

Product exchanges are one of thousands of examples of small-scale changes that can save significant amounts of energy.

What are product exchanges

Imagine two retailers selling the same DVD player online. One is in Berlin, and receives an order from a customer in the London. On the same day, a retailer in London receives an order for the same product from a customer in Berlin. There are two ways to deliver: each could courier the items across Europe, or they could agree to save the customer delivery costs by arranging local delivery – maybe even within a few hours. Product exchange save time, cost and energy.

How it works

Suppliers place stock on website, buyers source it there, and an integrated transport network delivers it.

Why product exchanges matter

The chemical industry in the EU is a prime example where huge amounts of energy could easily be saved by product exchanges. Every day many thousands of trucks drive long distances across Europe carrying identical chemicals in opposite directions from different sets of suppliers to factories. If both companies were part of a Product Exchange, they would swop their identical stock online. Polish polyethylene for example would go direct to a Polish factory, and the same for the French. Over 100 million kilometres of trucking could be saved if chemical suppliers worked more efficiently. That's equivalent to 10 million litres less diesel burnt, saving at least EU 20 million in costs. Setting up and running such a product exchange would cost less than EU 250,000 a year.

1.5 billion tons a year of petrochemicals are carried across Europe, mainly on trucks – 8% of all EU freight movements. The largest haulier has only 2% of the market. EU transport costs for petrochemicals are EU12 a ton more than the US because of such inefficiencies. Too many bulky, finished plastic products are transported from one country to another. 98% of chemical tonnes moved a year are produced by just 15 out of 4,300 petrochemical companies in the EU. So we can see that there are huge opportunities for consolidation and centralised distribution.

Challenges

Chemical manufacturers often try to make their products slightly different so that product swaps are less easy to arrange. However these product variations are often relatively insignificant and product substitution could happen quite easily in many cases. Companies can be resistant to product exchanges because they fear customer relationships may be weakened, especially if their customers realise how much easier it can be to get the same product delivered from a competitor with factory nearby.

Business Potential

Expect product exchanges to develop in many parts of the world for petrochemicals and other commodities. There will usually only be room for one Product Exchange to serve a particular industry sector in a region. The first company to build one will probably manage to defend its position from competitors.

Many more [Global Warming Videos by Futurist](#) Dr Patrick Dixon and [Sustainagility](#) book.

Articles and Videos on Global Warming

Here are more resources on this site that you may find helpful.

[True Cost of Global Warming](#)

[How business will help solve global warming with green technology](#)

[CARBON DIET to save the World](#)

[Global Warming - Science Summary](#)

[Future of Oil Prices: Middle East, global economy](#)

[Roof Gardens Impact on Energy Saving](#)

[Biofuels Controversy and Climate Change](#)

[Iceland Volcano Eruption - Geothermal Power Potential](#)

[Energy Use Consulting - Boom Industry](#)

[Smart Power Regulation - Energy Saving](#)

[Green Technology Innovation Awards Chaired by Patrick Dixon](#)

[Product Exchanges and Climate Change](#)

[Wind Turbines and Global Warming](#)

[Solar Cell Roofing and Climate Change](#)

[Low Energy Streetlights and Global Warming](#)

[Polymer Cement - to save 2% global CO2](#)

[Carbon Capture - Climate Change Business](#)

[Future of Oil Industry when will oil run out? Kuwait and region](#)

[Heat Pumps - to prevent global warming](#)

[Cost of global warming - practical answers](#)

[The \\$40 trillion climate change business](#)

[Impact of Global Warming on Human Life](#)

[The Future of the Environment](#)

[Green Technologies innovation will help with climate change](#)

[Sustainability, climate change and crazy biofuels policy](#)

[Sustainability: innovation will help save world. Sustainable business future](#)

[Sustainable business: \\$40 trillion green tech boom will help save world](#)

[How Green IT saves money and energy, improves image and environment - keynote](#)

[Water Wars Risk? Futurist Q&A with Patrick Dixon](#)

[Global Warming: green technology will help world](#)

[Economic Growth Limits? Sustainability. FUTURIST Q&A](#)