

Maximum fuel economy

[Environment](#), [Nature](#)



This incorporation has had various economic benefits to the shipping industry such as; Tim Carroll states that the use of larger (TEU) container ships is reported to be profitable to the shipping industry. Normally ships are used to transport goods and products that are heavier, bulky and those which cannot be transported by air. Such goods usually include heavy machines used in various industries. These goods are mostly transported from state to other states where they are needed. When the shipping industry incorporates the larger (TEU) ships it is very economical because more of the products, machines and goods can be transported.

(Patrick, 2001) Most of the larger (TEU) ships really help in the international trade. This simply means that the nations trading in the products can import and export more goods at a go. When the larger container ships are used there are usually economies of scale that are really experienced this comes up as a result of the capability of the larger container ships carrying large cargoes which normally results in very few transportation costs per unit. In fact research shows that the costs that are incurred when larger cargoes are used are twenty percent lower than those incurred when smaller ships are used.

When smaller ships are used, there is very limited space and cabins that can be packed in the goods. Larger space means that more revenue is reaped by the importing and the exporting countries. When larger (TEU) ships are used it means that there is high propulsion efficiency. The large (TEU) ships have got two propellers unlike the smaller ships. The two propellers are contra rotating in nature though they are not physically connected in nature. The same axis connects both of them. The shaft that is connected to the main

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propeller usually moves in anticlockwise motion in relation to the Azipod unit.

This means that the conventional rudder is not important for the entire ship to function. The larger (TE) ships have got a system that is really hydrodynamic in nature. (Powell, 2000) In this case the power that is required to propel the ship is lower than that which is used in propelling the smaller ships. The Azipod propeller and the main propeller have a power ratio of 30% and 70% respectively. Now this ratio helps in increased efficiency in the ship. Research shows that due to this propeller system, very minimal fuel is used in the large (TEU) container ships.

This research was done in relation to the amount of fuel that is used in the smaller ships. At least in the larger ships, more products can be transported with minimal fuel being used in the transportation. At least a nation or an individual that is transporting the goods using the larger (TEU) container ships will be in a position to save more. The amount that would have been used in buying the extra fuel can then be saved instead. (Moore, 1991) Tim Carroll reveals that the shipping industry is used to transport goods and sometimes raw products that are very delicate in nature.

Such goods need ample space so that they can be well packed before they are transported to their destination. The goods normally include fruits like mangoes, bananas among others. There are also other horticultural products that are transported by sea. When larger (TEU) container ships are used they really help in the minimization of the damages that are caused to these products. For instance machinery like computers needs good care during the

transportation process. If this is not done then the chances of the goods reaching their destination with damages is therefore very high.

Research shows that the smaller ships do not have ample space for packing most of these delicate products. The larger TEU container ships are also good as compared to the smaller ones. This is because the preserving machines can be incorporated in the ships to aid in the preservation of the perishable goods that are being transported. For instance a horticultural company in Brazil can easily use large refrigerators where different fruits are packed and are transported to the United States. (Powell, 2000) The shipping industry has been in the past contributing a great deal to the pollution of the water bodies.

Some of the fuel that is mostly used in smaller ships is quite harmful to the marine life. It is not just the sea and oceans that are affected; even the air is not an exception in this case. Some harmful gasses like carbon monoxide are released into the sea and the air. Governments usually incur increased expenses in dealing with this issue of pollution. On the other hand when larger (TEU) container ships are used, there are fewer emissions. The problem with the smaller ships is that the storage capacity for the fuel is very small. Now when much fuel is forced into them they usually leak into the water during the transportation.

This is unlike what happens to the larger (TEU) container vessels. They have got large tanks for fuel storage during the transportation process. This means that there are very minimal leakages that are released into the sea. This is very economical to the government since the costs that are incurred

in dealing with this pollution problem in the seas and the air are definitely reduced. This is done to protect the aquatic life like the fish which also contribute to the economy of the nations. In fact there are countries that receive or get tourists because of the aquatic life like whales. (Moore, 1991)