AAPA POWERS PROGRAM

Green Shipping Corridors Summary

As port authorities and marine cargo carriers look for ways to decarbonize operations while maintaining cargo efficiency, many are looking toward green corridors to formalize relationships between ports, carriers, shippers, and nations. The green corridor framework was formalized in the Clydebank Declaration, an international agreement established by the United Nations Climate Change Conference to promote the decarbonization of the global maritime shipping industry. The United States and 23 other nations signed the Declaration, with a shared goal of establishing six zero-emission green shipping corridors by 2025.

Green shipping corridors are maritime trade routes between at least two seaports, which support vessels powered by zero-emission fuels, although vessels need not run on zero-emission fuels at the onset of a green shipping corridor project. Substituting heavy-fuel, oil-powered vessels for vessels running on more environmentally friendly fuels such as ammonia, hydrogen, methanol, or liquid natural gas (LNG) will help carriers and ports achieve the goals of green shipping corridors.

Two green shipping corridors from United States ports were announced: Seattle to Alaska and Los Angeles to Shanghai. International announcements include: Australia to Japan, Asia to Europe, Montreal to Antwerp, and Australia to East Asia. The Los Angeles-Shanghai route expects to use green ammonia for zero-emissions vessels in operation by 2030. This busy shipping route would constitute the first green shipping corridor intended for container shipping. The Seattle-Alaska route will aim to create the first cruise-focused green shipping corridor, with major cruise lines calling at British Colombia, Juneau, and Vancouver after departing Seattle. Electric shore power is a major potential component of decarbonizing that route.

There are major technological and economic challenges and costs to creating a green shipping corridor.

First, zero-emission fuels for maritime shipping are not currently economically viable or technologically feasible at scale. As more carriers commit to build vessels powered by zero-emission fuels, increased demand will encourage ports and private industry to stand up production of these fuels.

However, the opportunity to ports and regional economies are tremendous. Rather than fueling overseas, United States ports and ports throughout the Americas can bolster local economies by supporting the production of low or zero-emission fuels locally with natural gas or renewable energy. By providing one of these fuels at a specific port, innovators could attract more vessels to call at ports. In any case, there is a need for cooperation between private industry, research institutions, and all levels of government. Subsidies and grant programs can help port authorities stand up production of alternative fuels and adopt revolutionary technologies.

Through the establishment of the AAPA POWERS program (Port Opportunities with Energy, Resilience, and Sustainability), AAPA will continue researching the necessary technologies and economic conditions to establish green shipping corridors and advocate for the Federal Government to take steps to support adoption of these corridors.