San Pedro Bay Ports
Sustainable Supply Chain Advisory Committee

System of Systems Recommendation

The San Pedro Bay Ports SSCAC recognizes that the goods movement system is made up of a series of systems and ultimately, individual freight moves. Congestion and inefficiencies at any point throughout the supply chain will result in immediate incremental costs and emissions at the specific point of friction. Further, because of the connected nature of the goods movement system, each individual impact within the supply chain could potentially have an adverse impact on another part of the goods movement system, and thus result in cascading additional incremental costs and emissions.

The technologies and systems that make up the goods movement system are currently undergoing a radical transformation. New powertrain technologies, fuels, and processes by which to move freight are being developed, tested and deployed on an ongoing basis. The implementation of the San Pedro Bay Ports Clean Air Action Plan will further accelerate such change. While individual systems and goods movement technologies may offer local economic and/or environmental sustainability benefits, it is critical that these new systems and technologies do not have a negative impact on the efficiency of the overall goods movement system.

The SSCAC has a stated goal to work towards solutions and technologies that will "improve freight system efficiency 25 percent by increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030." To ensure progress towards such a goal, every member of the goods movement community must accept responsibility for ensuring that their proposed actions, technology deployments and/or other activities do not have an adverse efficiency impact on any other part of the goods movement system.

The SSCAC therefore recommends that as new fuels, technologies and/or system improvements are considered and proposed, analysis should be completed by the San Pedro Bay Ports and other project stakeholders to:

a. Identify potential areas of benefit and risk to system efficiency from the proposed action, and identify mitigation measures to address the risks, and,
b. Evaluate how the proposed action will help contribute to the stated goal of improving freight system efficiency by 25 percent by 2030.