AIDA

Press Release

AIDA Cruises presents latest sustainability report: World's first LNGoperated cruise ship, AIDAnova, commissioned in 2018

In the latest edition of "AIDA cares" the company documents further progress on its way to emission-neutral cruising. As early as 2023, 94 percent of all AIDA guests will be sailing on ships that can be fully operated with low-emission liquefied natural gas or, in port, with green shore power.

After ten years of research and development, AIDA Cruises achieved a technological quantum leap with the commissioning of AIDAnova on December 12, 2018, putting the world's first cruise ship that is fully operated by low-emission liquefied natural gas (LNG) into service.

By 2023 two more of these innovative ships will take to the oceans. The company is also retrofitting the ships in the existing fleet on an ongoing basis with state-of-the-art green technology. The use of LNG, shore power from renewable energy sources, the use of modern exhaust gas cleaning systems, the reduction or complete elimination of plastic and disposable products, and the avoidance of food waste on board are key issues that AIDA Cruises is tackling.

"As Germany's market leader for cruises, we accept the ecological and social challenges that we face both now and in the future, and we are taking responsibility. Today we are already exploring together with our partners the use of fuel cells, batteries or liquefied gas from renewable sources in the cruise industry. We are committed to both the Paris climate targets and those of the International Maritime Organization (IMO). Our long-term goal is clear: emission-neutral cruising," said AIDA President Felix Eichhorn at the launch of "AIDA cares 2019".

Overview of the key facts:

Use of liquefied natural gas (LNG): AIDA Cruises to commission two more LNG-powered ships with low-emission propulsion by 2023.

AIDA has already been engaging in research into and development of the use of LNG in the cruise industry for over ten years.

With AIDAnova's launch at the end of 2018, the company commissioned the world's first cruise ship that can be operated entirely with low-emission liquefied natural gas (LNG) both at sea and in port. Two more of these innovative AIDA ships will be commissioned in 2021 and 2023 respectively. Thanks to the use of LNG, emissions of particulates and sulfur oxides are virtually eliminated, while emissions of nitrogen oxides and CO₂ are permanently reduced. At present, AIDAnova is sailing in the Western Mediterranean, and is supplied with LNG every 14 days in Barcelona. Previously, AIDAnova had been supplied in Tenerife/Canary Islands, also on a 14-day basis.

Overall the Carnival Corporation – which owns AIDA Cruises – has commissioned eleven LNG-powered ships for four of its cruise brands, which will be put into service by 2025. Like AIDAnova, all of these ships will be built at the Meyer Werft shipyards in Papenburg (Germany) and Turku (Finland). The floating engine room units and LNG tanks will be produced at the Meyer Werft shipyard's Neptun Werft in Rostock-Warnemünde, while the dual-fuel engines will also be built in Rostock-Warnemünde, by Caterpillar.



Press Release

Use of shore power: All AIDA ships built from 2000 (twelve ships) will be equipped for shore power connection.

On average, an AIDA ship spends 40 percent of its operating time in port. Shore power is therefore an important subject for AIDA Cruises when it comes to retrofitting the ships in the existing fleet with green technology. By using shore power from renewable energy sources while the ships are in port, emissions can be virtually reduced to zero.

As early as 2004, with the commissioning of AIDAdiva, AIDA Cruises was already considering the use of shore power as an option for eco-friendly ship operation when building both AIDAdiva and all further ships. This was ten years before the first plans for a shore power plant for cruise ships started to take shape in Germany. Since 2017 AIDAsol has been using the shore power plant in Hamburg-Altona during regular operations.

Ten ships of the AIDA fleet are currently equipped with a shore power connection or are technically prepared for it. All AIDA ships built from 2000 onwards (twelve ships) will be able to use shore power by the end of 2020.

So that the eco-friendly shore power technology aboard the AIDA ships can be used more extensively in future, port infrastructures need to be developed. In 2018 AIDA Cruises teamed up with the state governments of Schleswig-Holstein and Mecklenburg-Western Pomerania, forming partnerships for environmentally-friendly cruise tourism, with the aim of providing shore power for cruise ships at the ports of Kiel and Rostock by 2020. AIDA Cruises is ready to start test operations in both ports in 2020.

Exhaust gas cleaning systems: Nine ships already equipped.

For all AIDA ships that cannot be entirely powered by LNG, the Advanced Air Quality Systems (AAQS) developed by the Carnival Group are currently the most eco-friendly alternative for reducing ship emissions aboard AIDA ships when they are at sea.

In 2013, as part of an investment program, AIDA Cruises had already started to retrofit its fleet with these exhaust gas cleaning systems. Currently nine of twelve AIDA ships have been equipped with them: AIDAprima, AIDAperla, AIDAdiva, AIDAluna, AIDAmar, AIDAvita, AIDAblu, AIDAsol and AIDAbella.

AIDA has set itself the goal of equipping all ships in the existing fleet (except AIDAcara) that cannot be entirely powered by LNG in this way to improve air quality.

Thanks to these systems, emissions of particulates, nitrogen oxides and sulfur oxides can be significantly reduced. Carbon monoxide emissions can be cut by up to 70 percent, while emissions of unburned hydrocarbons are reduced by up to 85 percent. Where AIDA Cruises is licensed to operate these systems in its global travel regions and/or ports, they are being successfully deployed.

Next technological leap: First practical trial of fuel cells aboard an AIDA ship planned as early as 2021.

AIDA Cruises' long-term goal is emission-neutral cruising. Together with its partners in the worlds of research, science and business, AIDA Cruises has been doing pioneering work for many years in the area of research into and the use of alternative propulsion technologies and state-of-the-art environmental technology.

As part of its Green Cruising Strategy, for instance, AIDA is exploring the possibility of CO₂-free production of liquefied gas from renewable sources ("Power to gas" project) or the use of fuel cells and



Press Release

batteries for cruise ships. Within the scope of the "Pa-X-ell 2" project (promoted by Germany's Federal Ministry of Transport and Digital Infrastructure), practical trials of fuel cells aboard an AIDA ship are planned as early as 2021 in conjunction with the Meyer Werft shipyard and other partners.

Fuel in use:

The use of low-sulfur fuels has already been a reality in many of AIDA Cruises travel regions for years. In the North Sea, the Baltic Sea, off the coasts of North America and in all other ECA-regions worldwide, we use low-sulfur fuel containing at most 0.1 percent sulfur. In all European ports, the engines of AIDA ships have already been using only fuel containing a maximum of 0.1 percent sulfur for almost a decade now. After ten years of research and development, the exclusive use of low-emission liquefied natural gas (LNG) on a cruise ship became a reality as well, with the launch of AIDAnova at the end of 2018. AIDA Cruises will be putting two more of these innovative ships into service by 2023.

Avoidance of plastic and disposable items:

The reduction and, ideally, complete elimination of plastic and disposable items is a key element of AIDA Cruises' sustainability strategy. Wherever possible, disposable items have been replaced with reusable ones.

Many beverages are produced directly aboard the AIDA ships and/or are not purchased in bottles but in special large-volume beverage containers. Plastic straws have been replaced aboard AIDA ships with straws made of biodegradable starch. Furthermore, straws are not automatically provided with every beverage but only with cocktails or at the guest's express request. Wherever disposable cutlery or cocktail sticks remain unavoidable, these are made of wood. Items served with coffee, such as cookies, come without wrapping. AIDA guests enjoy their coffees "to go" from reusable cups rather than disposable plastic cups.

In staterooms and bathrooms, AIDA has dispensed with the use of bags in garbage bins. Laundry bags in the stateroom closets are made of compostable starch, while freshly dry-cleaned items are returned to guests' staterooms without a plastic cover. AIDA Cruises has already been offering only paper bags in its onboard shops since 2013 and, naturally, all spa and cosmetic items on board are free of microplastics.

With regard to the remaining disposable items such as paper napkins, AIDA Cruises ensures that these are biodegradable wherever possible.

Avoiding food waste:

Thanks to a wide range of initiatives, both large and small-scale, AIDA Cruises is succeeding in reducing food waste on board every year.

Naturally, food is prepared fresh and sustainably aboard all AIDA ships – not only for all guests, but also for the crew. AIDA is eager to ensure that no endangered animal species find their way onto the menu, and that wherever possible foodstuffs should be unprocessed, avoiding convenience products. This alone avoids a huge quantity of packaging waste.

Since the first AIDA ship was commissioned over 20 years ago, AIDA kitchens have already been working with what is known as the "cook and chill" system. This means that prepared food is only delivered to the restaurants if it is actually needed. All other food remains refrigerated. Since 2016 the company's entire fleet has been working with the so-called buffet runner system where the staff at the buffet restaurants use their mobile end device to place an order directly with the main kitchen. There,



Press Release

only the food that is actually required at that moment is prepared and delivered. This system is also used, incidentally, in the crew restaurants.

Many of the dishes at the buffet restaurants are prepared fresh at live cooking stations or offered in small individual portions. If guests enjoy the dish, they are free to help themselves to more, rather than sending food back. Table beverages are served not in bottles but in glass carafes. As the restaurants come up to closing time, the range of foods available is not reduced, but rather the size of the serving dishes at the buffet stations. All accumulated waste, including food scraps, is regularly measured aboard the AIDA ships, and steps to further reduce it are developed on an ongoing basis.

AIDA Cruises has already been transparently documenting its commitment to the environment and society since 2007 in its annual sustainability report, AIDA cares, which also sets out all of the key environmental figures. AIDA Cruises has published further information about its commitment to the environment and sustainability in its latest sustainability report, AIDA cares 2019, available at www.aida.de/aidacares.

Rostock, July 12, 2019