euros.

The HRADF aims to maximize the development and exploitation of the assets included into the Asset Development Plan (ADP)³, and following updates (i.e. infrastructure, corporations, real estate and other fields of the economy) and to attract direct investments, while achieving additional important benefits, such as job creation, infrastructure modernization and promotion of the necessary reforms and consequently promoting long-term benefits for the Greek economy and public finances.

In detail, the creation of the HRADF was aimed to achieve the following (expected) results:

- investments by third private parties in real estate development or infrastructure concessions (i.e. roads, ports, airports), - supposed to contribute significantly to Gross Domestic Product (GDP) growth, leading to an increase in future tax receipts;
- higher productivity of the assets in HRADF's portfolio, which might reduce subsidies and also lead to incremental, future GDP growth.

Once every six months, HRADF designs and approves a new version of the ADP, taking into account the expected revenues of the semester, the long-term benefits and the complexity and maturity level of each project.

The portfolio of assets entrusted to HRADF in order to facilitate the privatization, can be divided into three macro-clusters:

¹ Hellenic Republic Ministry of Finance. Medium Term Fiscal Strategy 2012-2015. https://www.hellenicparliament.gr/en/Nomothetiko-Ergo/Anazitisi-Nomothetikou-Ergou?law_id=b5a0bcad-54e7-406b-925e-0a38514daa25

² Source: Governor's Annual Report 2019. <https://www.bankofgreece.gr/Publications/ekthdkth2019.pdf>

³ Hellenic Republic Asset Development Fund. Asset Development Plan 2019. <https://www.hradsf.com/storage/files/uploads/1-adp-september-2019.pdf>

- Corporate assets (i.e. Hellenic Petroleum)
- Infrastructure (i.e. Port authorities in the form of companies)
- Land Development (i.e. undeveloped lands and real estate properties)

More specifically, in the macro-cluster of infrastructure, the HRADF holds 100% of shares in 10 port authorities⁴ which have the right to operate the respective ports until 2042. Based on their use, these ports are divided into the following categories: 1) Multi-purpose, 2) Cargo & bulk, 3) Cruise passenger and 4) Ferry/coastal passenger. **Figure 1** illustrates the range of services that every port provides.

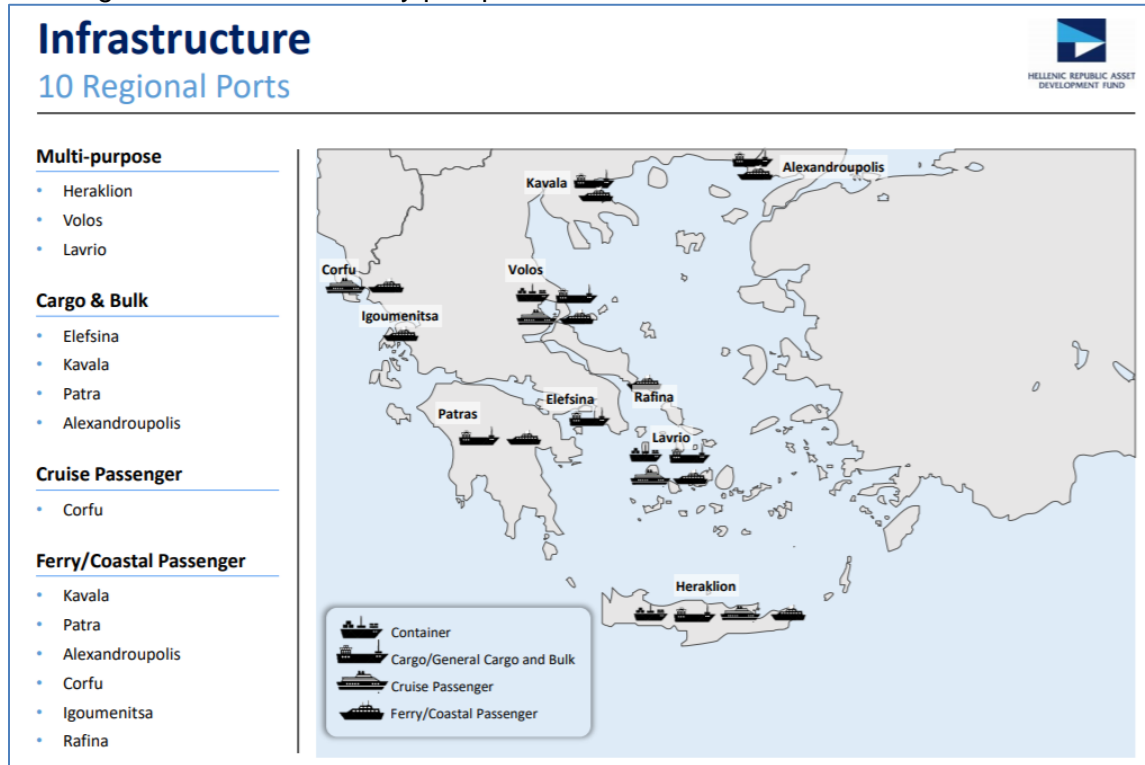


Figure 1: 10 regional ports' services

(source: <https://hradf.com/storage/files/uploads/10-port-authorities-jan2019.pdf>)

Ports are diverse and there is no one approach which can be mandated for all of them. Thus, the Fund has given the flexibility of designing the transactions of the ports on a case-by-case basis and evaluating the most appropriate approach to their development⁵. On July 17th, 2020 the HRADF launched three tender processes for the development of the ports of Alexandroupolis, Igoumenitsa and Kavala.

Background

A wide consensus exists in the global community regarding the need for a transition to “greener”, carbon-neutral and energy efficient communities. At the international level the

⁴ Hellenic Republic Asset Development Fund, Presentation regarding 10 port authorities: <https://hradf.com/storage/files/uploads/10-port-authorities-jan2019.pdf>

⁵ Enhanced Surveillance Report, Greece, May 2020 https://ec.europa.eu/info/sites/info/files/economy-finance/ip127_en.pdf

coordination of actions is undertaken by the adoption of the UN 2030 agenda and sustainable development goals (SDGs) and the Paris climate agreement. These frameworks call for deep transformations in every country that require complementary actions by governments, civil society, science, and business. While significant progress is being made on some goals, no country is currently on track towards achieving all SDGs. Reaching the Sustainable Development Goals is possible only through global cooperation and partnerships.

The European Commission has launched an ambitious roadmap termed the Green Deal that aims to make Europe the first carbon-neutral continent by 2050. Supported by investments in green technologies, sustainable solutions and new businesses, the Green Deal can be a new EU growth strategy that sets a path for a transition that is just and socially fair. Involvement and commitment of the public and of all stakeholders is crucial to its success.

European ports are at the crossroads of supply chains. As clusters of transport, energy, industry and blue economy, they add great value and are at the service of the European economy and society. Under the right conditions, they can be a key strategic partner in making the European Green Deal happen (ESPO, 2019⁶).

The literature review demonstrates that the concept of sustainability is gaining awareness in the port industry, requiring them to attain new expertise and apply new practices (e.g. Balbaa, et al., 2009⁷; Comtois & Slack, 2007⁸; Darbra, et al., 2009⁹; Oliver, 2007¹⁰; Sletmo, 2002¹¹). Port sustainable development can be defined as the situation in which the port is able to meet its own needs, without endangering its own future (ESPO, 1995¹²). According to Abbott, 2008: "Sustainable port development is defined as new port or port extension plans that meet (or even exceed) typical operational requirements and that provide economic growth that is compatible with environmental and social needs, including ways to manage the transition to this new and balanced paradigm. Through an integrated and ecosystem-based approach, i.e. taking a broad range of requirements (operational, economic, environmental, and social) into account from the start, port development can be realised in an inclusive way, resulting in a vital and modern port that has a 'societal licence to operate'. Thus, for ports, sustainability implies business strategies and activities that meet the current and future needs of the enterprise and its

⁶ ESPO (European Sea Ports Organization), 2020. Espo Position Paper "Roadmap to implement the European Green Deal objectives in ports". Available from:

file:///C:/Users/Christantoni%20Maria/OneDrive%20-%20TAIPED/PORTS/ESPO%20Green%20Deal%20position%20paper%20Green%20Deal-FINAL_3.pdf

⁷ Balbaa, A., Liyanage, J. P., & Labib, A. (2009) Quality concepts for environmental sustainability in seaports: a case study for Egypt. *International Journal of Environmental Technology and Management*. 10 (3-4), pp.427-441.

⁸ Comtois, C. & Slack, B. (2007) *Restructuring the Maritime Transportation Industry: Global Overview of Sustainable Development Practices*. Montreal: Ministry of Transport, Quebec. [online]. Available from: www.bv.transports.gouv.qc.ca/mono/0938424.pdf [accessed 19 July 2011].

⁹ Darbra, R. M., Pittam, M., Royston, K. A., Darbra, J. P., & Journee, H. (2009) Survey on environmental monitoring requirements of European ports. *Journal of Environmental Management*, 90, pp.1396-1403.

¹⁰ Oliver, R. W. (2007) Ports keep making strides in economic sustainability. *AAPA Seaports Magazine*, Winter. [online]. Available from:

<http://www.aapaports.org/Publications/SeaportsDetail.cfm?itemnumber=8914#seaportsarticle5>

¹¹ Sletmo, G. K. (2002) The rise and fall of national shipping policies. In Grammenos, C.Th. *The Handbook of Maritime Economics and Business*. London: Informa Professional, pp. 471-494.

¹² European Sea Ports Organization (1995), *Environmental Code of Practice*, Brussels

stakeholders, while protecting human and natural resources. This means ports must balance their roles as coastal stewards, facilitators of commerce and transportation, and members of their respective communities (Goulielmos, 2000¹³).

Greece places particular emphasis on achieving sustainable development and strongly supports the long-term strategic vision by 2050 of an EU economy that does not burden the climate. After the recession, it is of utmost importance to adopt a development model that "will leave no one behind". Greece has a Voluntary National Review on the implementation of the 2030 Agenda for Sustainable Development and has set 8 priorities for adopting the SDGs, which are also in line with the new National Growth Strategy. The new Greek NECP (National Energy and Climate Plan) presents ambitious climate and energy goals through a comprehensive and coherent program of measures and policies. In addition to the NPEC, a National Strategy for Circular Economy has been developed as a horizontal action aiming at the optimal use of resources (energy, water, raw material) in every economic sector.

The principles and goals of the circular economy should be integrated in the design, operation and development of ports, but also in the activities of providers and users of port services, and of logistics services, which are developed around ports or in collaboration with port operators. This is particularly linked to the increased volumes of cargo and passengers in ports, but also to the significant environmental impact of port operations and logistics services. The integration of circular economy approaches could provide benefits and reduced costs for all actors involved. The country's policy framework regarding ports, as outlined in the national strategic plans (National Strategy for Sustainable and Fair Growth 2030¹⁴, The new Greek National Energy and Climate Plan (NECP)¹⁵, National Adaptation Strategy Climate Change (NASCC)¹⁶, National Research and Innovation Strategy for Smart Specialization 2014-2020 (RIS3)¹⁷, National Circular Economy Action Plan¹⁸) is presented below (**Table 1**):

¹³ Goulielmos, A. M. (2000) European policy on port environmental protection. *Global Nest: The International Journal*, 2(2), pp.189-197.

¹⁴ National Strategy for Sustainable and Fair Growth 2030. Available at:
<https://www.nationalgrowthstrategy.gr/images/Growth-Strategy.pdf>

¹⁵ National Energy and Climate Plan. Available at:
https://ec.europa.eu/energy/sites/ener/files/el_final_necp_main_en.pdf

¹⁶ National Adaptation Strategy Climate Change. Available at:
http://www.ypeka.gr/Portals/0/Files/Klimatiki%20Allagi/Prosarmogi/20160406_ESPKA_teliko.pdf

¹⁷ National Research and Innovation Strategy for Smart Specialization 2014-2020. Available at:
<http://www.gsrt.gr/Financing/Files/ProPeFiles19/Executive%20Summary-2015-09-17-v04.pdf>

¹⁸ National Circular Economy Action Plan. Available at:
https://circulareconomy.europa.eu/platform/sites/default/files/national_circular_economy_strategy.pdf

Table 1: The national port policy of Greece

Policy Framework	Year	Provisions for ports
National Strategy for Sustainable and Fair Growth 2030	2019	<p>The port industry, which is closely tied to the logistics sector and to the wider field of intermodal transport, is of vital importance to the national economy. The upgrade of rail and road links in Northern Greece and the Balkans which is already underway will expand the hinterland of Greek ports to Central Europe. The privatisation of the port of Thessaloniki was concluded in 2018, following that of Piraeus. Ten further ports belonging to HRADF that have registered good commercial results are in the process of entering into sub-concession agreements according to standing EU and international practices.</p> <p>The legal framework regulating the sea transport of Liquid Natural Gas has been completed, opening the way for investments such as the LNG terminal in the port of Alexandroupoli.</p> <p>The majority of a total of 1.100 large and small ports, bays and mooring locations have been registered in the PORTIS database system, which includes economic and technical data, for purposes of better planning and utilisation. Legislative measures (4504/2017) have resulted in limiting bureaucracy and the provision of mechanisms/tools to Port Authorities in order to finally legalize certain port installations. A working group set up by executives from the Ministry, the Ministry of Interior and relevant stakeholders is establishing practices and regulations for a sustainable national port management system. Meanwhile, technical and educational seminars are being offered by the Ministry to Port Authorities in order to assist them in drafting port master plans, manage EU and national funds and implement port safety procedures.</p>
The new Greek National Energy and Climate Plan (NECP)	2019	<p>The energy transition in the shipping sector is one of the main priorities for the period 2021-2030. The policy measures that have been specified in the above policy priority are divided in the following sections:</p> <ol style="list-style-type: none"> 1) Promoting infrastructure for the use of natural gas in shipping and 2) Promoting the use of RES, Electricity and Electrification, and energy efficiency improvement actions in ports.
National Adaptation Strategy Climate Change (NASCC)	2016	<p>One of the key objectives of the NASCC is to promote adaptation actions and policies in all sectors of the Greek economy, with emphasis on the most vulnerable ones;</p> <p>Coastal systems: raise quay walls in ports</p> <p>Maritime transport: Examination of the need for relocation, redesign and strengthening breakwaters to protect ports and in general of maritime transport infrastructure from larger waves.</p>
National Research and Innovation Strategy for Smart Specialization 2014-2020 (RIS3)	2015	<p>Some of the key priorities of RIS3 are:</p> <ol style="list-style-type: none"> 1) The Development of smart port infrastructures and use of information Port Community Information Systems (PCSs), 2) The Development of energy consumption optimization technologies in port operations
National Circular Economy Action Plan	2018	<p>The principles and goals of the circular economy (reduction of environmental footprint, optimization of production and maximization of the use value of products, minimization of waste, use and reuse of materials, etc.) should be integrated in the design, operation and development of ports, but also in the activities of providers and users of port services, and of logistics services, which are developed around ports or in collaboration with port operators.</p> <p>The integration of circular economy approaches could provide benefits and reduced costs for all actors involved. In this context, the following themes are proposed:</p> <ol style="list-style-type: none"> I. Analysis of how to best integrate circular economy approaches in the operation of ports, spanning across all stages (port design, port operation and port expansion) and across all relevant activities. II. Development of facilities and services to ensure that all port waste is appropriately managed. This is not limited to waste and residues by vessels, but also expands to waste from port construction projects, other port operations and port services in general. III. Promotion of cold ironing, to reduce air emissions and improve air quality locally.

The HRADF digital ESG Rating Tool

Hellenic Republic's Privatization Program constitutes an opportunity to attract Foreign Direct Investments (FDI) in key sectors of the Greek economy (e.g. tourism, transport, and energy). Thus, the integration of ESG/ Sustainability considerations into the privatization process is of high priority, as it would lead to more sustainable outcomes that will raise the bottom-line performance for people, planet and economic prosperity.

According to World Bank, 2002: "If governments do not include environmental issues in the privatization process, improvements may still occur, but they will be limited to those resulting from the broader incentives and capacities the new investors bring with them". Without a special effort to integrate sustainability issues into privatization process, most of the potential environmental gains will not be captured.

To that end, the HRADF in cooperation with the European Bank for Reconstruction and Development (EBRD) (funding this project and offering their expertise), the company Global Sustain (technical and advisory support of the tool) and the company Think Plus (digital adaptation of the technical requirements of the tool) created a digital ESG Rating Tool to evaluate the sustainable performance of its portfolio's assets by using key performance indicators (KPIs). EBRD strongly promotes the integration of environmental and social matters into investment decisions. By supporting the development of the ESG Rating Tool with funding and know how, it contributed its experience of almost three decades of ESG integration and international best practices in environmental and social due diligence and monitoring to the Greek privatization process.

This initiative is one of a very few cases worldwide that a Privatisation Fund incorporates sustainability into its procedures, and it is the first time that a public organization in Greece develops its own digital ESG Rating Tool.

The HRADF ESG Rating Tool has been designed to create a user-friendly application to help a user evaluate every asset of the HRADF portfolio. The tool is based on best international practices and frameworks (credible indicators included in internationally recognised reporting frameworks like GRI, CDP, TCFD, ISO or UN Global Compact) and is in alignment with the SDGs and the environmental and social performance requirements of major funding and investment institutions, in particular EBRD's Performance Requirements. The tool brings together existing resources developed by international organizations to help the user screen HRADF assets according to environmental, social and governance issues.

The ESG Rating tool allows the user to:

- rate each of the existing HRADF assets based on specified criteria
- perform benchmarking across asset classes and the entire asset portfolio
- receive high-level recommendations for ESG enhancements of the asset.
- Monitor progress towards sustainability transition over time

In addition to the general metrics of the tool, asset specific metrics have been developed for specific categories of the HRADF portfolio, among which are ports that we discuss in this paper (**Figure 2**).

Greece has the largest coastline throughout the EU. There is a well-developed port network within the country due to its peculiarity and the existence of many islands. Ports are engines for the Greek economy and can become accelerators for the circular economy. Furthermore, we should not forget the value of ports to the country's geostrategic policy as well as their role in the combined transport chain. The ports are very diverse in the markets they serve, the type of vessels they accommodate, geographical location, size, tasks and responsibilities. To achieve the objectives of the European Green Deal and to help the transition of the shipping sector each European port should develop a roadmap featuring a detailed plan of pathways for facilitating the sustainability transition.

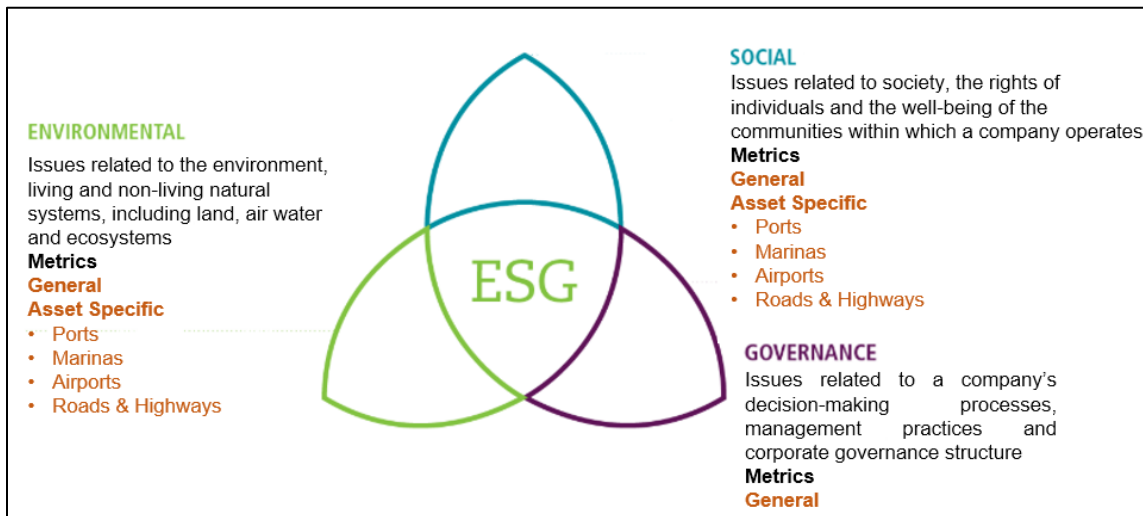


Figure 2: Structure of the HRADF ESG Rating tool

These roadmaps should take account of each port's particular circumstances. The ESG rating tool can be the roadmap for every port's sustainability transition and also provide a mechanism for monitoring the sustainability commitments and undertaking detailed impact performance of the investments before and after the implementation of each project. Ports that want to achieve sustainable development must cope with a specific sustainability policy by quantifying the targets. The HRADF ESG Rating tool provides a quantitative tool for port authorities to develop their sustainability port strategies, assess their sustainability performance, and identify strengths and weaknesses of their current operations for continuous improvement. The KPIs of the ESG Rating tool are organized around 13 categories (**Table 2**).

Table 2: Categories of the HRADF ESG Rating tool

ESG Classification	Categories
Environmental	Climate Change & Environment Water and Wastewater Management Energy, Emissions & Energy Efficient Buildings Biodiversity Waste, Material & Hazardous Material Management
Social	Employees Suppliers Community Ethical Operation
Governance	Highest Governance Body and Committees Remuneration Policies External Reporting and Communication

Recognizing the benefits that the integration of the principles and goals of the circular economy in the design, operation and development of ports have, as outlined above, a set of Circular Economy metrics has been defined (**Table 3**):

Table 3: Circular Economy metrics

ESG Classification	Metrics for Circular Economy
Environmental	<ul style="list-style-type: none">• How Does the strategy and business development of your organisation support circular economy?• Do you raise awareness and acceptance from citizens of surrounding area to support local circular initiatives?• Do you have circular economy practices for end-of-life (EOL) products?• Recycle (% of EOL)• Remanufacture (% of EOL)• Reuse (% of EOL)
Social	<ul style="list-style-type: none">• Do you implement ways of procurement to support a circular approach (e.g. CE – procurement framework)?

The tool has been designed to automatically generate four (4) scores, one for the Environmental assessment (the E score), one for the Social assessment (S score), one for the Governance assessment (G score); as well as and one overall ESG Score. It also generates an ESG Analysis & Rating Report (in pdf format) and high-level Recommendations for Improvement for further internal use by HRADF and other interested parties.

Discussion and concluding remarks

As mentioned above, the economic benefits of the privatization program are multiple: revenue from the sale of assets, foreign direct investment, increased operating and tax revenue from higher economic activity, positive impact on GDP growth and an increase in employment. However, the benefits can go far beyond, as privatization offers an opportunity to establish a genuine partnership between the public and the private sectors for the purpose of improving social conditions while creating the conditions for sustainable growth and development. HRADF contributes to the national effort of achieving sustainable development goals, leveraging its mission's flexibility to implement its program with the most sustainable manner, taking also into consideration economic sustainability. The goal, in addition to the reduction of public debt is laying the foundations of a competitive economy that respects the environment, creates employment positions and a cohesive society, by promoting innovation and enhancing adaptation of circular economy principles.

In ports, in particular, the efforts of integrating sustainability into their development and operation enhance their "license to operate" and increase their economic and environmental competitiveness, that is expected to be key of the "Blue Growth" of Greece, a long term sustainable development strategy of the marine and maritime sector, constituting an integrated maritime policy for the achievement of the objectives of the "Europe 2020" strategy for smart, sustainable and inclusive growth.

The covid-19 pandemic has highlighted the need to strengthen our commitment to implement the 2030 Agenda and the 17 Sustainable Development Goals, as is testing the limits of societies and economies around the globe and calls for an unprecedented level of scientific, social and economic cooperation and coordination. We must seize the opportunity of this crisis and built back better. By making progress on our global roadmap for a more inclusive and sustainable future, we can better respond to future crises.