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# Oil Spill Insurance and the Shadow Fleet

An Analysis of the Global Tanker Fleet's Insurance and How Ships Transporting Russian Oil Are Different

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# **Executive Summary**

For the operation of the global tanker fleet, adequate insurance against oil spills is a key prerequisite. Due to the large potential damages, such protection and indemnity (P&I) coverage is largely arranged through a mutual insurance system of P&I clubs, many of which are organized in the International Group. But the significant expansion of the shadow fleet, which allows Russia to circumvent the G7+ oil price cap, has posed serious questions about the adequacy of these ships' insurance. In this report, we undertake a comprehensive analysis of P&I insurance arrangements. *First*, we identify ~14,000 active ships that form the global tanker fleet. *Second*, we compile a list of 141 P&I insurance providers recognized by flag states. *Third*, we query all 42 publicly-available databases to establish the ships' insurance status. *Finally*, we are able to analyze how parts of the global fleet differ, including ships that transport Russian oil and/or are part of the "shadow fleet".

- The global fleet consists of ~14k ships ~3k crude oil and ~11k oil product/chemical tankers. Three fourths of the vessels are small (77.3%), especially those carrying oil products and chemicals. Crude oil tankers, on the other hand, are predominantly Aframax-size or larger, with an average dead weight of 170k tons (vs. 17k tons for product tankers). Flags of convenience, i.e., flag states without a genuine link to a vessel's owner, play an important role for the operations of the global tanker fleet.
- We are able to identify the P&I insurance of 8,935 vessels or 63.5% of the global tanker fleet. The International Group of P&I Clubs (IG) accounts for more than 91.0% of the ships for which coverage is known (8,127). Non-IG providers from oil price cap (OPC) coalition countries insure 545 ships and companies from outside of the OPC coalition 711, with 448 carrying a combination of policies. Finally, no information about P&I insurance was found for 5,134 ships (36.5% of the global fleet).
- Among tankers confirmed to have carried oil in 2024 (6,444), 84.0% have IG P&I insurance. Conversely, information is unavailable for 12.3%. The IG coverage share is significantly higher due to the composition of this group of ships only 10.6% have a dead weight (DWT) of below 10k tons vs. 46.5% in the global fleet as we cannot confirm the activities of many smaller vessels. And smaller tankers have a much lower IG insurance rate (29.1%) compared to those above 10k DWT (82.7%).
- P&I insurance coverage by the IG varies depending on a ship's involvement with Russian oil. Only 29.4% of tankers carrying Russian crude oil and 56.2% of tankers carrying Russian oil products in 2024 have IG insurance, while the respective numbers for ships only carrying cargo of non-Russian origin are above 90%. Importantly, the higher the total volume of Russian crude oil, the lower the share of IG coverage, which is consistent with the objective to evade the OPC as much as possible.
- The P&I insurance of shadow tankers is characterized by a fundamental lack of transparency. For ships that do not have any known links to OPC countries in terms of ownership, management, flagging, or insurance (4,539 vessels), P&I providers could be identified for only 6.3%. The share is marginally higher for those that transported Russian oil (16.9%). The absence of this information makes it extremely difficult to assess whether the insurance coverage is adequate in line with IMO standards.
- Tankers with and without IG P&I insurance differ significantly with regard to age and flagging. Ships with IG coverage are almost four years younger on average than those without it (14.4 vs. 18.1). More than 75% of the latter are older than 15 years and ~25% older than 20 years. Important differences also exist in terms of flagging: 64.2% of ships without IG insurance are registered in grey-listed, black-listed, or unranked jurisdictions, while only one fourth of IG-insured vessels are.



Russian P&I insurance providers only disclose information about their coverage of 220 tankers.
 This includes AlfaStrakhovanie, an important player now sanctioned in the EU, US, and UK, but not Ingosstrakh (sanctioned in the US and UK), which reportedly plays a major role for shadow fleet insurance. This lack of transparency is a serious challenge, but so is the fact that many P&I policies involve a sanctioned insurance company – or are re-insured by a sanctioned entity (i.e., RNRC).

Sanctions coalition countries should continue their efforts to shed light on insurance. The fundamental lack of transparency with regard to shadow tankers' P&I insurance, together with certain flag states' dereliction of their obligations within the existing regulatory framework, makes it extremely challenging for potentially affected coastal states to even assess risks. The recent statement by a group of Nordic-Baltic countries (NB8++) which outlined the introduction of P&I insurance checks for vessels passing through key geographical areas¹ (e.g., Baltic Sea, English Channel), shows that the problem is now well understood and action is being taken. We appreciate these countries' commitment to the rules-based international order and the protection of the environment, and urge to enforce this insurance requirement through the designation of vessels that fail to comply or are deemed to carry inadequate insurance – a tool that has proven to be effective.² In parallel, countries should ensure that the International Maritime Organization plays a stronger role in reining in shadow fleet activities, which represent a systematic attempt at undermining important rules and regulations.

<sup>1</sup> For the NB8++ statement, see <a href="here">here</a>. Denmark has also announced that it will conduct controls (see <a href="here">here</a>).

<sup>&</sup>lt;sup>2</sup> For our policy recommendations regarding oil spill insurance checks, see "Establishing Shadow Free Zones" here.



# An Introduction to Global Oil Shipping

In this report, we seek to provide a comprehensive overview of global oil shipping and a detailed analysis of the ships' oil spill insurance, also known as protection and indemnity (or P&I) insurance. The oil tanker industry serves as the backbone of global energy supply chains, facilitating the transport of large amounts of crude oil and oil products around the world. Its size and complexity demands a robust regulatory framework consisting of international treaties, domestic laws and regulations in different jurisdictions, and industry standards to ensure operational safety and the protection of the environment. Before delving deeper into the characteristics of the global tanker fleet, including its oil spill insurance coverage, it is important to outline the way in which global shipping is regulated and how its rules are implemented and enforced.

## **International Maritime Organization**

The International Maritime Organization (IMO) is the United Nations specialized agency with responsibility for the safety and security of shipping and the prevention of marine and atmospheric pollution by ships. The IMO currently has 176 member states and three associate members.<sup>3</sup> It consists of an Assembly, a Council, and five main Committees. In addition, there are a number of subcommittees focused on specific technical areas.<sup>4</sup> The IMO establishes rules and regulations in the global maritime industry<sup>5</sup>; implementation and enforcement, however, are obligations of its member states. Importantly, in December 2023, the IMO adopted a resolution highlighting the risks posed by shadow tankers and urging stakeholders to promote actions to prevent illegal operations by the "shadow fleet"<sup>6</sup>. Regardless of what IMO statutory documents declare, the organization has been repeatedly criticized for a lack of effective enforcement and failure to implement its mandate in the area of prevention of marine pollution and casualties investigations.<sup>7</sup>

## Flag States and Registries

Flag registration is a fundamental requirement for every ship and determines the jurisdiction under which it operates. Importantly, international law generally vests the obligation to ensure that vessels are seaworthy and properly insured in the flag states. Some degree of control also arises on the part of port states; however, it mainly encompasses verification of documents for admitting vessels to ports. Flag states, therefore, play a critical role for the effective implementation and enforcement of the global maritime regulatory framework. In certain cases, they are permitted to delegate inspection functions to third parties. The reputation of a flag state is an important factor influencing the assessment of risks related to a ship by stakeholders such as charterers, insurers, and financiers. The performance of flag states is evaluated based on port state controls. It is important to emphasize that notwithstanding the imperative requirement of a genuine link between the state and the ship<sup>8</sup>, "flags of convenience", i.e., "open" flag registries without a residency requirement for a ship's owner, have played an important role in global shipping for many years.<sup>9</sup>

<sup>&</sup>lt;sup>3</sup> See <u>here</u>.

<sup>&</sup>lt;sup>4</sup> See here

<sup>&</sup>lt;sup>5</sup> "IMO is the global standard-setting authority for the safety, security and environmental performance of international shipping. Its main role is to create a regulatory framework for the shipping industry that is fair and effective, universally adopted and universally implemented", see <a href="here">here</a>.

<sup>&</sup>lt;sup>6</sup> See <u>here</u>.

<sup>&</sup>lt;sup>7</sup> See <u>here</u>, <u>here</u>, and <u>here</u>.

<sup>&</sup>lt;sup>8</sup> See UNCLOS Article 91 here.

<sup>&</sup>lt;sup>9</sup> For more information on flags of convenience and open registries, see, for instance, here and here.



Flag states are tasked with ensuring that safety, environmental, and other standards are followed.

According to Article 4 of the United Nations Convention on the Law of the Sea (UNCLOS), the flag state should "effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag" and take "such measures for ships flying its flag as are necessary to ensure safety at sea with regard, *inter alia*, to the construction, equipment and seaworthiness of ships...".<sup>10</sup> In addition, the International Convention for the Safety of Life at Sea (SOLAS) stipulates rules and standards governing the construction of ships, the safety equipment with which ships must be fitted, and the operational standards for the avoidance of accidents.<sup>11</sup> According to UNCLOS and SOLAS, flag states are required to survey the ships when they are first registered, and at regular intervals thereafter, to evaluate compliance with technical and safety standards. These inspections can be delegated to specialized surveyors and classification societies.<sup>12</sup> Flag states also tasked with certifying that ships fulfill the requirements of the International Convention for the Prevention of Pollution from Ships (MARPOL)<sup>13</sup> and the Maritime Labour Convention (MLC)<sup>14</sup>.

Flag states assess a ship's protection and indemnity (or P&I) insurance and issue certification. Insurance for liabilities from oil spills is a key element of the regulatory framework with regard to oil shipping (see below). As with other international maritime rules and regulations, it is flag states that are tasked with evaluating whether "Blue Cards" issued by insurance providers for liabilities under the International Convention on Civil Liability for Oil Pollution Damage (CLC)<sup>15</sup> and the International Convention on Civil Liability for Bunker Oil Pollution Damage (BUNKER)<sup>16</sup> are valid, i.e., whether the insurance coverage is adequate. If this is the case, the flag state will issue official (CLC and BCC) certificates, which allow the ship to conduct operations. For more information on how flag states are supposed to assess the insurance's adequacy, see below.

#### **Port State Control**

Port state control (or PSC) is a procedure established by countries to inspect foreign ships while they are in port and ensure compliance with international maritime regulations and standards.<sup>17</sup> PSC inspections are conducted by the designated maritime authorities of countries that are signatories to specific agreements (Memoranda of Understanding, MoUs), including the Paris MoU (for Europe and the North Atlantic), Tokyo MoU (for Asia and the Pacific), Acuerdo de Viña del Mar (for Latin America), Caribbean MoU, Abuja MoU (for West and Central Africa), Black Sea MoU, Mediterranean MoU, Indian Ocean MoU, and Riyadh MoU. In addition, the US Coast Guard maintains another port state control regime. While inspections can occur at any time while a vessel is in a port, they often focus on ships that have a poor record of regulatory compliance. As these inspections are a check on flag states' implementation of maritime rules and regulations, port state control MoUs publish ratings (white, grey, and black lists) of flag states based on their results.<sup>18</sup>

#### **Classification Societies**

Flag states can delegate certain obligations to third-party providers, including classification societies. These entities carry out detailed inspections with regard to structural and safety standards and issue

<sup>&</sup>lt;sup>10</sup> For UNCLOS, see here.

<sup>&</sup>lt;sup>11</sup> For SOLAS, see <u>here</u>.

<sup>&</sup>lt;sup>12</sup> See SOLAS 1974 Reg. I/6; MARPOL Annex I Reg. 6, Annex II Reg. 8, Annex IV Reg. 4, and Annex VI Reg. 5.

<sup>&</sup>lt;sup>13</sup> For MARPOL, see <u>here</u>.

<sup>&</sup>lt;sup>14</sup> For MLC, see <u>here</u>.

<sup>&</sup>lt;sup>15</sup> For CLC, see here.

<sup>&</sup>lt;sup>16</sup> For BUNKER, see <u>here</u>.

<sup>&</sup>lt;sup>17</sup> See <u>here</u>.

<sup>&</sup>lt;sup>18</sup> See, for instance, the Paris MoU's ratings here and the Tokyo MoU's here.



certificates of compliance under various international conventions and other maritime regulations. Ships that fail to undergo inspections or do not fulfill all requirements face serious consequences. These include operational restrictions, e.g., a vessel may be denied entry into certain ports, denial of insurance coverage, including for P&I insurance, fines and detentions during port state controls, as well as loss of contracts. The International Management Code for the Safe Operation of Ships and for Pollution Prevention (International Safety Management (ISM) Code) was adopted by IMO Resolution A.741(18) and became mandatory by virtue of the entry into force, on 1 July 1998, of SOLAS chapter IX on management for the safe operation of ships<sup>19</sup>. According to the ISM Code, flag states are responsible for verifying compliance with requirements and for issuing (for five years) documents of compliance to companies and safety management certificates to ships<sup>20</sup>. The IMO also provides guidance as to the qualification and standing of the so-called "classification societies", that are authorized by the flag state to issue a document of compliance and a safety management certificate<sup>21</sup>.

### (Oil Spill) Insurance

Maritime insurance is governed by a system of international conventions that establish a general framework and articulate obligations of states, as well as national laws and regulations of flag states, states of registration of ship owners, and states of incorporation of P&I clubs. Furthermore, guidance and clarifications are periodically issued by the IMO. According to UNCLOS, signatory states should ensure that recourse is available in accordance with their legal systems for prompt and adequate compensation or other relief in respect of damage caused by the pollution of the marine environment by natural or juridical persons under their jurisdiction<sup>22</sup>. Importantly, UNCLOS obligates flag states to ensure compliance by vessels under their registry and entitled to fly their flags with applicable international rules and standards, as well as the domestic laws of the flag state<sup>23</sup>, and to adopt domestic laws that have the same effect as that of international rules and standards<sup>24</sup>. As a matter of public international law in the event of marine pollution, the flag state to or the private entity accosted with the vessel bears the responsibility for the damage; therefore, international state responsibility and individual liability exist concurrently<sup>25</sup>. Further specific international legal instruments were developed to govern issues arising from compensation of pollution caused by ships and cargoes, including: the 1969 Civil Liability Convention (CLC) and the 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage; the 1992 Civil Liability Convention and the 1992 Fund Convention; the 2003 Supplementary Fund Protocol; the 1976 London Convention on Limitation of Liability for Maritime Claims (LLMC); the 1973 International Convention for the Prevention of Pollution from Ships (MARPOL); and the 1974 International Convention for the Safety of Life at Sea (SOLAS).

International conventions establish legal requirements for protection and indemnity insurance. Article VII of the CLC mandates that all ships carrying in bulk a cargo of more than 2,000 tons of persistent oil are required to supply a certificate confirming "insurance or other financial security". Similar provisions established by other international conventions, depending on the tonnage of the cargo include Article 7.1 of the Bunkers

<sup>&</sup>lt;sup>19</sup> See IMO Resolution A.1118(30) Adopted on 6 December 2017.

<sup>&</sup>lt;sup>20</sup> See IMO Resolution A.1118(30) Adopted on 6 December 2017, 1.3.1.

<sup>&</sup>lt;sup>21</sup> For guidelines for the authorization of organizations acting on behalf of flag states, see IMO Resolution A.739(18). For the specifications on the survey and certification functions of recognized organizations acting on behalf of the flag states, see IMO resolution A.789(19). In the EU, the requirements applicable to classification societies are additionally governed by the Regulation (EC) 391/2009 of the European Parliament and of the Council of 23 April 2009 on common rules and standards for ship inspection and survey organizations.

<sup>&</sup>lt;sup>22</sup> See UNCLOS, Article 235, Paragraph 2.

<sup>&</sup>lt;sup>23</sup> See UNCLOS, Article 217.

<sup>&</sup>lt;sup>24</sup> See UNCLOS, Article 11, Paragraph 2.

<sup>&</sup>lt;sup>25</sup> See UNCLOS, Article 235.



Convention and Article 12.1 of the Wreck Removal Convention. The CLC, Bunkers Convention, and Wreck Removal Convention further stipulate that flag states should issue to the qualified vessels certificates in a prescribed form confirming that insurance or other financial security is in force.

According to the CLC, a certificate attesting that insurance or other financial security is in force should include the following information: (a) name of ship and port of registration; (b) name and principal place of business of owner; (c) type of security; (d) name and principal place of business of insurer or other person giving security and, where appropriate, place of business where the insurance or security is established; (e) period of validity of certificate. Importantly, the CLC stipulates that other contracting states may request consultation with the state of a ship's registry if there are grounds to believe that the insurer or guarantor named in the certificate is not financially capable of meeting the obligations imposed by the convention<sup>26</sup>.

The IMO has provided guidance for accepting Blue Cards or similar documentation from insurance companies by outlining the following criteria<sup>27</sup>: (i) adequate documentation on the company's financial standing, and hence solvency, which could be in the form of audited financial statements from the past three years; (ii) approval by the relevant authority that the company is eligible to carry out insurance business in the country; (iii) adequate documentation on reinsurance coverage on claims met by the company for liability incurred under the relevant convention; (iv) a guarantee by the company and its parent company, if one exists, that it will cover liability incurred under the relevant convention and up to the limits of liability; (v) a statement to the effect that liability incurred due to an act of terrorism is covered; and (vi) the rating that the insurance company and/or its reinsurers hold by an independent and internationally recognized rating agency.

Protection and indemnity insurance is often provided by mutual insurance societies, the P&I Clubs. Instead of operating as a for-profit entity, these cooperative groups are formed by shipowners to pool resources and share risks. This is necessary due to the large potential liabilities from oil spills, which make the provision of such coverage commercially unviable. Members contribute premiums based on their individual risk profiles, which form a collective fund to pay out claims. This model allows shipowners to benefit from cost sharing and ensures a focus on providing comprehensive coverage rather than profits. P&I coverage extends beyond financial compensation as P&I Clubs often provide legal and technical support to their members, assisting with claims management, regulatory compliance, and operational best practices. Their expertise can be pivotal in navigating legal and logistical complexities, minimizing reputational damage, and resolving claims efficiently.

The International Group of P&I Clubs plays a critical role for the provision of oil spill insurance. It consists of 12 clubs, which between them insure the liability risks, including those relating to pollution, of about 90% of the world's ocean-going commercial fleet. The good standing of the IG is confirmed by the fact that the IMO recommends to member states accepting Blue Cards issued by a member of the IG when it is possible to verify it through the IG's or the member clubs' website. According to IG rules, the insurance of civil liability for oil pollution damage covers \$1 billion per ship per incident, which includes response costs and third-party claims as well as fines. The financial capability of the IG is enhanced by the fact that the group has instituted so-called "pooling agreements," where member clubs collectively share the costs of claims that exceed \$9 million but are capped at \$70 million. This agreement outlines which claims can be pooled and the formula used to calculate each club's contribution. Additionally, through the "pool reinsurance programme," the

<sup>&</sup>lt;sup>26</sup> See CLC, Article VII, Paragraph 7.

<sup>&</sup>lt;sup>27</sup> See Circular Letter 3464 from 2 July 2014 here.

<sup>28</sup> See here.

<sup>&</sup>lt;sup>29</sup> See Guidelines for accepting Blue Cards issued by International Group Clubs and other insurers, IMO Circular Letter No 3464 dated 2 July 2014.

<sup>&</sup>lt;sup>30</sup> See, for example, item 6.5.1. of Standard Club P&I Rules for the 2023/24 policy year here.



member clubs negotiate a reinsurance cover of \$2 billion, bringing the total available funds to \$2.1 billion. Any claims beyond this amount are covered by "overspill" funds, collected from each club's members.<sup>31</sup>

**P&I insurance can also be arranged through providers outside of the International Group.** This is often the case for smaller vessels, where potential liabilities are lower and can be insured by smaller entities. When it comes to the insurance issued by providers other than members of the IG, the IMO summarized a number of problems and bad-faith practices employed by such insurance based on submissions from the member states, including: inconsistencies between the documents provided by the non-IG insurers and the underlying insurance policies, insolvency of the non-IG insurer, and uncooperative actions of such insurers<sup>32</sup>.

Ships require insurance beyond protection and indemnity coverage for their operations. This includes: (1) *Hull and Machinery (H&M) insurance*, which covers physical damage to the vessel, including its structure and machinery, and protects against risks such as collisions, goundings, or weather-related damages; (2) *Cargo insurance*, which provides coverage for what the vessel is transporting, ensuring compensation in the case of loss or damage; (3) *Loss of Hire insurance*, which protects vessel owners from income losses should a tanker become inoperable; (4) *War Risk insurance*, which specifically covers losses or damage caused by acts of war, piracy, or terrorism, and is particularly relevant for tankers operating in or near conflict regions.

## **Ship Management**

Ship managers are third party commercial services providers, who assume responsibility for operation of the ship from the owner based on the contract and normally provide technical maintenance, crew management, cargo handling, and regulatory compliance among other services<sup>33</sup>. Having assumed such responsibility, ship managers agree to take over all duties established by the ISM Code, and a similar principle would apply in many other technical maritime instruments. According to the ISM Code, the ship manager is responsible for adopting a safety management system<sup>34</sup>, ensuring good safety practices afloat as well as ashore and that adequate resources and support are available<sup>35</sup>, establishing emergency procedures and procedures for all operations and maintenance tasks<sup>36</sup>, and a system of verification, review and evaluation (internal audits)<sup>37</sup>. Importantly, ship managers are not directly liable for the pollution caused by ships according to provisions of CLC and HNSC as these stipulate "channeling provisions" whereby the liability of ship managers<sup>38</sup>, operators and charterers<sup>39</sup> is excluded. Under these instruments the claims should be brought against the registered ship owner, who would have recourse against third parties, including ship managers.<sup>40</sup>

<sup>31</sup> See here.

<sup>&</sup>lt;sup>32</sup> See IMO Report of the Legal Committee on the Work of its 107th Session here.

<sup>&</sup>lt;sup>33</sup> Additionally, see <u>here</u>.

<sup>&</sup>lt;sup>34</sup> ISM Code, Article 1.1.4.

<sup>35</sup> ISM Code, Article 6.

<sup>&</sup>lt;sup>36</sup> ISM Code, Articles 6–10.

<sup>&</sup>lt;sup>37</sup> ISM Code, Article 12.

<sup>&</sup>lt;sup>38</sup> ISM Code, Article 8.

<sup>&</sup>lt;sup>39</sup> 1992 CLC 92 Article III. para. 4; HNSC Article 7 para. 5.

<sup>&</sup>lt;sup>40</sup> 1992 CLC 92 Article III. para. 5; HNSC Article 7 para. 6.



## The Global Tanker Fleet

For this report, we identify a total of ~24,000 tankers using Equasis, of which ~14,100 are in service: ~3,100 crude oil tankers, ~5,800 oil products tankers, and ~5,200 chemical/products tankers.<sup>41</sup> Before delving deeper into the question of insurance, we analyze these ships based on several parameters – their age, size, flag state, and ship/commercial management - while combining products and chemical/products tankers into one group. This chapter not only provides an overview of the global tanker fleet but also serves as a comparison point for a closer look at vessels carrying Russian oil and those that are part of the shadow fleet.

Age: Close to 50% of the global tanker fleet (6,993 vessels) are 15 years old or younger (see Figure 1). Ships between the ages of 16 and 30 account for one third (4,740), and those older than 30 years make up ~17% (2,336). Distinguishing between crude oil and product tankers shows that the former tend to be younger, while there is a significant number of the latter that are of advanced age, i.e., older than 30 years (see Figure 2). This is also reflected in average ages – 13.0 years for crude oil tankers and 20.1 years for oil product tankers.

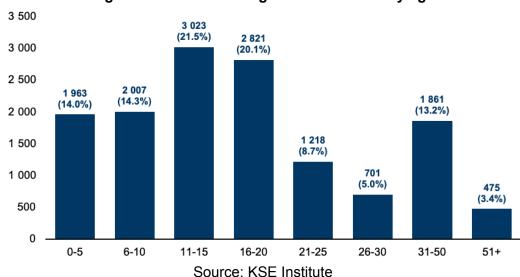


Figure 1: Vessels in the global tanker fleet by age

Size: When analyzing the size of vessels, we rely on a common categorization, which distinguishes five types: small tanker/handysize (up to 54,999 dead weight tons, or DWT), Panamax (55,000-84,999 DWT), Aframax (85.000 to 124,999 DWT), Suezmax (125,000 to 199,999 DWT), and VLCC+ (more than 200,000 DWT). 42 The size of a vessel is closely linked to its usage; specifically, the distance of a voyage determines which type will be more economical to use. For longer trips, larger tankers that can carry more cargo are preferable. In addition, ports often have restrictions with regard to the size of the ships they can service, and some geographical areas also do not allow for passage of very large ships. The overwhelming share of the global tanker fleet - 77.3% or 10,873 ships - is made up of small tankers (see Figure 3). However, there are significant differences between crude oil and product tankers, with almost all smaller vessels falling into the latter category, while 86.3% of crude oil tankers (2,695 vessels) are Aframax-size or bigger (see Figure 4). Average sizes also reflect this: 170,000 DWT for crude oil and 16,800 DWT for product tankers.

<sup>&</sup>lt;sup>41</sup> Equasis lists 24,003 ships under the search criteria "crude oil tanker", "oil products tanker", or "chemical/oil products tanker" in its "Advanced Ship Search". Selecting "in service/commission" as "ship status" leads to 14,069 results.

<sup>&</sup>lt;sup>42</sup> For a classification of tankers by size, see, for instance, here.



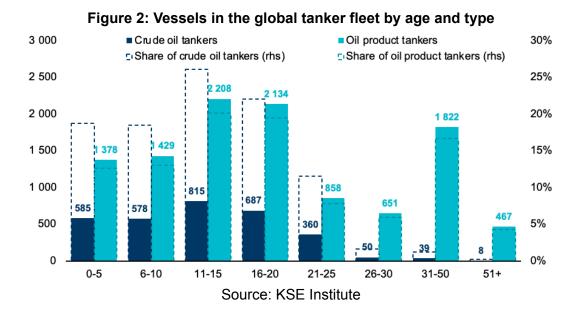
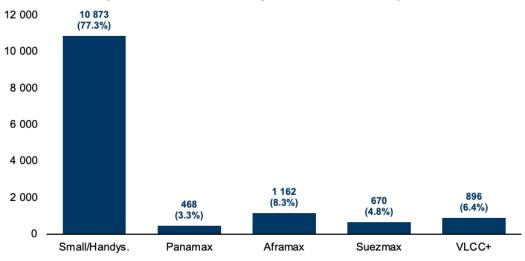


Figure 3: Vessels in the global tanker fleet by size



Source: KSE Institute

**Flags:** Analyzing tankers by their flag allows for insights into ownership trends, compliance patterns, and operational strategies. It also highlights the economic and political choices made by shipowners in response to regulatory and market dynamics. Within our sample of ~14,000 tankers, 15 flag states account for more than two thirds of the total (69.3% or 9,750 ships), with China, Panama, the Marshall Islands, and Liberia at the top of the list (see Figure 5). Those four countries are responsible for more than one third of all tankers (36.6% or 5,152 ships). Flagging dynamics differ somewhat depending on the type of the ship. Liberia plays a particularly prominent role as far as crude oil tankers are concerned. Overall, so-called "flags of convenience" – registration of ships in a country other than their owners' – represent a large share of the global tanker fleet.

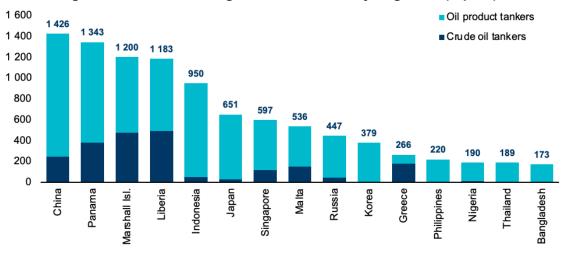
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<sup>&</sup>lt;sup>43</sup> See, for instance, here.



Figure 4: Vessels in the global tanker fleet by size and type 14 000 ■ Cru de oil tankers 100.0% Oil product tankers CIShare of crude oil tankers (rhs) 12 000 10 687 80.0% Share of oil product tankers (rhs) 10 000 60.0% 8 000 6 000 40.0% 4 000 20.0% 2 000 1 130 896 669 241 186 0.0% Small/Handys. VLCC+ **Panamax** Aframax Suezmax Source: KSE Institute

Figure 5: Vessels in the global tanker fleet by flag state (top-15)



Source: KSE Institute

Operators: Roughly 5,000 companies were identified as ship/commercial managers of the global tanker fleet. The top-three jurisdictions – China, Greece, and Singapore – account for almost one third of the total (31.2% or 4,384 ships), and the top-15 for 71.3%, which shows a relatively high level of concentration (see Figure 6). This is particularly the case for crude oil tankers, where Greek, Chinese, and Singaporean companies make up almost half (44.9% or 1,403 ships) of all ship/commercial managers. Greece clearly ranks at the top with 25.3% (790) of all crude oil tankers in the sample. Managers of product tankers are somewhat more diversified; the top-three countries – China, Singapore, and Indonesia – account for 29.6% (3,241) of the total.



2 000 Oil product tankers 1 800 ■ Crude oil tankers 1 600 1 448 1 400 1 173 1 200 968 955 1 000 800 636 591 600 439 435 310 400 287 260 257 256 247 200 Greece Singapore Indonesia China UAE Denmark Thailand Japan South Korea Turkey Russia Norway India Netherlands United Kingdom

Figure 6: Vessels in the global tanker fleet by country of manager (top-15)

Source: KSE Institute



# **Methodology and Data Sources**

#### **How We Determine Insurance Coverage**

First, we identify 141 insurance providers that make a ship eligible for registration in 15 countries.<sup>44</sup> This list is derived from publicly-available information on "recognized P&I clubs and insurance companies" provided by countries' ship registries. It is worth noting that the 12 members of the International Group of P&I Clubs are recognized in all countries. In addition, we find a total of 129 entities that will allow a vessel to be registered – 64 of them are headquartered in countries that participate in the G7+ oil price cap, i.e., the oil price cap (OPC) coalition<sup>45</sup>, and 65 are headquartered elsewhere. Figure 7 shows the number of recognized P&I clubs and insurance companies outside of the IG by country.

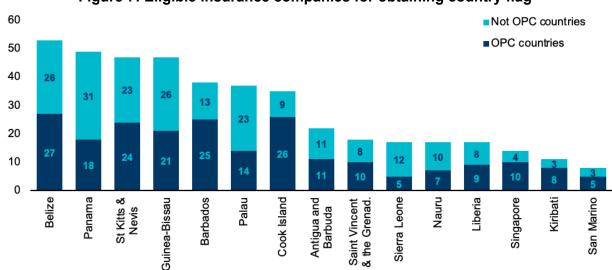


Figure 7: Eligible insurance companies for obtaining country flag\*

Source: Maritime and port authorities, KSE Institute \*excludes IG member clubs

Second, we attempt to establish the insurance status for all ~14,000 vessels of the global tanker fleet. Of the 129 companies outside of the International Group that we identified, 30 provide public access to information about the ships that they insure. 15 of these companies are located outside of the OPC coalition and 15 are located in OPC countries (see Table 1). Importantly, six Russian insurance companies provide such information, including Absolute Insurance Ltd., AlfaStrakhovanie PLC, AMT Insurance Ltd., Insurance Business Group (IBG), Sogaz Insurance, and SOGLASIE Insurance Company Ltd. However, Ingosstrakh, rumored to be the most important Russian provider<sup>46</sup>, does not publicly disclose the ships that it insures.

We are able to identify P&I insurance coverage for 8,935 vessels – or 63.5% of the global tanker fleet.<sup>47</sup> International Group insurance was found for 8,127 ships, which represents 91.0% of all vessels with identified insurance and 57.8% of the ~14,000 vessel sample (see Table 2). 427 of the IG-insured ships also hold some

<sup>&</sup>lt;sup>44</sup> For this analysis, we look at flag states, which publicly provide information on recognized P&I insurance providers, including a number of registries that play an important role for the fleet of ships carrying Russian oil.

<sup>&</sup>lt;sup>45</sup> The OPC coalition consists of Australia, Canada, the member states of the European Union, Japan, New Zealand, Norway, Switzerland, the United Kingdom, and the United States. Therefore, it is also sometimes referred to as the "G7+ price cap".

<sup>&</sup>lt;sup>46</sup> See, for instance, the Financial Times' coverage of Ingosstrakh's role here, here, and here.

<sup>&</sup>lt;sup>47</sup> Information about the vessels' insurance provided and summarized in this report was collected over the past several weeks and documents the current state of play as accurately as possible.



kind of additional policy within or outside OPC jurisdictions. In terms of non-IG coverage, we find 494 vessels insured by entities within the OPC coalition and 293 outside, with 21 ships carrying policies from both OPC and non-OPC jurisdictions. Finally, we are unable to identify the P&I insurance provider for 5,134 ships – or 36.5% of the global tanker fleet. A closer look at this last group of ships shows that most of them are small, i.e., less than 55,000 DWT (88.8% of the 5,134), and overwhelmingly represent product tankers (see Table 3). This is not surprising given the fact that potential liabilities of smaller vessels are lower and that they often undertake short voyages. As a result, they are often able to rely on local insurance companies.

Table 1: Non-IG P&I insurance companies with open databases of insured vessels

			•		
Headquartered in OPC coalitio	n jurisdiction	ıs	Not headquartered in OPC coalition	jurisdictio	ons
Company	Country	Ships	Company	Country	Ships
Anglo & Eastern Ship Owners P&I Club	VG	1	Absolute Insurance Ltd.	RU	49
Asia Faith Insurance (Bermuda) Limited	BM	4	Africa Asia Shipowners Mutual Ass. Assn.	GW	3
British Marine	UK	191	AlfaStrakhovanie PLC	RU	90
Hydor AS	NO	144	AMT Insurance	RU	31
JMM Europe	ΙE	-	Al-Bahriah Insurance & Reinsurance S.A.L	LB	-
Marine Underwriting Services	LV	29	China Shipowners Mutual Assurance Assn.	CN	343
Mitsui Sumitomo Insurance Co. Ltd.	JP	1	Continental Steamship Owners Mutual P&I Assn.	MH	-
MS Amline Marine	UK	72	East of England P&I Association Ltd	SC	42
Noord Nederlandsche P&I Club	NL	-	Edinburgharian PANDI Association	SC	-
Pyramid Marine Overseas P&I and Insurance	US	5	Insurance Business Group (IBG)	RU	-
Ro Marine AS	NO	67	Korea Shipowners Mutual P&I Association	KR	90
Shipowners Mutual Syndicate Limited	UK	1	Qeshm International Trust Alliance (QITA) P&I Club	TR	21
Sirius Mutual Protection and Indemnity Assn.	US	-	SOGLASIE Insurance Company Limited	RU	5
The MECO Group	UK	30	Sogaz Insurance	RU	47
Thomas Miller Specialty GmbH UK Branch	UK	7	Türk P&I Insurance Company	TR	1

BM - Bermuda (UK), CN - China, GW - Guinea-Bissau, IE - Ireland, JP - Japan, KR - South Korea, LB - Lebanon, LV - Latvia, MH - Marshall Islands, NL - Netherlands, NO - Norway, RU - Russia, SC - Seychelles, TR - Türkiye, UK - United Kingdom, US - United States, VG - British Virgin Islands (UK)

Table 2: P&I insurance of ships in the global tanker fleet

International Group P&I	Non-IG from OPC country	From non- OPC country	Count	Share of total
Yes	No	No	7,700	54.7%
Yes	Yes	No	30	0.2%
Yes	No	Yes	397	2.8%
No	Yes	Yes	21	0.1%
No	Yes	No	494	3.5%
No	No	Yes	293	2.1%
No	No	No	5,134	36.5%

Source: KSE Institute \*includes chemical tankers

There appears to be a link between the place of incorporation of ship managers and the absence of information about P&I insurance, specifically for tankers of Panamax size and above. Companies from China (126 out of 574), the UAE (77), and the Seychelles (73) record the highest number of vessels without confirmed coverage, while in terms of the share, Iran (51 out of 53), the Seychelles (73 out of 91), and the Marshall Islands (33 out of 61) stand out. It is possible that the vessels have some local insurance, but their size poses questions about the adequacy of such arrangements. Tankers managed in the G7+ overwhelmingly carry IG insurance, including 809 (out of 815) Greek, all 134 Norwegian, and all 87 Japanese tankers.

Among non-IG P&I insurers, several companies stand out in terms of the number of covered vessels. This includes within OPC countries British Marine (United Kingdom, 191 ships), Hydor AS (Norway, 144), MS Amlin Marine (United Kingdom, 72), Ro Marine AS (Norway, 67), and outside of OPC countries China



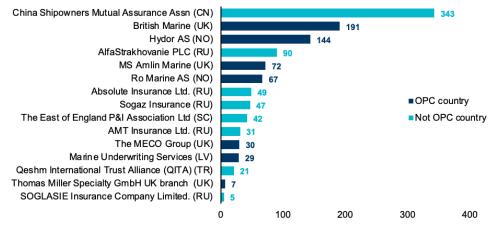
Shipowners Mutual Assurance Association (China, 343), AlfaStrakhovanie PLC (Russia, 90), Korean Shipowners' Mutual Protection & Indemnity Association (South Korea, 90), Absolute Insurance Ltd. (Russia, 49), and Sogaz Insurance (Russia, 47). For more information on the non-IG coverage, see Figure 8 as well as the section on Russian insurance providers. 30 vessels insured in OPC countries and 397 vessels insured in countries outside of the OPC coalition also hold IG insurance (see Table 2).

Table 3: Distribution of tankers for which no P&I insurance was identified

	Crude oil tanker	Oil prod./chem. tanker	All vessels
Small/Handysize	56	4,504	4,560
Panamax	33	25	58
Aframax	245	6	251
Suezmax	107	1	108
VLCC+	157	0	157
All vessels	598	4,536	5,134

Source: KSE Institute

Figure 8: Non-IG P&I insurance by company (top 15 by number of vessels)



Source: Insurance providers, KSE Institute

#### **How We Define "Shadow Fleet"**

The term "shadow fleet" has been used extensively in recent months as the number of ships evading sanctions on Russian oil grew, and it has been interpreted in varying ways. Therefore, it is critical to begin with a clear definition. We approach this issue from the perspective of the G7+ oil price cap which states that Russian oil transported with the participation of service providers from this group of countries must be sold at or below a certain price. This level was set at \$60/barrel for crude oil, \$100/barrel for premium oil products (e.g., diesel, gasoline), and \$45/barrel for discounted oil products (e.g., naphtha, fuel oils). As we view the shadow fleet as a strategy to evade these restrictions and enable Russia to sell its exports at market prices, a shadow tanker is defined as a ship that does not have any links to G7+ jurisdictions, including ownership, management, flagging, and insurance. In a previous report, we concluded that the shadow fleet had largely been built by acquiring ships on the second-hand market and stripping them of any such connections. It is important to note that the term "shadow" refers to opaque ownership and management structures, reflagging to

<sup>&</sup>lt;sup>48</sup> See "Assessing Russia's Shadow Fleet: Initial Build-Up, Links to the Global Shadow Flee, and Future Prospects" here.



increasingly suspicious locations, and a lack of transparency regarding oil spill insurance. It does not mean that we do not know what the ships are doing, where they are operating, and what they are transporting.

The shadow fleet differs from other ships – referred to as "mainstream fleet" or "white fleet" – in a fundamental way as shadow tankers systematically undermine the rules and regulations of the global shipping industry, including with regard to technical standards and adequate oil spill insurance. Thus, the classification of tankers into a "white fleet" and a "shadow fleet" is increasingly important in the context of maritime security, environmental protection, and compliance with international sanctions. The "white fleet" represents vessels that adhere to international standards, including proper flag registration, recognized P&I insurance, and transparent ownership and management structures. These vessels contribute to a regulated and accountable global shipping industry. On the other hand, the "shadow fleet" consists of ships that often operate outside established norms, using methods such as flag-hopping, opaque ownership structures, and insufficient insurance coverage to evade scrutiny.

Table 4: Classification of ships in the global tanker fleet<sup>49</sup>

Ownership, management, and flag From OPC country Not from OPC country White fleet White fleet From OPC country (incl. IG) 4,109 (29.2%) 4,533 (32.2%) White fleet Shadow fleet Not from OPC country 4 (<0.1%) 289 (2.1%) Possibly shadow fleet White fleet Unknown/not identified 830 (5.9%) 4,304 (30.6%)

Source: KSE Institute

In our analysis, we use five parameters to identify shadow tankers and determine whether there is a link to an OPC coalition jurisdiction or not: (1) the vessel's registered owner; (2) the ship/commercial manager; (3) the ISM manager; (4) the flag registry; and (5) the P&I insurance provider. If any of the five has a link to OPC coalition countries, the vessel is classified as part of the "white fleet" – because the price cap will apply to its operations involving Russian oil. Only if none of the five show such a link, we identify the vessel as a shadow tanker. The insurance part is the most challenging one as the provider for many ships is unknown. For the overview that follows, we classify these ships as "potentially shadow fleet".

Two-thirds (67.4%) of the 14,069 ships in our analysis are identified as part of the "white fleet" (9,476), 2.1% (289) as part of the "shadow fleet", and for 30.6% (4,304) we were unable to conclusively determine the status due to the absence of information about the ships' oil spill insurance. While it is likely that many of them do not have links to G7+ jurisdictions, we consider them as a separate group for the purposes of the summary statistics presented here. Altogether, the shadow fleet could be as large as one third of the global tanker fleet. Table 4 summarizes our findings regarding the classification of vessels. It is important to emphasize that this assessment is based on our definition of "shadow fleet" – i.e., absence of links to oil price cap coalition countries – as well as the overall lack of transparency with regard to P&I insurance. Likely, not all ships for which P&I insurance information is publicly unavailable are part of the shadow fleet.

<sup>&</sup>lt;sup>49</sup> 834 of the global tanker fleet vessels identified in Table 2 as not having P&I insurance from an OPC coalition jurisdiction are not part of the shadow fleet due their registered owner, ship/commercial/ISM manager, and/or flag state.

<sup>&</sup>lt;sup>50</sup> The significant share of small vessels included in our analysis also leads to a relatively high "shadow fleet" estimate.



# **P&I Insurance: A Deep Dive**

#### **Insurance of the Global Tanker Fleet**

Almost 60% of the global tanker fleet is insured by the International Group. For our analysis, we investigate the insurance coverage of 14,069 tankers. 57.8% (8,127 vessels) are insured by the IG, while 3.7% (515) are insured through other Western P&I insurers outside of the IG. This leaves 2.1% of the fleet (293 vessels) insured by non-Western insurers and 36.5% (5,134) for which the insurer could not be determined (see Figure 9). The global fleet consists of a large number of ships under 10,000 dead weight tons (DWT) and handysize tankers (10,000-54,999 DWT) – they account for 46.5% and 30.8%, respectively (see Figure 10).

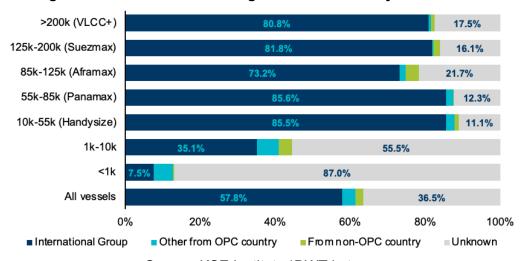


Figure 9: P&I insurance of the global tanker fleet by vessel size<sup>51</sup>

Source: KSE Institute \*DWT in tons

The insurance status varies considerably by vessel size. For 87.0% of very small vessels (under 1,000 DWT) the P&I insurance provider is unknown and the share of IG-insured ships low at 7.5%. For small vessels (1,000-9,999 DWT), no insurance was identified for 55.5% and 35.1% are insured by IG members. The situation looks very different for vessels of 10,000+ DWT – Handysize, Panamax, Aframax, and Suezmax, and VLCC+. Of the 7,524 ships, 82.7% are insured by IG members and the provider is unknown for 14.0%.

84% of the active oil tanker fleet have P&I coverage from the IG. A different way to look at this issue is by focusing on the vessels which can be confirmed to have transported crude oil and/or oil products in 2024 – 6,444 ships. Due to data restrictions, this sample only includes ~700 vessels smaller than 10,000 DWT (see Figure 10). The majority of ships are either Handysize (43.7%), Aframax (16.4%), VLCC+ (13.2%), Suezmax (9.8%), and Panamax (6.3%). As a result of compositional effects, the share of ships insured by members of the IG is much higher than for the full global fleet – 84.0% (see Figure 11). 2.0% of the vessels are insured by non-IG Western providers, 1.7% by non-Western ones, and for 12.3% the insurance provider is unknown. Importantly, the insurance status represented here reflects the latest available information for each vessel. It does not mean that the ship held this insurance for the entirety of 2024 or all voyages with cargoes from certain countries. We use the ships' activities only to define a separate sample of vessels for our analysis.

<sup>51</sup> Vessels with IG and OPC country-based non-IG insurance are counted in the "International Group" category, vessels with OPC country-based and non-OPC country-based insurance are counted in the "Other from OPC country" category.



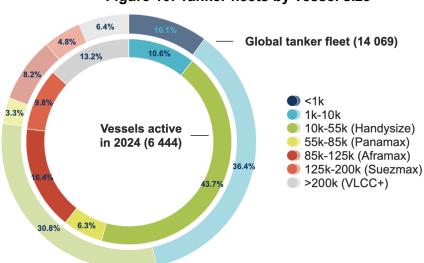


Figure 10: Tanker fleets by vessel size\*

Source: KSE Institute \*Insurance status reflects latest available information

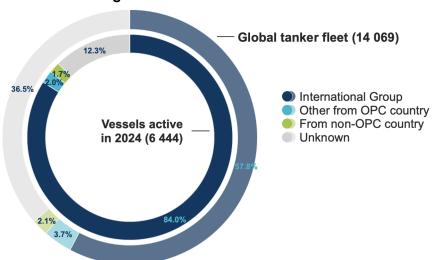


Figure 11: P&I insurance of tanker fleets\*

Source: KSE Institute \*Insurance status reflects latest available information

## **Insurance of Tankers Carrying Russian Oil**

The share of IG P&I insurance is closely linked to whether a ship transported Russian crude oil. A comparison of vessels that carried Russian crude in 2024 (415) and those that carried only oil of non-Russian origin (2,165) reveals significant differences. For the latter, the share of ships with IG P&I insurance is 90.6%, while the insurance provider is unknown for only 8.5%. For ships that carried Russian crude oil, the respective numbers are 29.4% and 56.9%, while 3.9% are insured by non-IG providers in OPC countries and 9.9% by companies outside of OPC countries (see Figure 12). 45 of these are currently insured by Russian companies. The share of IG P&I coverage based on the number of ships is higher than the estimates based on transported



volumes which we document in our *Russia Chartbook* and *Russian Oil Tracker*.<sup>52</sup> Again, the insurance status is the latest available and does not mean the ship carried the coverage during all voyages in 2024.

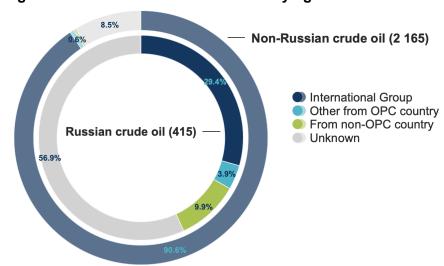


Figure 12: P&I insurance of tankers carrying Russian crude oil in 2024\*

Source: KSE Institute \*Insurance status reflects latest available information

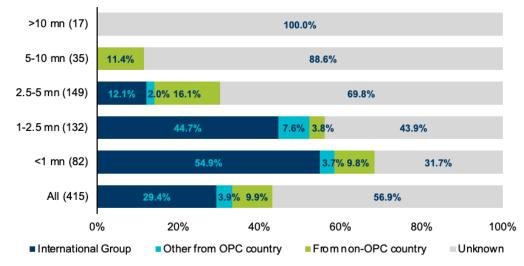


Figure 13: P&I insurance of tankers carrying Russian crude oil in 2024 by volume\*

Source: KSE Institute \*Volume in barrels; number of vessels in parentheses; insurance status reflects latest available information

Interestingly, the share of IG-insured vessels declines significantly with the volume of Russian oil transported – and, conversely, the share of ships with unknown insurance increases (see Figure 13). For ships that carried less than 1 million barrels in 2024, the current IG insurance rate is 54.9% and the provider is unknown for 31.7%. The respective numbers for ships that carried 1-2.5 million barrels are 44.7% and 43.9%, and for those that carried 2.5-5 million barrels, 12.1% and 69.8%. Of the ships that transported more than 5 million barrels, 0% currently hold IG P&I insurance and the provider is unknown for 92.3%, with the remaining 7.7% insured by

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<sup>52</sup> See here.



non-Western companies. Thus, the more important a ship is for Russian oil exports, the less likely it is to rely on Western services. This is consistent with the intention to evade the G7+ oil price cap as much as possible.

P&I insurance also varies depending on the transport of Russian oil products, but not by as much. While the share of IG-insured ships is smaller for ships that carried Russian cargo (863) than for those that only carried non-Russian cargo (4,016) – 56.2% vs. 92.7% –, it is significantly higher than for crude oil (see Figure 14). Here, it is important to recognize that 142 ships transported both crude oil and oil products and are, thus, counted in both parts of the analysis. Conversely, the share of ships without known providers is higher than for ships carrying non-Russian cargo – 31.4% vs. 5.5% – but much lower than in the case of crude oil. Essentially, the fact that the price cap for premium oil products (e.g., diesel, gasoline) was set so high (at \$100/barrel) that it rarely applies and the fact that oil products make up a smaller share of Russian oil exports – 36% for oil products vs. 64% for crude oil in volume terms in 2024 – means there is a much smaller incentive to invest into alternative export capacities in the form of ships that have no G7+ links and do not fall under the price cap. 59 of the vessels transporting Russian oil products are currently insured by Russian companies.

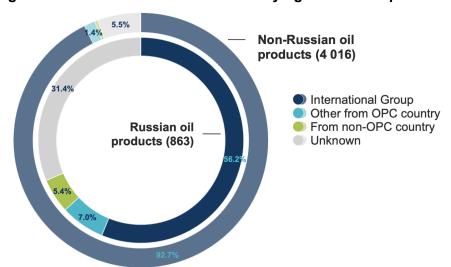


Figure 14: P&I insurance of tankers carrying Russian oil products in 2024\*

Source: KSE Institute \*Insurance status reflects latest available information

The insurance status varies somewhat depending on the volume of Russian oil products carried during 2024, but not dramatically. Only for those ships that carried less than 1 million barrels is the share of IG coverage low (15.9%), the share of unknown providers higher (49.3%), and the role of non-Western providers more significant (31.9%). For all other categories, IG coverage stands between 55-65% and unknown providers account for 25-35%. (see Figure 15). The incentive structure discussed above clearly factors in here.



>10 mn (87) 57.5% **3.4% 4**.6% 34.5% 5-10 mn (285) 1.8% 28.1% 2.5-5 mn (267) 63.7% 5.6% 3.7% 27.0% 1-2.5 mn (155) 55.5% **5.2%** 3.9% 35.5% <1 mn (69) 31.9% 49.3% All (863) 7.0% 5.4% 31.4% 0% 20% 40% 60% 80% 100% Other from OPC country From non-OPC country International Group Unknown

Figure 15: P&I insurance of tankers carrying Russian oil products in 2024 by volume\*

Source: KSE Institute \*Volume in barrels; number of vessels in parentheses; insurance status reflects latest available information

P&I coverage by the International Group is the standard for ships transporting non-Russian cargo. For ships that are not involved with Russian oil (2,165), the share of IG P&I coverage based on the most-recent information is very high – 90.6% for those transporting crude oil and 92.7% for those transporting oil products (see Figures 16 & 17). There is also little variation depending on the volume involved with the exception of ships transporting between 1-2.5 million barrels of crude oil in 2024, for which the IG share is significantly lower at 73.1%. The dynamics behind this will require additional investigation. What the results show, however, is that outside of the Russian oil trade, P&I coverage by the International Group remains the industry standard.

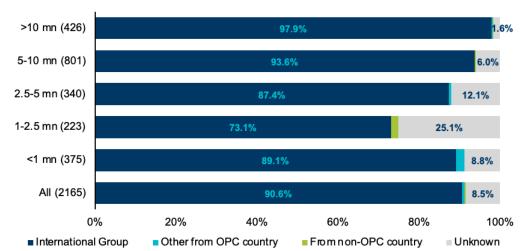


Figure 16: P&I insurance of tankers carrying non-Russian crude oil in 2024 by volume\*

Source: KSE Institute \*Volume in barrels; number of vessels in parentheses; insurance status reflects latest available information



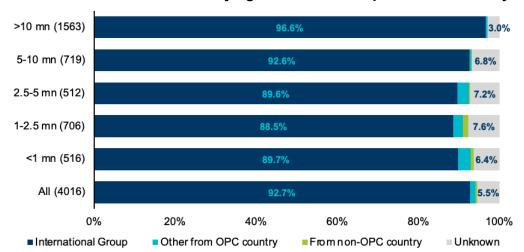


Figure 17: P&I insurance of tankers carrying non-Russian oil products in 2024 by volume\*

Source: KSE Institute \*Volume in barrels; number of vessels in parentheses; insurance status reflects latest available information

#### Insurance of the Shadow Fleet

Insurance of shadow tankers remains largely intransparent. We define a vessel as part of the shadow fleet if it does not have any links to G7+ jurisdictions, including ownership, management, flagging, and insurance. Thus, by definition, none of these 4,593 ships will hold P&I insurance from the IG or any other Western provider. What our analysis shows, however, is a fundamental lack of transparency in terms of the oil spill insurance of shadow tankers that carried Russian oil in 2024 – for 16.9% (85) of the ships, the insurer is known and for 83.1% (417) it is not (See Figure 18). Our analysis shows that this is not a problem unique to the shadow fleet involved with Russian oil – 93.7% of the global fleet without links to the G7+ do not have a known insurance provider. The share is not fundamentally different for those ships that carried oil in 2024 (87.3%) or that carried non-Russian oil (93.2%). That we know marginally more about the insurance of the "Russian" shadow fleet is the result of disclosures by four Russian insurance companies, which insure a total of 220 ships, including the 85 vessels carrying Russian oil mentioned above (see Figure 19). Ingosstrakh, one of the most important insurers, does not provide any information on the ships that it provides coverage for.

Characteristics of IG-insured and non-IG insured ships differ significantly.<sup>53</sup> It has been argued by some observers<sup>54</sup> that the "Russian" shadow fleet was not fundamentally different from the rest of the global tanker fleet, especially in terms of their P&I insurance. In our view, this is incorrect. For the following analysis, we look at the 1,135 ships that carried Russian oil in 2024<sup>55</sup>, 556 currently hold IG P&I insurance and 579 do not. *First, there is the question of the ships' age.* We find that 23.0% of IG-covered vessels are ten years old or younger, 23.2% between eleven and 15 years old, 46.2% between 16 and 20 years old, and only 7.6% older than 20 years (see Figure 20). For non-IG insured ships, the distribution is very different: only 22.8% of them are 15

<sup>&</sup>lt;sup>53</sup> This distinction is not identical to the one between "shadow fleet" and "white fleet" as 54 ships that carried Russian oil in 2024 and do not have IG P&I insurance are linked to G7+ jurisdictions in other ways, e.g., non-IG insurance, ownership, ship/commercial/ISM management, or flagging. Thus, these are no "shadow tankers" based on our definition.
<sup>54</sup> See, for instance, here.

<sup>&</sup>lt;sup>55</sup> 273 tankers carried Russian crude oil in 2024, 720 carried Russia oil products, and 142 carried both.



years old or younger, 53.0% between 16 and 20 years old, and 24.2% older than 20 years. **Non-IG insured ships are significantly older, with an average age of 18.1 years (vs. 14.4 years for IG-insured ones).** 

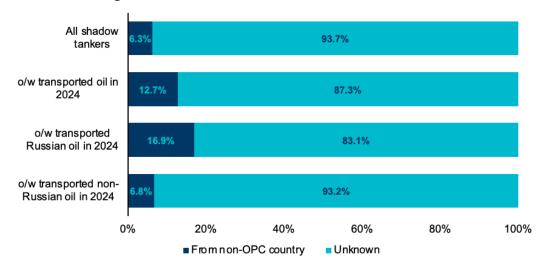


Figure 18: P&I insurance of active shadow tankers\*

Source: KSE Institute \*Insurance status reflects latest available information

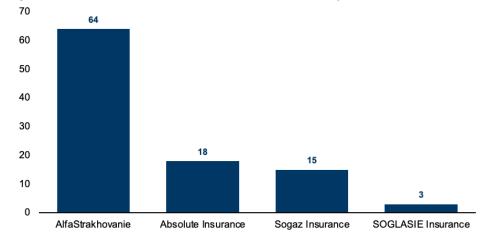


Figure 19: Active shadow tankers P&I-insured by Russian companies\*

Source: KSE Institute \*Insurance status reflects latest available information; figure includes only vessels that are confirmed to have transported oil in 2024

Second, we take a look at flag states, which we break down in four categories: white-listed, grey-listed, and black-listed by the Paris MoU<sup>56</sup> and those without a rating due to lack of a track record. 75.1% of IG-insured tankers are flagged in white-listed jurisdictions and an additional 21.8% in grey-listed ones, leaving only 3.1% for black-listed or unrated ones (see Figure 21). Flag states accounting for the largest number of ships are Liberia (159), Panama (113), the Marshall Islands (98), Malta (79), and Greece (59). All of these with the exception of Liberia (grey-listed) are white-listed flag states. For non-IG insured vessels, the distribution is quite different. White-listed flag states account for only 35.8% (with 21.2% Russian-flagged ships<sup>57</sup>), while

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<sup>&</sup>lt;sup>56</sup> See <u>here</u>.

<sup>&</sup>lt;sup>57</sup> Whether Russia should be white-listed or will remain so is a legitimate question. The Tokyo MoU, an alternative system of port state control, already moved Russia to its grey list (see <u>here</u>).



grey-listed ones for 38.6%, black-listed ones for 8.8%, and flag states without a rating for 16.8%. Flag states accounting for the largest number of non-IG insured ships are Panama (150), Russia (120), Gabon (75), as well as Barbados and the Cook Islands (49 each). Among these, Gabon deserves particular attention as it flags a large number of tankers without any meaningful track record as a flag state. **Non-IG-insured tankers are largely registered in problematic flag states, while this is not the case for IG-insured ships.** 

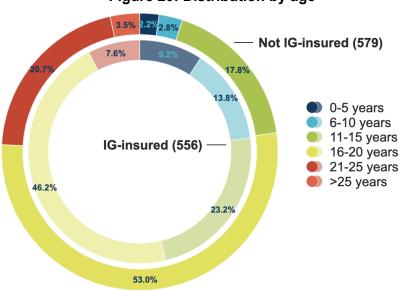


Figure 20: Distribution by age\*

Source: KSE Institute \*Insurance status reflects latest available information

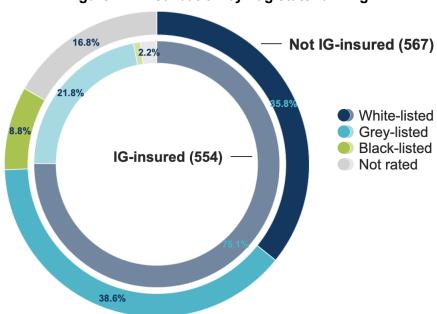


Figure 21: Distribution by flag state ranking\*

Source: KSE Institute \*Based on Paris MoU; insurance status reflects latest available information



# Special Feature: Russian P&I Insurance Providers

The role of Russian insurance companies gets to the core of one of the challenges related to the shadow fleet: likely insufficient coverage for damages from oil spills. As those people and entities behind shadow operations found it difficult to build an alternative infrastructure for this purpose without any links to G7+ jurisdictions, they are suspected to rely heavily on Russian insurance providers. While some of these provide information on covered vessels, many do not, including Ingosstrakh which has been reported to play an outsized role.<sup>58</sup> Due to this lack of information, it is difficult to assess whether the P&I insurance carried by hundreds of vessels is adequate under IMO guidelines.

**Even where the insurance company is known, its financials and, thus, ability to pay out in case of an incident, cannot be evaluated.** Problems related to Russian insurance companies go further, however. For one, many of them, including AlfaStrakhovanie, which is discussed further below, are under sanctions in various jurisdictions such as the European Union, United States, and United Kingdom. Therefore, it is likely difficult – if not impossible – for anyone in these jurisdictions to accept a payment from such a company. What is more, re-insurance has reportedly been arranged through the Russian National Reinsurance Corporation (RNRC), a subsidiary of the Russian central bank (CBR). Both the CBR and RNRC are also sanctioned.

Russian P&I insurance providers do not have any strong incentive to pay out to anyone in a country identified by Russia as "unfriendly" to its interests. Allegedly, some of the insurance arrangements involving Russian entities such as Ingosstrakh contain sanctions exclusion clauses and it is unclear how broadly they will be interpreted. For instance, the insurance provider could void the policy should the oil on the vessel in question have been sold above the G7+ price cap although, technically, the cap does not apply to ships that have no links to OPC jurisdictions in terms of ownership, management, flagging, and insurance. In case the insurer chooses to not honor its contractual obligations, it is unclear whether the damaged party – e.g., a coastal community in the Baltic Sea, English Channel, or Mediterranean – has any legal recourse.

In this section, we take a closer look at some of the Russian P&I insurers: AlfaStrakhovanie, Absolute Insurance, Sogaz Insurance, AMT Insurance, and SOGLASIE Insurance Company.<sup>62</sup> Two of the companies allegedly playing particularly important roles for shadow fleet insurance – Ingosstrakh and VSK – do not publicly provide information on insured vessels. The numbers presented below reflect statistics with regard to all vessels in the global tanker fleet, not only those confirmed to have been active in 2024 or which transported certain types of cargo. Thus, they may differ from statistics presented in the previous section.

#### AlfaStrakhovanie PLC

AlfaStrakhovanie insures 90 tankers, 9 of which are also insured by Ro Marine AS from Norway, 7 by one of the IG P&I clubs, and 1 each by Sogaz Insurance and SOGLASIE Insurance Company Ltd. This leaves 74 vessels without any links to OPC jurisdictions and, thus, identifies them as part of the shadow fleet.

• 80% of tankers insured by AlfaStrakhovanie (72) are older than 15 years.

<sup>&</sup>lt;sup>58</sup> See, for instance, the Financial Times' coverage of Ingosstrakh's role <u>here</u>, <u>here</u>, and <u>here</u>.

<sup>&</sup>lt;sup>59</sup> For information on sanctioned entities, see <u>here</u>, <u>here</u>, and <u>here</u>.

<sup>&</sup>lt;sup>60</sup> For a list of foreign states and territories involved in unfriendly activity towards Russia, Russian companies and citizens according to the Russian government, see Government Directive No. 430-r of 5 March 2022 <u>here</u>.

<sup>&</sup>lt;sup>61</sup> See here.

<sup>&</sup>lt;sup>62</sup> More information about these tankers as well as their characteristics and activities can be found here.



- 53% of the vessels are flagged in white-lested jurisdictions (according to the Paris MoU), including Russia (32) and Barbados (16), 18% in grey-listed ones (Panama 8, Cook Islands 6, St. Kitts and Nevis 1, Sierra Leone 1), 6% in black-listed ones (Palau 5), and 23% in non-ranked flag states (Gabon 14, Honduras 5, Djibouti 3).
- UAE-based companies manage 37% of the vessels and Russia-based ones 33%. Management is quite fragmented, with 21 Emirati and 15 Russian companies appearing as ship managers.
- Only 8 of the AlfaStrakhovanie insured tankers are listed as holding BCCs (Bunker Convention Certificate), CLCs (Civil Liability Certificate), NWRCs (Nairobi Wreck Removal Certificate), or MLCs (Maritime Labour Certificates). For the remaining vessels, no information is available.
- 52 of the tankers carried out voyages only from Russia, 7 from Russia as well as other countries, and 10 only from countries other than Russia during the time that they were confirmed to be covered by the company's insurance (and until November 2024). Overall, AlfaStrakhovanie insured tankers undertook 271 voyages from Russia and 32 from other countries. They transported 66 million barrels of Russian oil and 3.3 million barrels of oil of different origin; thus, Russian cargo accounted for 95%.
- 37 tankers are currently subject to sanctions in the United States, European Union, or United Kingdom.

#### **Absolute Insurance Ltd.**

Absolute Insurance Ltd. insures 49 tankers, 2 of which are also insured through members of the IG. As 1 vessel is managed by an entity in Malta, this leaves 46 ships that are part of the shadow fleet.

- All 49 tankers are small tankers/handysize, with the 2 largest at 50,000 DWT and the others displaying an average deadweight of 5,500 tons.
- Almost 60% of the ships (29) are older than 21 years, which may negatively affect the possibility of obtaining insurance from reputable international insurance clubs and increase insurance premiums.
- 45 out of 49 tankers (92%) operate under the flag of Russia, which is white-listed by the Paris MoU, 6% are registered in grey-listed jurisdictions (Cook Islands, Sierra Leone, Panama), and 2% in black-listed ones (Palau).
- The vast majority of the ships (86%, 42) are managed by Russian companies, with the most important Ilya Muromets Jsc (11), Volgotanker Volzhski Oil Shpg (8), and Dilmas Co Ltd. (7).
- According to data from Absolute Insurance Ltd., 42 tankers have BCCs, NWRCs, and TCs (Tonnage Certificates), 39 have HNSCs (Hazardous and Noxious Substances Certificates), and 35 MLCs, but none of them have CLCs. The CLC is particularly important as it confirms that the vessel has sufficient coverage for damages caused by a spill of its cargo.
- Due to the small size of many of the tankers, we can only track vessel activity for 16, 11 of which transported only cargo from Russia, 5 from other countries, and 4 from several places including Russia. These ships undertook a total of 40 voyages from Russia and 5 from elsewhere, transporting 1.9 million barrels during the former and 0.45 million barrels during the latter. Thus, Russian cargo accounted for 81% of the total volume transported by these vessels.



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## **Sogaz Insurance**

Sogaz Insurance insures 47 tankers, one of which is also insured by AlfaStrakhovanie. All of the vessels are part of the shadow fleet.

- 26 of the 47 tankers (55%) are small tankers/handysize, 18 are Aframax, and 3 are Suezmax.
- Less than one third (14) are under 15 years old, while tankers aged 21 years or more account for more than one third (16). The average age of Sogaz-insured ships is 20 years.
- 46 of the ships are flagged in Russia and 1 in Azerbaijan. Russia is grey-listed by the Tokyo MoU and Azerbaijan is not ranked.
- 46 out of 47 tankers fly the Russian flag, which is white-listed by the Paris MoU, and 1 tanker operates under the flag of Azerbaijan, which is black listed.
- 45 ships are managed by Russian entities, 1 by an Azerbaijani company, and 1 by an Emirati one. 2 of the Russian operators – Invest Fleet Ltd. and South Fleet Ltd. – have almost identical legal addresses in St. Petersburg, which only differ by the office numbers. Both companies have taken over vessels previously managed by Sovcomflot and, later, Sun Ship Management and Oil Tankers Scf Mgmt Fzco, which are under sanctions in several jurisdictions. More information can be found <a href="https://example.com/here-numbers-number
- Sogaz Insurance does not provide information about any certificates held by these ships.
- 11 tankers carried out 24 operations, all from Russian ports and transporting 9 million barrels of oil.
- 33 tankers are currently subject to sanctions in the United States, European Union, or United Kingdom and most of them have suspended operations after their designation.

#### **AMT Insurance Ltd.**

AMT Insurance Ltd. insured 31 tankers. Many of the ships have characteristics that distinguish them from those insured by other Russian companies. 17 of them are classified as part of the "white fleet" as 13 were also insured by a member of the IG (West of England), 3 were also covered by a non-IG insurer in an OPC coalition country (British Marine), and 1 is managed by a Maltese entity.

- The 13 IG-insured tankers are managed by two Turkish companies Palmali Gemicilik Ve Acentelik and Spring Marine Denizcilik and they share the same ISM manager (Palmali Gemicilik Ve Acentelik). 12 of the 13 are flagged in Liberia.
- In addition to the 3 British Marine-insured vessels (where it cannot be determined whether the coverage is still valid), there are 9 others that carried insurance in addition to their coverage through AMT Insurance Ltd.: 7 from Seychelles-based East of England P&I Association Ltd. (now expired), and 1 each from Africa Asia Shipowner Mutual Assurance Association (Guinea-Bissau) and Asia Faith Insurance (Bermuda) Limited.
- For 30 out of 31 tankers, information on the validity of the coverage is difficult to interpret. On the one hand, it is indicated to have expired in 2023, on the other hand, it is identified as "valid".
- 13 of the 14 tankers identified as shadow fleet are older than 26 years, the oldest of them is 41, and the average age is 32. All of them are small tankers/handysize.



- 48% of tankers fly flags of while-listed countries (Liberia 12, Russia 5), 26% of grey-listed ones (Sierra Leone 5, Panama 2, St. Kitt and Nevis 1), and 6% of black-listed ones (Tanzania 2). The remaining 16% have flags that are not ranked by the Paris MoU.
- They are flagged in 7 countries Gambia, Mongolia, Panama, Russia, Sao Tome and Principe, Sierra Leone and Tanzania – and managed by companies in 5 countries – China, Indonesia, Malaysia, Russia and Samoa. 7 out of the 14 tankers do not have an ISM manager according to Equasis.
- During January 2023-November 2024, we have records for activities of 13 out of 31 tankers. The others are either small or were engaged in domestic transportation only. Those 13 carried 6.3 million barrels of oil products, with only 0.3 million barrels transported from Russia.

## **SOGLASIE Insurance Company Ltd.**

SOGLASIE Insurance Company Ltd. insures the smallest number of tankers among the Russian P&I coverage providers: 5 (4 crude oil tankers and 1 chemicals/oil product tanker). All of them are part of the shadow fleet as they do not have any links to entities in G7+ jurisdictions.

- The age of the tankers is between 21 and 24 years.
- The ships are flagged in only two countries: Panama 3 (grey-listed by ParisMoU) and Djibouti 2 (not listed by ParisMoU).
- 4 different companies manage the ships: Indian Vigor Marine Services Llp, Emirati Maxcon Marine Services Inc, and two Seychelles-based ones, Trident Harmony Ltd and Trident Prosperity Ltd.
- 1 of the tankers also has insurance through AlfaStrakhovanie PLC, with the SOGLASIE insurance expiring in early 2025.
- Each of the five tankers holds the following certificates: BCC, CLC, MLC, WRC.
- The company's website does not indicate the period for which the insurance has been valid. Under the
  assumption that this was the case for one year, we find that only 3 SOGLASIE-insured ships loaded oil
  in ports with all operations done in Russia. 4.3 million barrels were transported during 15 voyages.