



WHAT IS THE INTERNATIONAL MARITIME ORGANIZATION (IMO)?

The International Maritime Organization (IMO) is an agency within the United Nations that is the global standard-setting authority for the international shipping industry. Its main goal is to create standards for the shipping industry that are fair and effective, and universally adopted and enforced.

The IMO is dedicated to creating a level playing field—in other words, to prevent ship operators from addressing their financial issues by compromising on safety, security and environmental performance. This approach also encourages innovation and efficiency.¹

IMO was established on March 17, 1948, and currently has 174 member states.

The IMO sets standards based on consensus and does not require formal voting unless it is deemed to be necessary.

WHAT IS THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION BY SHIPS (KNOWN AS MARPOL), AND WHAT IS ANNEX VI?

The International Convention for the Prevention of Pollution by Ships (i.e., MARPOL) is a treaty that was adopted in 1973, entered into force in 1983, and modified in 1978 and 1997 (where Annex VI was added).

The United States ratified MARPOL on December 8, 1980, and in 1998, the United States signed the protocol creating Annex VI on air pollution. The United States ratified Annex VI of MARPOL in April 2006 after submission for advice and consent by President Bush in 2003.

The objective of MARPOL is to limit shipborne pollution by restricting operational pollution and reducing the possibility of accidental pollution. MARPOL specifies standards for stowing, handling, shipping and transferring pollutant cargoes, as well as discharge of ship-generated operational wastes.

MARPOL consists of six separate Annexes, each one addressing the various sources of ship generated pollution. Annex I and II are mandatory for all signatory nations to MARPOL while Annexes III, IV, V, and VI are optional. Currently, the United States is signatory to Annexes I, II, III, V and VI.

MARPOL has been incorporated into U.S. law by the “Act to Prevent Pollution from Ships” (APPS) and implemented within 33 U.S.C. §§ 1901-1915 and 33 C.F.R. 151 et. seq.

MARPOL Annex VI currently has 87 parties that represent more than 96 percent of the world merchant shipping tonnage.

WHAT IS IMO 2020?

IMO 2020 is an international requirement that, as of January 1, 2020, the maximum sulfur content for marine fuel is 0.5 percent by weight.

Since 2012, all ships are required to have less than 3.5 percent sulfur content outside of Emission Control Areas (ECAs) where they were required to have less than 1.0 percent sulfur.

As of 2015, all ships within ECAs – located in around the United States and Europe – are required to have no greater than 0.1 percent sulfur in their marine fuel. The United States is already using and producing fuel that is five times more stringent than what IMO 2020 requires.

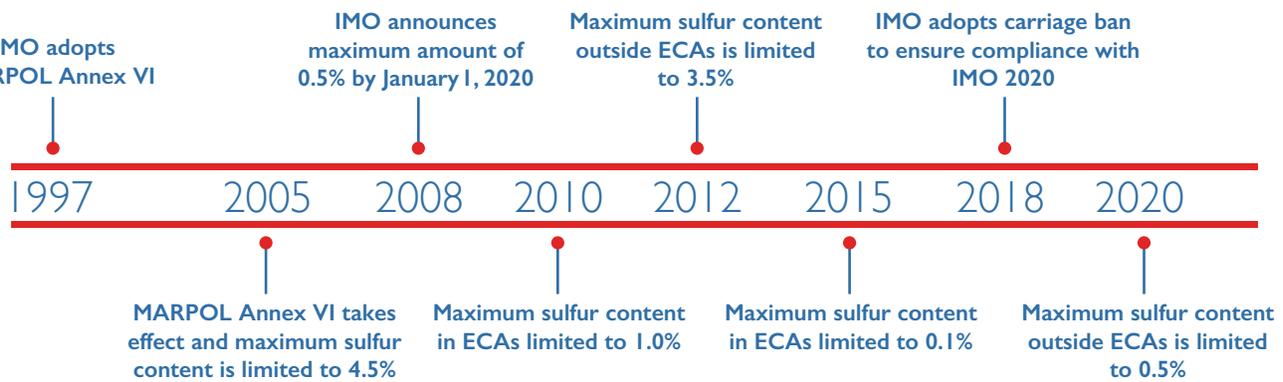


HOW WAS IMO 2020 ADOPTED?

IMO 2020 was adopted in 2008 during the Bush administration. As part of the adoption of IMO 2020, the parties agreed to evaluate whether there would be sufficient supply by 2018. In 2016, an IMO study found that there would be enough supply to implement IMO 2020 on time, and the parties agreed that the standards would be binding on January 1, 2020.

To help ensure compliance with IMO 2020, the IMO adopted a “Carriage Ban” in October 2018 that prevents carrying non-compliant fuel for the purposes of propulsion or operation without proper environmental controls. This prevents ships from using non-compliant fuel when away from the port and then switching to compliant fuel when under inspection.

Per IMO’s governance structure, any decisions require a 22-month notice and thus would have needed to have been enacted by March 2018. As that date has passed, IMO 2020 will go into effect on January 1, 2020.



WHY IS IMO 2020 GOOD FOR AMERICA?

IMO 2020 will expand America’s energy dominance and security.

The United States is already producing and using IMO-compliant fuel. In the last decade, American refiners have invested more than \$100 billion to prepare for IMO 2020. America’s refineries are complex systems that can refine non-compliant fuel into IMO 2020 compliant fuel.

However, foreign oil producers in other countries, such as Russia and Iran, have not upgraded their refineries to process IMO-compliant fuel.

Therefore, the United States will be uniquely positioned to provide compliant fuel around the world, which limits Russia, Iran, Saudi Arabia and others’ ability to leverage their energy supplies against ours.



WILL THERE BE A DISRUPTION TO GASOLINE OR DIESEL SUPPLIES IN 2020?

No. As part of the agreement in 2008 establishing the standards, IMO prepared a report in 2016 to ensure that there will be sufficient fuel available in 2020. The report shows that there will be enough supply to meet the expected demand in 2020 and in the future. Based on that report, the parties agreed to move forward with the January 1, 2020 deadline.

In its February 2019 Short Term Energy Outlook, the Energy Information Administration predicted that the prices of gasoline and diesel will be lower in 2020 than they were in 2018. This implies that there will not be a significant difference in supply and demand, because if there were a supply concern, demand would be greater than supply and it would result in significantly higher gasoline and diesel prices.

Goldman Sachs' updated and expanded modeling "suggests that both the shipping and refining industries are on track to meet this challenge." And the International Energy Agency testified before Congress that "the situation is far more manageable for shipping and refineries than previous forecasts suggested."

Lastly, MAPROL Annex VI allows for ships to use non-compliant fuel if compliant fuel is not available. A ship must document its efforts to obtain compliant fuel but is not required to deviate from its intended voyage to obtain compliant fuel.

WILL OIL PRICES INCREASE SIGNIFICANTLY IN 2020?

No. It is highly unlikely that IMO 2020 by itself will cause a significant increase in crude prices.

The EIA estimated in their February 2019 STEO that oil prices would be less than \$65 a barrel in 2020 – less than the cost of a barrel in 2018.

EIA's February 2019 STEO also predicts that diesel and heating oil will be cheaper in 2020 than they were in 2018.

WHAT DETERMINES THE PRICE OF GASOLINE AND DIESEL?

The factors that affect the price of gasoline and diesel are diverse and complicated. The main components that affect retail gasoline prices are (in order of significance): (1) the cost of crude oil; (2) taxes; (3) refining costs and profits; and (4) distribution and marketing costs.

The cost of crude oil is the largest component of the retail price of gasoline. There are various factors that may influence crude oil prices. The EIA identifies seven key factors that affect the cost of crude oil, including the supply from OPEC and non-OPEC countries and demand from OECD and non-OECD countries.

WHAT ARE THE IMPACTS TO ELECTRIC UTILITY PRICES BECAUSE OF IMO 2020?

There are many factors that impact utility prices in homes including fuels, power plants, transmission and distribution systems, weather conditions and regulations (state, federal and international). EIA estimates that heating oil prices will be less in 2020 than there were in 2018. As those factors that may be affected by IMO 2020 are predicted to be lower in 2020 than they were in 2018, utility prices should not be impacted by IMO 2020.



HOW DOES SULFUR AFFECT CITIZENS' HEALTH?

The use of sulfur in ships can result in the development of sulfur dioxide (SO₂). It has been calculated that just 15 of the largest ships in the world emit more sulfur than the total of all the world's cars.

The U.S. Environmental Protection Agency (EPA) has set limitations on the amount of SO₂ allowed, as exposure can harm the human respiratory system and make breathing difficult. Children, the elderly and those who suffer from asthma are particularly sensitive to effects of SO₂.

By decreasing sulfur emissions from international shipping, it can help reduce SO₂ exposure to American citizens and ensure that states are meeting their SO₂ requirements.

HOW DO SHIPS COMPLY WITH IMO 2020?

Ships have three ways to comply with IMO 2020:

- Purchase low-sulfur fuel;
- Install exhaust gas cleaning systems (aka "scrubbers") on their ship and continue purchasing high-sulfur fuel; or
- Use another fuel source, such as liquefied natural gas (LNG), as their fuel source.

WHO IS RESPONSIBLE FOR ENFORCING IMO 2020?

IMO 2020 is enforced by each "flag" country – where the vessel is registered or licensed – as well as by port states where vessels required to comply with the IMO 2020 requirements call. In the United States, the U.S. Coast Guard is responsible for enforcing IMO 2020 requirements on U.S. flagged vessels and on foreign-flagged vessels that call at U.S. ports.

WHAT HAPPENS IF A SHIP IS NOT IN COMPLIANCE WITH IMO 2020 AFTER JANUARY 1, 2020?

Non-compliance with IMO 2020 requirements could result in the ship being detained in port, subject to penalties and being required to obtain compliant fuel.