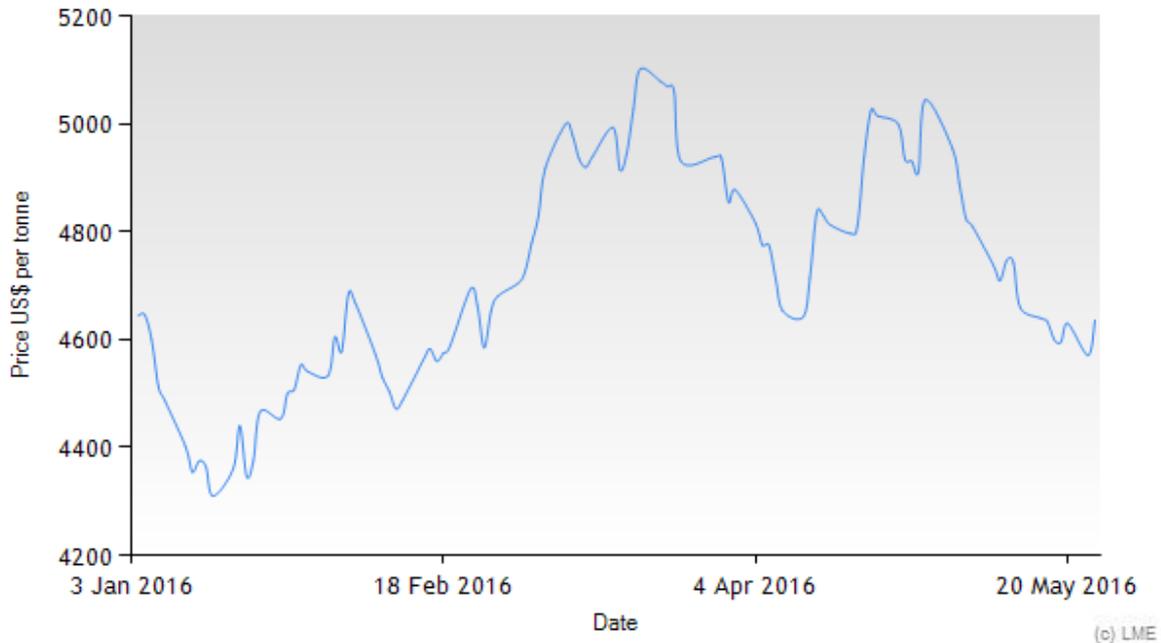


## Trading recyclable materials

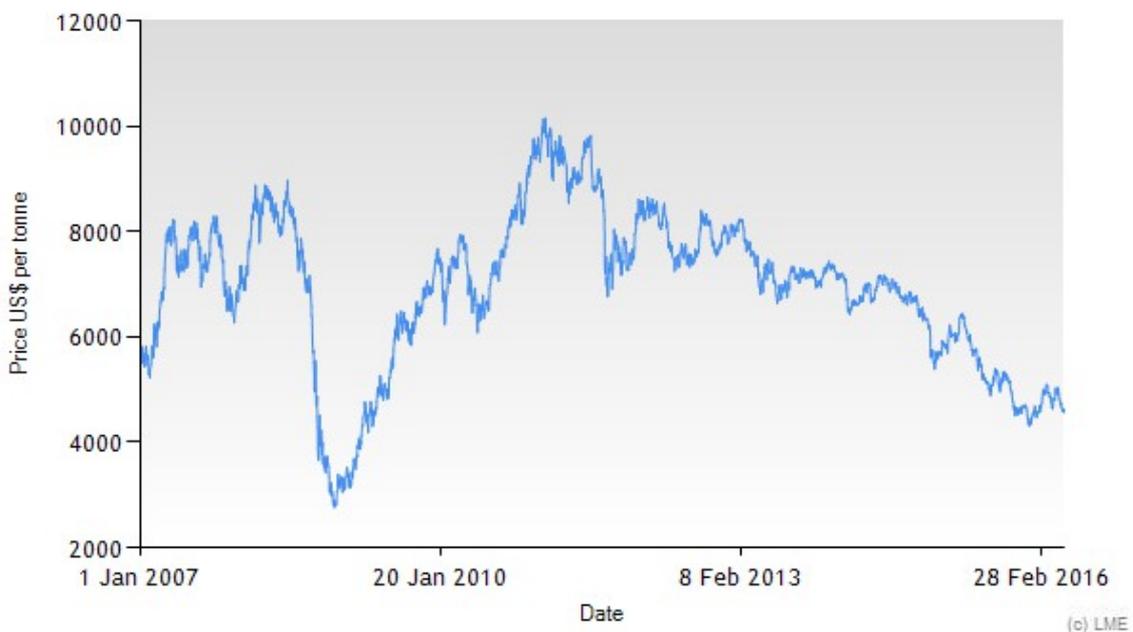
another lesson by Adam R Mathews

*Which terms of delivery are you aware of? Which do you use?  
How are prices of materials set? Does this depend on payment terms?  
Are there global benchmarks for pricing of recyclable materials?  
What effects to these international fluctuations have on market prices?*

This is a graph of the London Metals Exchange cash-buyer price for copper for the year 2016 (to COB 24 May). *Can you describe the price progression?*



This is a longer-term price graph for LME cash-buyer Copper, from 1 January 2007 to 24 May 2016. *What trends can you see here? What some of the underlying causes? How might the price of other commodities relate to this? Does this change the way you might describe this year's progression?*



# Emissions Trading schemes

From wikipedia ([https://en.wikipedia.org/wiki/Emissions\\_trading](https://en.wikipedia.org/wiki/Emissions_trading)). Accessed 25 May 2016, edited by ARM

What do you know about emissions trading? Do you know any examples?

Emissions trading or cap and trade is a government-mandated, market-based approach to controlling pollution by providing economic incentives for achieving reductions in the emissions of pollutants. Various countries, states and groups of companies have adopted such trading systems, notably for mitigating climate change. A central authority (usually a governmental body) allocates or sells a limited number of permits to discharge specific quantities of a specific pollutant per time period. Polluters are required to hold permits in amount equal to their emissions. Polluters that want to increase their emissions must buy permits from others willing to sell them. Financial derivatives of permits can also be traded on secondary markets.

In theory, polluters who can reduce emissions most cheaply will do so, achieving the emission reduction at the lowest cost to society. Cap and trade is meant to provide the private sector with the flexibility required to reduce emissions while stimulating technological innovation and economic growth. The largest greenhouse gases trading program is the European Union Emission Trading Scheme.

## Criticism

Emissions trading has been criticised for a variety of reasons. For example, in the popular science magazine *New Scientist*, Lohmann (2006) argued that trading pollution allowances should be avoided as a climate stabilization policy for several reasons. First, climate change requires more radical changes than previous pollution trading schemes such as the US SO<sub>2</sub> market. It requires reorganizing society and technology to "leave most remaining fossil fuels safely underground". Carbon trading schemes have tended to reward the heaviest polluters with 'windfall profits' when they are granted enough carbon credits to match historic production. Expensive long-term structural changes will not be made if there are cheaper sources of carbon credits which are often available from less developed countries, where they may be generated by local polluters at the expense of local communities.

You are going to read about four criticisms of emissions trading. Can you match the titles to the paragraphs?

**Distributional effects**     **Offsets**     **Permit allocation versus auctioning**     **Permit supply level**

**A)** Campaigner Jutta Kill of European environmental group FERN argued that offsets for emission reductions were not substitute for actual cuts in emissions. Kill stated that "[carbon] in trees is temporary: Trees can easily release carbon into the atmosphere through fire, disease, climatic changes, natural decay and timber harvesting."

**B)** Regulatory agencies run the risk of issuing too many emission credits, which can result in a very low price on emission permits. This reduces the incentive that permit-labile firms have to cut back their emissions. On the other hand, issuing too few permits can result in an excessively high permit price.

**C)** If polluters receive emission permits for free ("grandfathering"), this may be a reason for them not to cut their emissions because if they do they will receive fewer permits in the future. This perverse incentive can be alleviated if permits are auctioned, i.e., sold to polluters, rather than giving them the permits for free. Auctioning is a method for distributing emission allowances in a cap-and-trade system whereby allowances are sold to the highest bidder. On the other hand, allocating permits can be used as a measure to protect domestic firms who are internationally exposed to competition. This argument in favor of allocation of permits has been used in the EU ETS, where industries that have been judged to be internationally exposed, e.g., cement and steel production, have been given permits for free.

**D)** The US Congressional Budget Office examined the potential effects of the American Clean Energy and Security Act on US households. This act relies heavily on the free allocation of permits. The Bill was found to protect low-income consumers, but it was recommended that the Bill be made more efficient by reducing welfare provisions for corporations, and more resources be made available for consumer relief.