

**ENHANCING LEGAL FRAMEWORK ON ENVIRONMENTAL PROTECTION
THROUGH MAQASID SHARIAH: APPROACHES FOR MUSLIM COUNTRIES**

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ABSTRACT

Environmental pollution is considered to be among the fastest growing problems at present and cause a serious concern globally due to its potential adverse impacts on environment, ecosystems and human health. Emission and discharges from industrial activities can contaminate soil, water resources and marine environment, release unwanted pollutants into the air, and contribute towards climate change. For developing countries such as Malaysia, the regulation of industrial waste is causing imminent challenges, not only in relation to having an effective legal framework on pollution control but also in achieving sustainable development goals. The objectives of this paper are to highlight the status of industrial waste, and to examine existing policies and regulatory strategies to control pollution as tools for sustainable development. Being a Muslim majority country, Malaysia's direction in industrial waste regulation can also be examined from the context of Islam. In this regard, Malaysia's quest in environmental governance can be validated based on Islamic values derived from divine principles. This paper suggests a need for Malaysia to incorporate and implement Islamic principles within a wider context of policy directives. If these principles can be successfully implemented, they will not only help the country effectively manage its industrial waste, but also enable it to become a model developing Muslim country in achieving sustainability targets.

Keywords: industrial wastes, pollution, sustainable development, Islamic principles, Maqasid Syariah

Acknowledgement: This article is funded by the IIIT-Strategic Research Project (SRP) 2020 'Applied Maqasid Studies'

INTRODUCTION

Environmental pollution due to industrial waste is becoming common occurrence in many parts of the world and Muslim countries including Malaysia are not excluded from facing the same problem. The adverse impact of industrial pollution globally is immense. For example, the World Health Organisation made an estimation that in 2016, ambient air pollution was responsible for 4.2 million deaths worldwide due to pollutants emitted from industries, household and other sources.¹ Currently air pollution is considered by the WHO to be the world's largest single environmental health risk and is associated with a wide range of serious illness, such as lung cancer, chronic obstructive pulmonary disease and cardiovascular diseases.² There is also a serious concern raised by the United Nations through the UNEP about discharges from industries and other pollution sources that are causing worsening conditions of the many rivers in Latin America, Africa and Asia due to industrial discharges since the 1990s.³ The importance of sustainable management of industrial activities has been recognized and supported by the United Nations through the 17 Sustainable Development Goals (SDG) under the 2030 Agenda for Sustainable Development.⁴ It is noted that industrial waste pollution is a crosscutting issue affecting different areas of sustainable development in each of the three sustainability domains: environment, economy, and society. It is acknowledged by the United Nations General Assembly Report of International Law Commission that the regulation of pollution is now becoming a paramount importance for countries worldwide requiring the setting up of policy and legal framework at the national level.⁵ However, in reality, the task of controlling pollution from industries can be a challenge, not only in dealing with complex interactions between discharges and the impact on the environment or human health, but in applying the most suitable policy directive in order to achieve objectives of sustainable development. It is undeniable that progressive economic development

¹ World Health Organization, "Burden of Disease from Ambient Air Pollution for 2016," accessed August 25, 2021, https://www.who.int/airpollution/data/AAP_BoD_results_May2018_final.pdf.

² World Health Organization, "Global Health Observatory (GHO) Data", accessed August 25, 2021, <https://www.who.int/data/gho/data/themes/theme-details/GHO/air-pollution>

³ UNEP 2016. A Snapshot of the World's Water Quality: Towards a global assessment. United Nations Environment Programme, Nairobi, Kenya, 162

⁴ "Transforming Our World: The 2030 Agenda for Sustainable Development." United Nations, accessed August 25, 2021, <https://sustainabledevelopment.un.org/content/documents/>

⁵ "Report International Law Commission 2015" United Nations General Assembly, accessed August 25, 2021, https://legal.un.org/ilc/sessions/67/a_70_10_advance_unedited.pdf.

that is taking place in Malaysia until now has allowed the nation to raise its socio-economic status and improve living condition of the people.⁶ Nevertheless, adverse impact of such development is also felt. In Malaysia, most of industrial pollution problems are associated with increased concentration of people and economic activities in urban and sub-urban areas, as well as due to the growing numbers of, industries, agricultural areas and transportation.⁷ Malaysia's current position and aims pertaining to pollution control can be established through the review of its environmental related policies which also contain short-term and long-term strategies aiming at sustainable development.⁸ The extent of Malaysia's commitment on the matter can further be evaluated through the provisions of a number of legislations and ratification of relevant international conventions.⁹

The objectives of this paper are to highlight the status of industrial waste, and to examine existing policies and regulatory strategies to control pollution as tools for sustainable development. Being a Muslim majority country, Malaysia's direction in industrial waste regulation can also be examined from the context of Islam. Malaysia's quest in environmental governance can be validated based on Islamic values derived from divine principles. This paper suggests a need for Malaysia to incorporate and implement Islamic approaches towards environmental protection within a wider context of policy directive. If these principles can be successfully implemented, they will not only help the country effectively manage its industrial waste, but also enable it to become a model developing Muslim country in achieving its sustainability targets. The research methodology undertaken is primarily qualitative through primary and secondary data. Primary data refers to include national policies and legislation while secondary sources are publication and data in the forms of journals, books, thesis and official documents. To assess Malaysia's adherence to the Islamic teaching relating to environmental protection, the study also explores principles prevail in Islam by referring to relevant provisions of the *Quran* and *Hadith* of the Prophet (SAW). The

⁶ "Eleventh Malaysia Plan 2016," Economic Planning Unit, accessed August 25, 2021, <https://www.epu.gov.my/>

⁷ "Annual Report 2017," Department of Environment, accessed August 25, 2021, <https://www.doe.gov.my/>.

⁸ Maizatun Mustafa, "Environmental Quality Act 1974: A Tool Towards the Implementation and Achievement of Malaysia's Environmental Policy." *IIUM Law Journal* 19, no. 1 (2011): 1-3.

⁹ Maizatun Mustafa, *Environmental Law in Malaysia*, 3rd ed. (Zuidpoelsingel, The Netherlands: Kluwer Law International, 2016).

policy and law on environmental protection in Malaysia is also discussed in light of relevant Islamic principles and international guidance.

MALAYSIA IN GENERAL

Malaysia is located in Southeast Asia and consists of two geographical regions divided by the South China Sea: the Peninsular Malaysia or West Malaysia, and East Malaysia. The former shares common land borders with Thailand and Singapore, whereas the latter is situated in Borneo and shares a common land boundary with Brunei and Indonesia. Malaysia is recognised as one of 17 mega-diverse countries in the world and is blessed with vast arrays of forest and marine ecosystems.¹⁰ Its tropical rainforests with complex ecosystems constitute the core of biodiversity and natural heritage resulting in very rich species of flora and fauna.

Table 1: Ethnic Groups of Malaysia

Ethnic Composition	Percentage
Malay	50.1%
Chinese	22.6%
Indigenous Bumiputra groups other than the Malays,	11.8%
Indian	6.7%
Others	0.7%

*Source: Department of Statistics*¹¹

The current population of Malaysia is around 32 million and consists of a multiracial society.¹² Its main divisions of ethnic groups are Malays, Chinese, Indians, and other indigenous groups. The demographic composition in the country are provided in Table 1 above. In Malaysia, the Malays who generally practice the religion of Islam are the largest ethnic group accounting for 50.1% of

¹⁰ "Biodiversity in Malaysia," Ministry of Natural Resources and Environment, accessed August 26, 2021, <https://www.ketsa.gov.my/>

¹¹ "Population & Demography," Department of Statistics Malaysia Official Portal, accessed August 25, 2021, <https://www.dosm.gov.my>

¹² Ibid

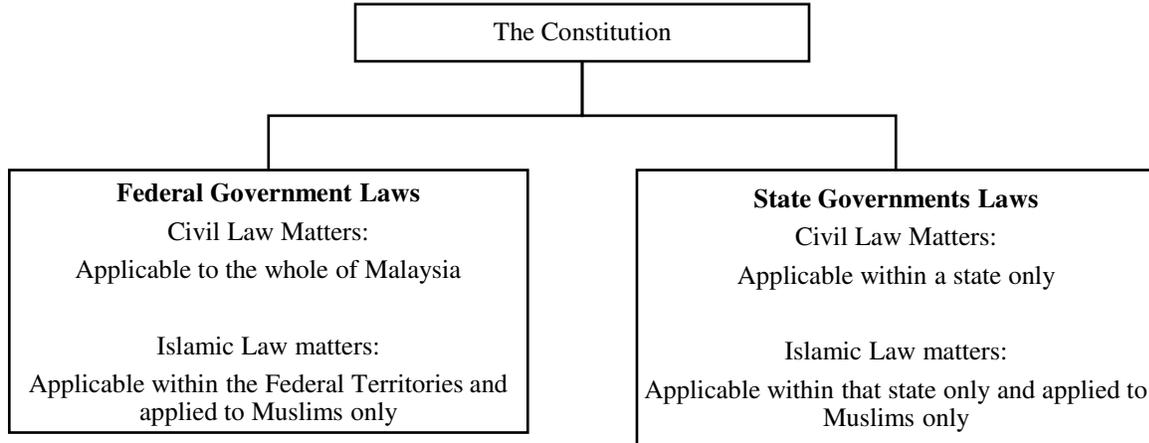
the total population. While Islam is the most widely professed religion and considered to be the official religion of Malaysia, as a multi-racial nation, other religions are also embraced including Buddhism (19.8%), Christianity (9.2%) and Hinduism (6.3%).

SYSTEM OF GOVERNMENT

Malaysia has a decentralized administrative jurisdiction of federal and state governments. The Federal Constitution¹³ is the highest law which provides the power to legislate under the jurisdiction of the federal and state governments. Laws that are legislated by the parliament are considered as federal laws and applicable to all states in Malaysia uniformly. Whereas state government can make laws on state matters which are applicable within that particular state only. It is also relevant to mention that Islamic law is another important source for Malaysia. However, its application is very limited in scope and applies to Muslims only. Under the Constitution, areas pertaining to Islamic matters are under the jurisdiction of the state governments. Thus each of the states in Malaysia has a constitutional right to enact Islamic law which is applicable to Muslims in their territory.¹⁴ Article 74 of the Federal Constitution, read together with the State List, prescribes for Islamic matters that fall under the jurisdiction of the state such as personal and family law of persons professing the religion of Islam including succession, marriage and divorce, and guardianship. Other matters are *waqf*, charitable institutions, *zakat*, *baitulmal* and mosque. Thus, by virtue of the constitutional provisions, each state is free to enact its own version of Islamic law whereas for the Federal Territories which are under the plenary control of the federal government, they can also develop their own body of Islamic law within the Territories (See Figure 1 below).

¹³ "Federal Constitution," Attorney General Chambers, accessed August 25, 2021, <http://www.agc.gov.my/>

¹⁴ Farid S. Shuaib, "The Islamic legal system in Malaysia." *Pac. Rim L. & Pol'y J.* 21, no 1, (2012): 85-113

Figure 1: Constitution's Division of Legislative Powers

In relation to jurisdiction pertaining to the environment, the constitutional provision with the most profound effect is the division of law-making powers between the state and federal governments. While natural resources such as forestry and rivers are under the jurisdiction of states, matters such as factories, noxious substances and wastes management come within the jurisdiction of federal government.¹⁵ Another constitutional provision that are highly influential in environmental governance is the one that permits the federal government to make laws in respect of State List in order to implement international treaties. This provision is pertinent to allow for domestic effects of the ratified international treaties.¹⁶ Thus even though constitutional distribution of powers renders both federal and state governments competent to deal with environmental matters, in most situations almost all of the laws relating to industrial waste pollution are federal laws and not state law.¹⁷

While Malaysia is a country of decentralized administrative jurisdiction, administratively, there is no specific ministry that deals exclusively with the environment. Previously, the highest government body in charge of the subject matter was the Ministry of Natural Resources and Environment. However, after the general election in May 2018, a number of ministerial

¹⁵ Maizatun Mustafa, *Environmental Law in Malaysia*, 3rd ed. (Zuidpoelsingel, The Netherlands: Kluwer Law International, 2016).

¹⁶ Maizatun Mustafa, "Environmental Quality Act 1974: Development and Reform." *Malayan Law Journal* 2 (2009).

¹⁷ Maizatun Mustafa, *Environmental Law in Malaysia*, 3rd ed. (Zuidpoelsingel, The Netherlands: Kluwer Law International, 2016).

reorganization took place, namely the establishment of two new Ministries. One of which was the Ministry of Energy, Science, Green Technology and Climate Change.¹⁸ This new Ministry was the reorganisation of three former Ministries, namely the Ministry of Science, Technology and Innovation, the Ministry of Energy, Green Technology & Water, and the Ministry of Natural Resources & Environment. Another one was the Ministry of Water, Land and Natural Resources which was formerly known as the Ministry of Natural Resources and Environment.¹⁹ In 2020, there has been yet another change of government in Malaysia with another reorganisation of ministries related to the environment. Currently, matters relating to the environment come under the new Ministry of Environment and Water. Under this Ministry, the Department of Environment²⁰ is the main body dealing with environmental protection and management. It also has comprehensive jurisdiction over environmental administration and is charged with formulating rules and enforcing legislation on environmental pollution and industrial wastes for the whole country.

INDUSTRIAL DEVELOPMENT AND ENVIRONMENTAL POLLUTION

Since independence, Malaysia has practiced a centralised economic development planning system and embarked on industrialisation as a major goal of growth. As a result, industrial sector has become the fastest growing sector and the dominant force in economic development. After the 1970s, diversification of economy from mining and agricultural sectors to manufacturing activities has led to a strong economic growth.²¹ Thus, in a period of nearly six decades Malaysia has risen from a country where majority of the population was poor with an over dependence on agriculture and tin mines to one dominated by the industrial growth and higher increase in gross domestic product (GDP). At present, Malaysia is considered as a developing country by the Kyoto Protocol²²

¹⁸ Ministry of Energy, Science, Green Technology and Climate Change, 2019, accessed August 25, 2021. <https://www.mestecc.gov.my/web/>

¹⁹ Maizatun Mustafa, "Indicators for Sustainable Development: Understanding the Criteria for a Successful Sustainability Relevant to Environmental Law in Malaysia." *International Journal of Engineering & Technology* 7, no. 3.30 (2018): 141-147, <https://doi.org/10.14419/ijet.v7i3.30.18216>.

²⁰ "Official Portal of Department of Environment," Department of Environment, accessed August 25, 2021, <https://www.doe.gov.my/>

²¹ Department of Statistics Malaysia, "Yearbook of Statistics Malaysia 2010." (2011).

²² "Parties and Observers," United Nations Climate Change, 2019, accessed August 25, 2021, <https://unfccc.int/parties-observers>.

while the World Bank²³ categorises it as an upper middle-income country which is expected to reach the high-income threshold sometime between 2020 and 2024. In addition, the Global Islamic Economy Indicator that measures the development of the Islamic economy in 73 countries had put Malaysia together with the United Arab Emirates as having the most developed Islamic economy ecosystems in 2018.²⁴ Since the 1980s, Malaysia's economic development continues to progress with the GDP showing an upward trend. For example, in 2011, Malaysia's economy managed to grow 5.1 percent, whereas for 2015, the GDP was 5.0 percent with main contributions were from the services sector (54 percent) and manufacturing sector (25 percent) followed by mining and quarries (9 percent), and agriculture (9 percent).²⁵

While Malaysia is enjoying the benefits of rapid economic growth and improvements in technology and industrialization, environmental protection and pollution control continue to become main challenges. Previously, major environmental issues stemmed mainly from the lack of development and inadequate infrastructure facilities. At present, Malaysia exhibits most of the environmental problems that are typical of many developing countries, namely that of development activities.²⁶ Industrial sector has been identified to be main sources of environmental pollution with the manufacturing and agro-base industries as significant contributors of water and air pollution. In coastal waters, main sources of marine pollution are oil and grease contamination, as well as heavy metals from uncontrolled industrial discharges.²⁷ Hazardous waste generation from industries is another source of environmental pollution affecting Malaysia at present. In 2017, a total of 2.02 metric tonnes of hazardous waste was generated, a slight decrease as compared to 2.76 metric tonnes reported in 2016.²⁸ The effects of industrial pollution are vast and causing some of the most significant environmental disasters both at domestic and regional levels. They also affect public health and ecosystem, and affecting the economy in the long term.²⁹ For example, the

²³ "Malaysia," The World Bank in Malaysia), accessed August 25, 2021, <https://www.worldbank.org/en/country/malaysia>

²⁴ "State of the Global Islamic Economy 2018/19," accessed August 25, 2021, <https://www.salaamgateway.com>

²⁵ Economic Indicators," Department of Statistics Malaysia Official Portal, accessed August 25, 2021, <https://www.dosm.gov.my/>

²⁶ "Annual Report," Department of Environment, 2017, accessed August 25, 2021, <https://www.doe.gov.my/> .

²⁷ "Malaysia Environmental Quality Report," Department of Environment, accessed August 25, 2021, <https://www.doe.gov.my/>.

²⁸ "Compendium of Environmental Statistics Malaysia 2018/2019," Department of Statistics Official Portal, November 30, 2018, accessed August 25, 2021, <https://www.dosm.gov.my/>.

²⁹ "Annual Report," Department of Environment, accessed August 25, 2021, <https://www.doe.gov.my/> .

release of chlorofluorocarbon contributes towards the depletion of the ozone layer causing the earth to be more prone to exposure of the harmful ultra violet radiations. Coincidentally, challenges facing Malaysia in dealing with industrial waste pollution relates directly to the need to reduce greenhouse gas emissions that contributes towards climate change which is a global concern for all nations including that of Muslim countries.³⁰ Past experience has shown that increased economic development can lead to increase emissions of greenhouse gases. Mitigation measures which are necessary to help Malaysia attain climate change targets would therefore include reduction of environmental pollution loads across economic and other activities.³¹

Policy on Sustainable Development

Even though Malaysia practices a division of federal and state governments, strong federalism through the provision of the Constitution means that most of matters pertaining to environmental pollution, including formulating of policy directives and enacting the laws, are under the jurisdiction of the federal government. For the same reason, environmental related policies are mostly conducted in a top down manner from the government to the people. As a member state of various United Nations environmental conventions, Malaysia is highly influenced by, and committed itself to, the United Nations' sustainability agendas. It was pursuant to the participation of the United Nations Conference on the Human Environment in Stockholm in 1972 that Malaysia introduced its first ever environmental policy directives, enacted a federal environmental law, and established an environmental agency to enforce the law.³²

³⁰ "Malaysia Biennial Update Report to the UNFCCC," Energy Commission Malaysia, accessed August 25, 2021, <http://www.st.gov.my>.

³¹ "Malaysia National Climate Change Portal," Ministry of Natural Resources and Environment, accessed August 25, 2021, <https://www.ketsa.gov.my/>

³² Maizatun Mustafa, "Environmental Quality Act 1974: Development and Reform." *Malayan Law Journal* 2 (2009).

Table 2: Environmental Related Policies

Scope		Policy Document
Climate change	1	National Policy on Climate Change (2009)
	2	National Energy Policy (1979)
	3	National Energy Efficiency Action Plan (2015)
	4	National Renewable Energy Policy and Action Plan (2008)
	5	National Biofuel Policy (2006)
	6	National Green Technology Policy (2009)
	7	Green Technology Master Plan Malaysia (2017-2030)
	8	National Transport Policy (2019-2030)
	9	Low Carbon City Framework (2011)
	10	National Policy on Industry 4.0 (2018)
	11	Policy and Mechanism on National Disaster and Relief Management (2007)
	12	National Agro-Food Policy (2011-2020)
	13	Intended Nationally Determined Contribution of The Government of Malaysia (2015)
	14	Malaysia Third National Communication & Second Biennial Update Report to the UNFCCC (2018)
	15	Biennial Update Report (2020)
Environment	1	National Policy on the Environment (2002)
	2	National Water Resources Policy (2012)
	3	National Policy on Biological Diversity (2016 – 2025)
	4	National Forestry Policy (1978, revised 1992)
	5	National Solid Waste Management Policy (2016)
	6	National Cleanliness Policy (2019)
National Development Plan	1	12th Malaysia Plan (2021-2025)
	2	National Physical Plan 3 (2016-2020)

Table 2 above contains the list of existing policies relevant to the environment in Malaysia. Specifically, in 2002, the National Policy on the Environment Malaysia was officially introduced to provide a framework aims at promoting economic, social and cultural progress through environmentally sound and sustainable development. The Policy adopts broad-based strategic approaches on key areas such as prevention and control of pollution and are used as a basis to implement environmental strategies within the legal framework. These policy directives are supported by the current 12th Malaysia Plan which recognizes the importance of environmental sustainability as part of a comprehensive socio-economic development plan as well as for the purpose of environmental protection and climate change mitigation.³³ In essence, these policy directives are main documents in guiding the manner in which environmental law is to be formulated and enforced including that pertaining to environmental protection and pollution control. At the international level, Malaysia's direct involvement in the climate change process began when it ratified the United Nations Framework Convention on Climate Change (UNFCCC), followed by the Kyoto Protocol and the Paris Agreement. Under the Kyoto Protocol, Malaysia is categorized as a developing country that does not have a mandatory greenhouse gas emissions target. While the Kyoto Protocol is not legally binding for Malaysia, as one of the Non-Annex 1 parties. In 2016 during the Paris Agreement, Malaysia pledged to reduce its GHG emissions intensity (per unit of GDP) by 45% by 2030 relative to the emissions intensity in 2005.

Table 3: Regulatory Agencies

Scope		Regulatory Agency
Climate Change	1	Ministry of Energy and Natural Resources
	2	Ministry of Environment and Water
	3	Ministry of Agriculture and Food Industries
	4	Ministry of Transport
		Ministry of International Trade and Industry
		Ministry of Science, Technology & Innovation
Environment	1	Department of Environment, Ministry of Environment and Water

³³ "12th Malaysia Plan 2020," Economic Planning Unit, accessed August 25, 2021, <https://www.epu.gov.my/>

Malaysia has a decentralized administrative jurisdiction of federal, state and local governments. The Constitution is the supreme law and the setting of legal frameworks on the environment and climate change stems from the Constitution's distribution of powers as provided in the legislative lists under the 9th schedule through List I (Federal List), List II (State List) and List III (Concurrent List). From these distribution of powers, regulatory agencies are set up to regulate aspects of environmental protection as provided in Table 3 above.

As a developing country, the concept of sustainable development is pertinent for Malaysia as it provides guidance of an economic compatibility of the environment and development.³⁴ The United Nations defined the term "sustainable development" as "*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*".³⁵ Later, the Millennium Development Goals (MDG) added a new dimension to the concept emphasising the quality of life as an overall concept, in addition to the carrying capacity of its supporting ecosystems.³⁶ In 1992 the United Nations' conference subsequently seen the adoption of the Rio Declaration on Environment and Development by member states. This Declaration precisely consists of a preamble and 27 principles focussing on humans and their rights to healthy and productive lives in harmony with nature.³⁷ The finalised Rio Declaration is the result of long debates over procedure and substantial negotiations of both developed and developing nations including Malaysia³⁸ which reflects a delicate balance of principles considered important by both industrialised and developing countries.³⁹ Content of the Declaration, as summarised in Table 4

³⁴ "Malaysia Sustainable Development Goals Voluntary National Review 2017," Economic Planning Unit, accessed August 25, 2021, <https://www.epu.gov.my/>

³⁵ World Commission on Environment and Development, *Our Common Future* (Oxford, New York: Oxford University Press, 1987).

³⁶ "Malaysia Millennium Development Goals Report, 2015." United Nation Malaysia, 2015, accessed July 25, 2019, https://www.un.org/millenniumgoals/2015_MDG_Report

³⁷ United Nations Conference on Environment, and Development (1992: Rio de Janeiro, Brazil). *Report of the United Nations Conference on Environment and Development: Rio de Janeiro, 3-14 June 1992*. Vol. 1. New York: United Nations, 1993, Resolutions Adopted by the Conference. Sales No. E.93.I.8 and corrigendum. Resolution I, annex I (Rio Declaration on Environment and Development). Resolution I, annex II.

³⁸ Maizatun Mustafa, "Climate Change Litigation: A Possibility for Malaysia?", (paper presented at the Climate Change Litigation Scholarship Workshop, June 7-8 2018) National University Singapore NUS, Singapore. (Unpublished).

³⁹ United Nations Conference on Environment, and Development (1992: Rio de Janeiro, Brazil). *Report of the United Nations Conference on Environment and Development: Rio de Janeiro, 3-14 June 1992*. Vol. 1. New York: United

below, promotes principles such as the centrality of human beings to the concerns of sustainable development; the primacy of poverty eradication, and the importance of the environment for current and future generations. Apart from that, the Declaration also recognises the need for a special consideration for development based on principles such as common but differentiated responsibilities, polluter pays, and precautionary approach.⁴⁰ Other important concerns highlighted include the needs for participation and the importance of specific groups for sustainable development and the requirement of nations to put in place legal instruments to deal with environmental matters.

Table 4: The Rio Declaration on Environment and Development

1.Human is the centre of sustainable development.	14. States should discourage other states from activities that cause environmental degradation.
2.State has the right to exploit their resources, and be responsible to ensure no damage is caused to the environment of other states.	15. Precautionary approach shall be applied by state according to their capabilities.
3.Right to development must meet developmental and environmental needs of present and future generations.	16.National authorities to promote internalization of environmental costs and economic instruments. The polluter should bear the cost of pollution.
4.To achieve sustainable development, environmental protection shall constitute an integral part of the development process.	17.Environmental impact assessment undertaken for activities that have impact on the environment.
5.All states and people to eradicate poverty as a requirement for sustainable development.	18.States to notify of natural disasters that produce harmful environmental effects on other states.
6.Special situation and needs for developing countries shall be given special priority.	19.States to notify affected states on activities that have adverse transboundary environmental effect.
7.States shall cooperate to conserve, protect and restore health and integrity of the ecosystem.	20.Women have a vital role in environmental management and development.

Nations, 1993, Resolutions Adopted by the Conference. Sales No. E.93.I.8 and corrigendum. Resolution I, annex I (Rio Declaration on Environment and Development). Resolution I, annex II.

⁴⁰ Maizatun Mustafa, "Climate Change Litigation: A Possibility for Malaysia?", (paper presented at the Climate Change Litigation Scholarship Workshop, June 7-8 2018) National University Singapore NUS, Singapore. (Unpublished).

8. To achieve sustainable development, State should reduce unsustainable patterns of production.	21. The creativity, ideals and courage of the youth should be mobilized to forge a global partnership.
9. States should cooperate to strengthen capacity-building for sustainable development.	22. Indigenous people and other local communities have a vital role in environment.
10. Environmental issues best handled by citizen through access to information and participation. States to facilitate and provide access to public awareness and participation.	23. Environment and natural resources of people under oppression shall be protected.
11. States shall enact environmental legislation and reflect the environment and development context.	24. Warfare destruct sustainable development.
12. States should cooperate to promote a supportive and open international economic system.	25. Peace, development and environmental protection are interdependent and indivisible.
13. State to develop law on liability and compensation for the victims of pollution.	26. States to resolve environmental disputes peacefully in accordance with the UN Charter.
	27. States and people shall cooperate and in a spirit of partnership to fulfil the Declaration's principles.

Source: *United Nations Conference on Environment and Development*⁴¹

The latest progress on sustainable development by the United Nations was in 2015 when a guidance of Sustainable Development Goals (SDG) was agreed upon by nations worldwide as a new perspective in dealing with development issues encountered by all countries, regardless of their level of development, targeted to be achieved by the year 2030 (See Table 5). The SDG has 17 high level goals and 169 specific targets, encompassing the social, economic and environmental dimensions of development.⁴² These targets are designed to be global in nature and universally applicable. They also take into account different national realities, capacities and levels of

⁴¹ United Nations Conference on Environment and Development (1992: Rio de Janeiro, Brazil). *Report of the United Nations Conference on Environment and Development: Rio de Janeiro, 3-14 June 1992*. Vol. 1. New York: United Nations, 1993, Resolutions Adopted by the Conference. Sales No. E.93.I.8 and corrigendum. Resolution I, annex I (Rio Declaration on Environment and Development). Resolution I, annex II.

⁴² "Transforming Our World: The 2030 Agenda for Sustainable Development." United Nations, accessed August 25, 2021, <https://sustainabledevelopment.un.org/content/documents/>

development while at the same time acknowledge national policies and priorities. The SDG was initially developed based on the objectives of MDG which was concluded at the end of 2015. The MDG which was applicable only to developing countries specifically focused on the most vulnerable populations, and addressed issues such as extreme poverty, hunger, disease, gender equality, education, and environmental sustainability.⁴³ However, the SDG which continues to carry MDG's mission is applicable to all state members universally, whether they are developed or developing countries. The SDG is also more comprehensive and ambitious than the MDG as it requires inclusive and participatory approaches through the incorporation of the three sustainable development dimensions economic, social and environmental .⁴⁴

Table 5: Sustainable Development Goals (SDG)

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| <p>Goal 1. End poverty in all its forms everywhere.</p> <p>Goal 2. End hunger, achieve food security and improved nutrition, and promote sustainable agriculture.</p> <p>Goal 3. Ensure healthy lives and promote well-being for all at all ages.</p> <p>Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.</p> <p>Goal 5. Achieve gender equality and empower all women and girls</p> <p>Goal 6. Ensure availability and sustainable management of water and sanitation for all.</p> <p>Goal 7. Ensure access to affordable, reliable, sustainable, and modern energy for all.</p> <p>Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.</p> <p>Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.</p> <p>Goal 10. Reduce inequality within and among countries.</p> <p>Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable.</p> <p>Goal 12. Ensure sustainable consumption and production patterns.</p> <p>Goal 13. Take urgent action to combat climate change and its impacts.</p> <p>Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development.</p> <p>Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss.</p> <p>Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.</p> <p>Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable</p> |
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⁴³ "The Millennium Development Goals Report 2015," United Nations, accessed August 25, 2021, https://www.un.org/millenniumgoals/2015_MDG_Report

⁴⁴ "Transforming Our World: The 2030 Agenda for Sustainable Development." United Nations, accessed August 25, 2021, <https://sustainabledevelopment.un.org/content/documents/>

development.

From the review of the overall objectives of sustainable development including the current SDG, it can be noted that many of the principles are devised to address development concerns such as “the right to development” and to highlight the special needs of the developing countries. Malaysia has strongly associated itself with short or medium term objectives of rapid industrialisation, high economic growth and increased material well-being in its development.⁴⁵ Malaysia’s strong tendency towards economic development has raised a concern of how the country is to deal with the environment, which is threatened to be destroyed as a result of rapid industrialisation. These development strategies, which allow Malaysia to sustain growth experienced, must continue to be undertaken but at the same time their approach needs to re-evaluated in consonance with the ambitious SDG targets.⁴⁶ In this regard, it is argued that, the choice of a strategy for sustainable development must also address directly the issue of inter-generational equity. It is also on this basis that the task of ensuring environmental protection is appraised against the overall framework of the national socio-economic objective and its practices in environmental management. Specifically in the context of SDG, industrial wastes management is considered a cross cutting issue impacting various areas within each of the three sustainability domains of environment, economy, and society.

For example, Goal 6 on water and sanitation explicitly addresses the problem of waste dumping in its Target 6.3: *“By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally”*⁴⁷. Whereas Target 12.4 states as follows: *“By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse*

45 “Eleventh Malaysia Plan 2016,” Economic Planning Unit, accessed August 25, 2021, <https://www.epu.gov.my/>

46 “Malaysia Sustainable Development Goals Voluntary National Review 2017,” Economic Planning Unit, accessed August 25, 2021, <https://www.epu.gov.my/>

47 “Target 6.3 – Water Quality and Wastewater,” UN Water, November 3, 2017, accessed August 25, 2021, <https://www.sdg6monitoring.org/indicators/target-63>.

impacts on human health and the environment".⁴⁸ Thus most of the 17 SDGs and their targets can be directly linked to industrial waste pollution management particularly concerning public health, living conditions and the ecosystem. Consequently, Malaysia must manage its industrial waste pollution guided by the SDG aspiration in order to constitute a contribution to sustainable development.

Sustainable Development and Islamic Principles

For Malaysia, while environmental protection and pollution control objectives are based on the concept of sustainable development and other related international law principles, Islamic elements can however be found directly or indirectly embedded within some of the national policies. For example in 2006, Islamic development principle was officially embodied within the Ninth Malaysia Plan (2006-2010) through the concept of Islam *Hadhari* as a comprehensive and universal development framework for the nation.⁴⁹ The framework was formulated as an approach that "enjoins progress and advancement as an imperative for the people, while being firmly rooted in the universal values and injunctions of Islam". This concept which was introduced in accordance with Islamic teachings founded in the *Quran* was aimed at achieving certain principles which Muslim nations must demonstrate including protection of the environment.⁵⁰ More importantly this concept which was propagated as part of institutional reform in the governance process was meant to direct Malaysia as a Muslim country to undertake obligation and to demonstrate its competency to be part and parcel of the process of globalisation and modernization, including the practice of environmental protection.⁵¹

⁴⁸ "Goal 12: Ensure Sustainable Consumption and Production Patterns – United Nations Sustainable Development," United Nations, 2019, accessed August 25, 2021, <https://www.un.org/sustainabledevelopment/sustainable-consumption-production/>.

⁴⁹ "Ninth Malaysia Plan 2005-2010," Economic Planning Unit, 2005, accessed August 25, 2021, <https://www.epu.gov.my/>

⁵⁰ Ahmad Atory Hussain, "Islam Hadhari: Suatu Kesenambungan Dasar Penerapan Nilai-Nilai Islam selepas Era Tun Dr. Mahathir Mohamad." *REKAYASA—Journal of Ethics, Legal and Governance* 2 (2006): 1-10.; Maizatun Mustafa, *Environmental Law in Malaysia*, 3rd ed. (Zuidpooslingel, The Netherlands: Kluwer Law International, 2016).

⁵¹ Abd Razak, Ratna Roshida, and Muhammad Hasru Zakariah. "Islam Hadhari: Apa Dan Kenapa (Islam Hadhari Approach: What is it and Why)." *Jurnal Hadhari: An International Journal* 2, no. 1 (2010): 1-21.

The concept of Islam *Hadhari* is not the only measure undertaken by Malaysia in assimilating and upholding Islamic principles within its policy directives and governance. In the strive towards attaining the stipulated SDG targets, Malaysia continues to be concerned about its level of commitment from the perspective of Islam.

On the premise of the need to ensure continuous improvement in government's performance on matters which include environmental protection, Malaysia subsequently implemented the first ever Shariah Index in the world.⁵² This index which was introduced in 2015 is meant to provide a benchmark to determine if the country is fulfilling the objectives of five aspects of the *Maqasid Syariah* (objective of Islamic principles) namely the religion, protection of life, protection of the mind, protection of the race and protection of property. Apart from environment, this benchmarking covers other areas such as judicial, economy, education, infrastructure and environment, health, culture, politics and social.⁵³ Basically, this Index applies a scientific measurement method to measure two important functions:

- evaluating the seriousness of government efforts from year to year in meeting Islamic standards concerning government policies and programs, and
- identifying improvements that needed to be given focus to achieve better benefits following the adoption of universal values in Islam.

Under the Index, specific environmental areas evaluated include environmental conservation, disaster management and environmental awareness. For the year 2017, the Index gave the score of 86.7 per cent for aspect of the environment. This score was given on the basis of the continuously prioritising aspects given in waste management policies to ensure environmental sustainability and the well-being of the community.⁵⁴ For the purpose of the Index, evaluation was done on three main stakeholders namely policy makers, enforcement agencies and society to gauge the extent of which laws and policies as well as programmes can be realised and implemented successfully

⁵² "Malaysia Launches First Ever Syariah Index," *The Star*, February 11, 2015, accessed August 23, 2021, <https://www.nst.com.my/news/nation/>

⁵³ "Indeks Syariah Malaysia: Model Tadbir Urus Berteraskan Maqasid Syariah" Jabatan Kemajuan Islam Malaysia, 2015, accessed August 22, 2021, <https://www.islam.gov.my/en>.

⁵⁴ Tasnim Lokman, "Malaysian Syariah Index Score Goes up to 76.06 Pct for 2017," *New Straits Times*, August 3, 2017, accessed August 23, 2021, <https://www.nst.com.my/news/nation/>.

based on the five aspects of *Maqasid Syariah*. The basis of *Maqasid Syariah* could be found in various verses of the Quran⁵⁵. For example, in Verse 17:9, Allah says “*Verily this Quran doth guide to that which is most right (or stable), and giveth the Glad Tidings to the Believers who work deeds of righteousness, that they shall have a magnificent reward*” . Al Raysuni as cited in Saged et al had defined *Maqasid Shariah* as “the goals set by the Law to achieve the interests of the servants”, which is referred to as goals and objectives sought by mankind that promote social justice.⁵⁶

The application of the values of *Maqasid Syariah* can be gauged through the evaluation conducted on these stakeholders which is expected to provide a picture of position of Malaysia in relation to its Islamic compliance. Through this index, both the government and civil society can utilize report to identify priorities for action, understand key implementation challenges, track progress, ensure accountability, and identify gaps that must be closed in order to achieve the *Maqasid Syariah*. At the international level, Malaysia’s commitment towards sustainable development from the perspective of Islam can be referred to within the Islamic Declaration on Sustainable Development.⁵⁷ This Declaration was adopted by the Environment Ministers of the 57 OIC Member States participating in the fifth Islamic Conference of Environment Ministers in 2012 and was formulated within the framework of the Islamic world’s participation in the Rio+20 Summit.

Malaysia is a member state of the OIC which welcomed the holding of the United Nations Conference on Sustainable Development 2012 and confirmed the commitment of environment ministers in the Islamic world to cooperating on achieving the goals of this Conference. Among the emphasis of the Declaration include ethical norms and humankind’s responsibility in the utilisation, allocation and preservation of natural resources. It also stresses the adoption of more productive and sustainable development patterns through the rational use of natural resources, with focus on placing ecosystem balance at the core of economic development and social progress.

⁵⁵ Sabariah Yaakub and Nik Ab Halim Nik Abdullah, 2020, “Towards Maqasid Shariah in Sustaining The Environment through Impactful Strategies”, *International Journal of Islamic Business*, VOL 5 ISSUE 1, p 36 – 45.

⁵⁶ Saged, A. A. G., Alhaj, T. A. A., & Bi, M. Y. Z., 2017. The role of the Maqasid al-Shariah in preserving the environment. *Humanomics*, 33(2), 125-132.

⁵⁷ “Islamic Declaration on Sustainable Development 2012,” The Islamic World Educational, Scientific and Cultural Organization, accessed August 25, 2021, <https://www.icesco.org/en/>.

Up until now, legal provisions have been relied upon in dealing with industrial waste pollution and in attaining the sustainability targets. However, these targets cannot be separated from the Islamic principles. In this regard, issues on sustainable development should also be viewed within the framework of the Quranic teachings and *Sunnah* of the Prophet (SAW) which provide a defined framework on the manner in which environment and resources are to be dealt with for the benefit of justice and equality as a whole.⁵⁸ For example, one of the way in which Islam protects the environment and ensure cleanliness of water resources from pollution is by observing basic hygiene. Islamic rituals begin with cleanliness as it is the key to the everyday act of worship either in the form of ablution or major impurities by performing the prescribed shower.⁵⁹ Allah says in Surah 5:6: “*O ye who believe! when ye prepare for prayer, wash your faces, and your hands (and arms) to the elbows; Rub your heads (with water); and (wash) your feet to the ankles. If ye are in a state of ceremonial impurity, bathe your whole body. But if ye are ill, or on a journey, or one of you cometh from offices of nature, or ye have been in contact with women, and ye find no water, then take for yourselves clean sand or earth, and rub therewith your faces and hands, Allah doth not wish to place you in a difficulty, but to make you clean, and to complete his favour to you, that ye may be grateful*”.

The Quran also provides the foundation for environmental conservation for muslims. In Surah 6:99 Allah says: “*It is He Who sendeth down rain from the skies: with it We produce vegetation of all kinds: from some We produce green (crops), out of which We produce grain, heaped up (at harvest); out of the date-palm and its sheaths (or spathes) (come) clusters of dates hanging low and near: and (then there are) gardens of grapes, and olives, and pomegranates, each similar (in kind) yet different (in variety): when they begin to bear fruit, feast your eyes with the fruit and the ripeness thereof. Behold! in these things there are signs for people who believe.*”

⁵⁸ Zubair Hasan, “Sustainable Development from an Islamic Perspective: Meaning, Implications and Policy Concerns,” *Journal of King Abdulaziz University-Islamic Economics* 19, no. 1 (2006): 3-18, <https://doi.org/10.4197/islec.19-1.1>.; Mehri Ahmadi, "Sustainable development-Islamic perspectives." In *1st International Conference on Rethinking the Sustainable Development (ICORESD 2016) May. 2016.*; Dariah, Atih Rohaeti, Muhammad Syukri Salleh, and Hakimi M. Shafiai. "A new approach for sustainable development goals in Islamic perspective." *Procedia-Social and Behavioral Sciences* 219 (2016): 159-166, accessed August 25, 2021. <https://doi.org/10.1016/j.sbspro.2016.05.00>

⁵⁹ Ali Ali Gobaili Saged, Thabet Ahmad Abu Alhaj, Mohd Yakub Zulkifli Bi, (2017) "The role of the Maqāsīd al-Sharī'ah in preserving the environment", *Humanomics*, Vol. 33 Issue: 2, pp.125-132,

Since Islam provides guideline in relation to environmental protection, any effort towards such protection can also be appraised in the context of Islam. In principle, the basis of sustainable development can be found within the Islamic tenets where humankind was taught to conserve air, land, water, and other living beings as well as strive for just economic needs and good social interactions.⁶⁰ In *Surah al-Qasas* (28), verse 77 Allah says: *"But seek, with the (wealth) which Allah has bestowed on thee, the Home of the Hereafter, nor forget thy portion in this world: but do thou good, as Allah has been good to thee, and seek not (occasions for) mischief in the land: for Allah loves not those who do mischief"*. In another *Surah*, *al-Maidah* (5) verse 87, Allah says *"O ye who believe! Make not unlawful the good things which Allah hath made lawful for you but commit no excess: for Allah love not those given to excess"*. From these two verses, it is evident that Islam prohibits actions of damaging the earth. Thus while mankind is encouraged to enjoy God's provisions, they are however warned against actions that would cause damage.⁶¹ The Islamic viewpoint on sustainability may be further grasped through large numbers of saying of the Prophet (SAW). For example, it has been reported by Anas ibn Malik that the Prophet (SAW) said, *"If the Resurrection were established upon one of you while he has in his hand a sapling, then let him plant it."* This *hadith* is a strong message on the importance of sustainable development whereby even when all hope is lost for mankind, one should sustain nature's growth. The Prophet (SAW) believed that nature remains a good in itself, even if man does not benefit from it. The importance and benefit of environmental conservation which transgresses economic gain can also be referred to in a *hadith* narrated by Al-Bukhari where the Prophet (SAW) said: *"There is none amongst the believers who plants a tree, or sows a seed, and then a bird, or a person, or an animal eats thereof, but it is regarded as having given a charitable gift [for which there is great recompense."* Studies undertaken by scholars such as Zubir Hassan and Kamali have shown that approach of the contemporary sustainable development principle is largely in consonance with the *Maqasid Syariah*.⁶² According Kamali Islam's perspective on sustainable development is based

⁶⁰ Mohammad Hashim Kamali, "Environmental Care in Islamic Teaching: A Qur'anic Perspective." *ICR Journal* 3, no. 2 (2012): 261-283.

⁶¹ Ahmad Sarip Saputra, Ida Rohmah Susiani, and Nur Syam (2021), *Hifdh Al-Bī'ah as part of Maqāsid Al-Sharī'ah: Yūsuf Al-Qarḍāwī's perspective on the environment in Ri'āyat al-Bī'ah fi Sharī'ah al- Islām* book. AIP Conference Proceedings 2353, 030106 (2021); <https://doi.org/10.1063/5.0052768>

⁶² Zubair Hasan, "Sustainable Development from an Islamic Perspective: Meaning, Implications and Policy Concerns," *Journal of King Abdulaziz University-Islamic Economics* 19, no. 1 (2006): 3-18,

on a number of Syariah concepts, such as the principle of public interest (*maslahah*).⁶³ A number of other sustainable principles can be compared with Islamic values in relation to the control of pollution. They include role and responsibilities of humankind in environmental protection which is based on the concept of vicegerency of humankind in the earth (*khalifah*) and the concept of justice (*adil*).⁶⁴ What is intended here is to show that Malaysia's policy directive and strategies on pollution control within the law and its commitment to environmental protection are based on sustainability principles and are in accordance with Islam as discussed below.

STRATEGIES UNDER ENVIRONMENTAL LAW

There is a direct link between policy directive and legal provisions especially in guiding the manner in which the law is to be formulated and enforced. The top down approach has been thoroughly and systematically implemented in Malaysia through policies that showcase consistent goals which are articulated at the top hierarchy, and the enforcement of law which are aligned with the policy. A number of different approaches are being applied within environmental law designed to regulate sectors that cause pollution. Studies by Kamali,⁶⁵ Mansour et.al.,⁶⁶ and Mukhtar et.al.⁶⁷ have shown that approaches within administration and environmental governance are not against Islamic principles. Likewise many of the legal strategies in dealing with industrial wastes pollution are not contrary to Islam. In fact there are a number of strategies on environmental sustainability which are entirely in line with Islamic teachings which are being practice in Malaysia as discussed here.

<https://doi.org/10.4197/islec.19-1.1>; Mohammad Hashim Kamali, "Islam and Sustainable Development." *ICR Journal* 7, no. 1 (2016): 8-26

⁶³ Mohammad Hashim Kamali, "Islam and Sustainable Development." *ICR Journal* 7, no. 1 (2016): 8-26

⁶⁴ Dariah, Atih Rohaeti, Muhammad Syukri Salleh, and Hakimi M. Shafiai. "A new approach for sustainable development goals in Islamic perspective." *Procedia-Social and Behavioral Sciences* 219 (2016): 159-166, accessed August 25, 2021. <https://doi.org/10.1016/j.sbspro.2016.05.00>

⁶⁵ Mohammad Hashim Kamali, "Islam and Sustainable Development." *ICR Journal* 7, no. 1 (2016): 8-26

⁶⁶ Mehdi Shabannia Mansour, Kamal Halili Hassan, and Parviz Bagheri. "Shari'ah Perspective on Green Jobs and Environmental Ethics." *Ethics, Policy & Environment* 20, no. 1 (2017): 59-77

⁶⁷.; Sohaib Mukhtar, Zinatul Ashiqin Zainol, and Sufian Jusoh, "Islamic Law and Sustainable Development Goals," *Tazkia Islamic Finance and Business Review* 12, no. 1 (2018), <https://doi.org/10.30993/tifbr.v12i1.124>

Most important law on environmental protection in Malaysia is the Environmental Quality Act 1974 which was enacted for the purpose of prevention, abatement, and control of pollution and formed the basic legislation for achieving national environmental objectives and policies. For this reasons, various strategies are formulated to combat discharges of pollution from various sources aiming to reduce human and environmental exposure to hazard and contaminants. It is contended that the main objective of this law on pollution control is founded in *Syariah* on the basis that any externalities that result in negative effects on the environment and society are deemed contradictory to Islamic values must be eliminated including all forms of environmental pollution arising from industrial activities. The condemnation of any act that may harm society and ecosystem is in line with *Maqasid Syariah* in promoting and securing benefits while at the same time and preventing harm.⁶⁸ Islam also believes that the primary duty of a government is to promote good and forbid wrong doing. The act of pollution is considered as mischief and condone by the religion. In order to achieve sustainable management of the environment, Islam permits the authority to intervene.⁶⁹

In addition, Islam is of the view that all actions are evaluated in terms of their consequences as social goods and benefits, and social detriments.⁷⁰ For this reason, the authority's power to impose liability on any person or entity responsible for causing damage to the environment affecting the general public is therefore in accordance with Islamic teaching. Similarly the authority has the right to impose punishment on any person or entity for the violation of environmental law. At the same time, the authority must bear the responsibility by taking the necessary measures to prevent or minimize damage through the prohibition of certain activity that can result in environmental harm, or by imposing specific measures to lessen environment impact.⁷¹ In actual practice, regulatory agencies in Malaysia are given tasks to uphold various administrative and legal duties

⁶⁸ Asyraf Wajdi Dusuki and Nurdianawati Irwani Abdullah, "Maqasid al-Shariah, Maslahah, and Corporate Social Responsibility." *American Journal of Islamic Social Sciences* 24, no. 1 (2007): 25.; Paizah Hj. Ismail, "Penyelesaian Masalah Pertentangan antara Nas Berasaskan Prinsip Maqasid al-Syari'ah." *Jurnal Fiqh* 11 (2014): 75-96.

⁶⁹ Abubakr Ahmed Bagder et al., "Environmental Protection in Islam," *IUCN Environmental Policy and Law Paper*, no. 20 Rev (1994). https://www.iucn.org/sites/dev/files/import/downloads/eplp_020reven.pdf.; Ibrahim Ozdemir. "Toward an understanding of environmental ethics from a Qur'anic perspective." in *Islam and Ecology: A bestowed trust*, eds. Richard C Foltz; Frederick Mathewson Denny; Azizah Haji Baharuddin (Cambridge: Harvard University Press, 2003), 3-37. <https://www.researchgate.net/profile/Ibrahim-Oezdemir-5/publication/350726446>

⁷⁰ Mohammad Hashim Kamali, "Environmental Care in Islamic Teaching: A Qur'anic Perspective." *ICR Journal* 3, no. 2 (2012): 261-283.

⁷¹ Mohammad Hashim Kamali, "Islam and Sustainable Development." *ICR Journal* 7, no. 1 (2016): 8-26.

towards the control of industrial pollution from various sources. This can be referred to in legal provisions such as the imposition of criminal sanction for any non-compliance of the law.⁷²

It can be said that the application of criminal sanction to control industrial wastes pollution also meet the Islamic teaching based on the jurisprudence of *ta`zir* which is a discretion-based judgement for the purpose of deterrence which is relevant to sustainability. Cases such as *Pendakwa Raya v NCK Aluminium Extrusion Sdn Bhd* (2002) 6 MLJ 96 and *PP v Kota Pharma (M) Sdn Bhd* [2002] 1 LNS 335 are two examples to illustrate the imposition of higher fines and jail sentence against the offenders that contaminate water resources. According to the Department of Environment (2017) a total of 193 cases of non-compliance industries were charged in courts in 2017 with a fine of RM 3,882,000 (Ringgit Malaysia) collected on offences relating to water, air and toxic wastes pollution.⁷³ From the perspective of sustainable development, the risk of heavy penalty, including imprisonment, which is applicable to all industries and sectors, can generate greater accountability and directly help towards control of pollution, emission reduction and subsequently climate change mitigation.⁷⁴ The payment of fine can be considered as the internalisation of environmental concerns by imposing the cost of pollution control on the polluters under the sustainable development principle of polluter pays. This principle which is legally enforced under the law is meant to induce the polluter to bear the expenses as consequences of their actions. Similarly Islam recognises the fundamental principle for allocating costs of pollution prevention and control measures. In Islam, it is the prerogative of the authorities to impose penalty or any form of financial liability on matters related to the protection of public interest, or the five elements of *Maqasid Syariah*.⁷⁵ In practice, in relation to public interest, the imposition of penalty is therefore crucial to address environmental issues to hinder problematic behaviours or illegal activities by the industries.

⁷² Maizatun Mustafa and Nurah Sabahiah Mohamed, "The Development of Environmental Crime and Saction in Malaysia." *European Scientific Journal* 11, no. 25 (2015), <https://core.ac.uk/download/pdf/236406861.pdf>

⁷³ "Annual Report," Department of Environment, accessed August 25, 2021, <https://www.doe.gov.my/> .

⁷⁴ Maizatun Mustafa, "Environmental Quality Act 1974: A Tool Towards the Implementation and Achievement of Malaysia's Environmental Policy." *IIUM Law Journal* 19, no. 1 (2011): 1-

⁷⁵ Mohammad Hashim Kamali, "Islam and Sustainable Development." *ICR Journal* 7, no. 1 (2016): 8-26

Another important principle within sustainable development which has a basis in Islam is that of precautionary action against speculated threats. Generally the purpose of precautionary principle is to enable decision makers to consider the likelihood of harmful effects of human activities on the environment before the activities are pursued.⁷⁶ This principle is pertinent in circumstances where available information is inadequate and the possible impact is uncertain. In Islam, the precautionary principle is derived from the concept of blocking the means to evil or *sadd al-dhara'i* which refers to preventing an evil before it actually materializes.⁷⁷ This concept is also intended to anticipate actions that might lead to harmful effect on the people or the environment. The legality of *sadd al-dhara'i* which is established in Quran has been elaborated by Saleem (2010) and Salleh et al.⁷⁸ Under environmental law in Malaysia, there are a number of provisions which are based on the precautionary principle which seek to prevent of any possible harm that will bring about destruction of the environment or public health. One of which is the requirement of environmental impact assessment (EIA) which requires the project proponent to bring evidences that their intended project will not cause harm to the environment. In Malaysia EIA is considered to be one of the most effective and practical tools to support the implementation of sustainable development. As a precautionary measure, EIA is useful to anticipate and minimize potentially serious or irreversible risks committed by industries and to prevent potential threat to the environment.⁷⁹

Another strategy applied within environmental law which is supported by Islam is social corporate responsibility in the form of environmental audit. Environmental protection is one aspect of social responsibility that must be undertaken by corporations and industries. Through such requirement, businesses are obligated to manage their activities and to produce an overall positive impact

⁷⁶ Haseeb Ansari, Parven Jamal & Maizatun Mustafa, "Meaning and scope of the precautionary principle." in Hunud Abia Kadouf and Sharifah Zubaidah , "Land use planning and environmental sustainability in Malaysia: Policies and Trends. Universiti Islam Antarabangsa Malaysia, 2006.

⁷⁷ Ahmad Dahlan Salleh et al., "Theory and Application of Sadd al-Dhara'i '(Blocking the Means) in Shafi 'iyya School." *International Journal of Academic Research in Business and Social Sciences* 9, no. 1 (2019).

⁷⁸ Muhammad Yusuf Saleem, "Methods and methodologies in fiqh and Islamic economics." *Review of Islamic Economics* 14, no 1 (2008): 103–123, <https://core.ac.uk/download/pdf/300358726.pdf>; Ahmad Dahlan Salleh et al., "Theory and Application of Sadd al-Dhara'i '(Blocking the Means) in Shafi 'iyya School." *International Journal of Academic Research in Business and Social Sciences* 9, no. 1 (2019).

⁷⁹ Maizatun Mustafa, *Environmental Law in Malaysia*, 4th ed. (The Netherlands: Kluwer Law International, 2019).

through economic, environmental or social actions.⁸⁰ From Islamic perspective, environmental audit is also consistent with the concept of trust or *amanah* where human beings who are regarded as vicegerent on earth are required to take care of the natural environment entrusted to them. Thus freedom in the utilization of natural resources must be done in a trusted manner coupled with wisdom in order to avoid destruction and to sustain the environment. Islam gives mankind the freedom to utilize natural resources as a form of trust. The *Quran*, for example, says a faithful Muslim will “*fulfil their trusts and observe their promises and commitments*” as provided in *Surah al-Mu'minun* (23) verse 8. Therefore, it can be understood that those who believe in Allah will take good care of the trust given to them.

In Malaysia, the requirement of environmental audit is being practiced either voluntarily or through legal intervention by certified companies and multinational industrial facilities. For this purpose, corporate entities are required to uphold their trust by complying with all the prescribed elements including environmental policy and legal requirement within their processes and activities.⁸¹ Considering large amount of pollution can be generated from the industrial sector, environmental audit as well as EIA have a role to play in pollution prevention by imposing responsibility on industries and requiring them to reverse or restore any environmental damage caused. In this regard, these two strategies which provide for an opportunity to systematically integrate environmental sustainability measures into a wide range of activities or entities can therefore be recognised as the vehicle for the implementation of SDG.

One more important sustainable development principle involving social concern is public participation consciousness. The term “public participation” is defined by UNEP (1988) as “*involving, informing, and consulting the public in planning, management, and other decision-making activities which can be considered part of the political process*”.⁸² Public participation

⁸⁰ Maizatun Mustafa, Azlinor Sufian, and Sharifah Zubaidah Syed Abdul Kader. "Progression of Policies and Laws towards Addressing Climate Change and Sustainability Issues: Recent initiatives from Malaysia." in *Human and Environmental Security in the Era of Global Risks*, eds. Mohamed Behnassi, Himangana Gupta and Olaf Pollmann (Switzerland: Springer, Cham, 2019), 133-147. https://doi.org/10.1007/978-3-319-92828-9_7

⁸¹ Maizatun Mustafa et al., “Haze pollution: regulating corporate responsibility and liabilities under Environmental Law in Malaysia.” *The Journal for Environmental Law, Development and Research*, 1 (Inaugural Issue) (2019): 18-31

⁸² “State of the Environment Report 1988: The Public and Environment” United Nations Environmental Program, accessed August 25, 2021, <https://wedocs.unep.org/bitstream/handle/>

through various means such as consultation and empowerment are vital within a sustainable society as it will consequently enable the public to effectively participate in the legal process that affect the environment. In Islam, participation in any activity can be connected with consultation or *shura*. The term *shura* can also be defined as an obligation to engage in debate and discussion and to express opinion. The *Quran* prescribes mutual consultation as the basis for decision-making. For example, Allah instructed the Prophet (SAW) to consult his companions when making important decisions when Allah says in *Surah al-Imran* (3) verse 159 “*So pardon them and ask forgiveness for them and consult with them upon the conduct of affairs. And when thou art resolved, then put thy trust in Allah. Lo! Allah loveth those who put their trust (in Him)*”. Thus in Islam, the authority should manage affairs of the public by a process of mutual consultation, which is a religious imperative.

The concept of consultation in the form of public participation has been incorporated within the implementation of law in Malaysia as a platform to allow the public to have adequate freedom to express their concern over environmental issues. One of which is through the EIA process whereby the law makes it a requirement for the project proponents to public display and public right to comment of the EIA report. EIA is relevant for the purpose of pollution control prevention including that involving emissions from industries. Considering that reducing of pollution is one of the main sustainability policy drivers, the application of EIA and the support of public participation to manage emissions are therefore crucial.⁸³ Another method of public participation is in the form of public complain. There is a formal procedure undertaken by the Department of Environment to allow any person to make a formal pollution complaint on specific environmental harm such illegal disposal scheduled waste or air and water pollution from industries sources. In response, the Department shall carry out an investigation on the alleged harm.⁸⁴ Tracing back the implementation of this process over the years, it is significant to highlight the success of engaging the public in environmental protection. For example, during the year 2017, a more than 5000 complaints were received on polluting activities including that of air and water pollution.⁸⁵ This public complain platform is therefore considered to be an important premise in attaining

⁸³ Maizatun Mustafa, “Climate Change Litigation: A Possibility for Malaysia?”, (paper presented at the Climate Change Litigation Scholarship Workshop, June 7-8 2018)

⁸⁴ “Annual Report,” Department of Environment, accessed August 25, 2021, <https://www.doe.gov.my/>

⁸⁵ Ibid

sustainable development objectives because it allows the public who are either directly or indirectly affected by any environmental harm the right to lodge their grievances straight to the regulatory body for further action.

As a developing country as well as a Muslim country, environmental sustainability also means that Malaysia needs to reduce industrial waste pollution through the viable alternative of green energy which is regarded as more environmentally-friendly and causes less pollution as compared to fossil fuels. From the Islamic perspective, it is the obligation of mankind to maintain the balance in the utilization of natural resources and to avoid overdependence of resource which can result in environmental pollution and climate change. When it comes to implementing this concept into actions, it is relevant to refer to Malaysia's action in enacting the Renewable Energy Act 2011 to provide for a more comprehensive law on renewable energy.⁸⁶ Notably, the Act represents the primary regulatory framework to increase the renewable energy generation and help enhance low carbon economy. Since the passing of the law, Malaysia has seen a significant increase in non-fossil fuels energy sources such as biomass, solar, biogas, biomass and natural gas. In relation to industrial pollution, strategies within this law which promotes cleaner renewable sources and can help reduce pollution emission from industries and enhance environmental quality. The transition to renewable alternative energy resources is therefore considered fundamental to Islamic-based sustainable development on the basis of the protection of life and the environment. On the part of the industrial sectors, their positive externalities through the application of renewable energy which reduces pollution and improves environmental quality is encouraged by Islam because of the external benefits derived from such action.⁸⁷ From the perspective of Islam, any positive outcome from industrial activities to society is in line with Islamic value as it does not just contribute to material benefits but considered a religious virtue in Islam.

Now that Malaysia is on its way towards the incorporation and implementation of sustainable development objectives, the next action is regarding the measurement of success against the SDG. At the domestic level Malaysia has already integrated its national targets into domestic agenda. At

⁸⁶ Maizatun Mustafa, *Environmental Law in Malaysia*, 4th ed. (The Netherlands: Kluwer Law International, 2019)

⁸⁷ Maizatun Mustafa, "Indicators for Sustainable Development: Understanding the Criteria for a Successful Sustainability Relevant to Environmental Law in Malaysia." *International Journal of Engineering & Technology* 7, no. 3.30 (2018): 141-147, <https://doi.org/10.14419/ijet.v7i3.30.18216>

the same time. Malaysia is also implementing policy strategies to achieve those goals. However, at the international level, the domestic progress needs to be measured and evaluated through a number of assessment tools by the international agencies. One of the tools applied to measure countries' commitments and distance towards the achieving the SDG is the SDG Index and Dashboards Report. This Report which tracks country performance on the 17 SDG would rank all countries on a scale of 1-100, based on an assessment of the extent to which the goals have been achieved.⁸⁸ In the most recent Sustainable Development Report 2019, Malaysia obtained the SDG Index score of 69.6, and is ranked 68th out of 162 countries, one level below the United Arab Emirates which scored 69.7. This Report has indicated that Malaysia is performing relatively well in certain SDG areas such as the utilisation of clean energy through the setting up of law and policy strategies designed to reduce dependency on fossil fuels. On the other hand, the best-performing countries for 2019 Denmark, Sweden and Finland score 85.2, 85.0, and 82.8 respectively as outcome of their achievement in balancing economic, social and environmental issues. In this regard, this Report is also indicative of Malaysia's present position as compared to other nations especially in achieving the targets of SDG in all areas including that of pollution control and emission reduction.

CONCLUSION

The regulation of industrial waste pollution and the protection of environmental quality are integral parts of actions towards sustainable development. This article has presented a number of insights into legislative strategies undertaken by Malaysia in dealing such pollution. While Malaysia has made some progresses towards its strives for sustainability, accelerating environmental degradation indicates a strong sustainability concern for Malaysia. The key challenge now is in striking a balance between environmental protection and pollution control. As a Muslim country as well as a country that aspire to become a developed nation, Malaysia continues to validate its environmental policy directives based on Islamic principles. For Malaysia applying the principle

⁸⁸ Jeffrey Sachs et al., "Sustainable Development Report 2019," Bertelsmann Stiftung and Sustainable Development Solutions Network, accessed August 25, 2019, <https://www.bertelsmann-stiftung.de/de/publikationen/publikation/did/sustainable-development-report-2019>

of sustainable development, and evaluated it from the perspective of Islam are essential. This discussion has shown that although Malaysia may not have all of its policy directives purely based on Islamic precepts, most of its administration and economic activity are nonetheless not against Islamic values. Principles such as *Maqasid Syariah* is being aggressively applied as an inner core by the government through the implementation of policy and law. However it is still necessary for Malaysia to put more initiative towards upholding the Islamic teaching within its administration and governance. While sustainable development from the conventional perspective has covered the three important aspects of social, economic and environment, Malaysia needs to work really fast to ensure the SDG agenda can be achieved by the year 2030 as currently the country is not within a comfortable position according to the SDG Report. There is a fundamental needs to inculcating moral and spiritual aspects on all stakeholders. The emphasis of human morality and spirituality in addition to physical development would make the overall sustainable development a very Islamic concept and in line the teaching of Islam towards environmental protection and sustainability.

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