

## Asian Trade and its Pollution - a vexing global problem

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### **Abstract**

China has a long history of successful international trade, and until the advent of the steam engine, its pollution was generally low. However the modern opening up of its interior by railways, river shipping and road haulage has allowed industrial pollution to develop across the nation. Their sea and river ports and the hinterland industries have also enlarged their scope over the last three decades creating huge demand for resources and thus creating heavy pollution directly in China and indirectly globally through its varied global logistics needs.

In this seminar we will review the pollution loading of primary fuels, and the CO<sub>2</sub> loading of “best of class” of rail, truck, plane and ship, and note the CO<sub>2</sub> loadings for high and very-high speed transits (TGV and maglev). We will suggest that it is only maglev that has the capacity to fulfil China’s logistics needs internally and pan-continently but this system, if it is to ‘save the planet’ presumes a carbon neutral generation of its electrical power. As of today neither China nor elsewhere has any capability to capture and sequester CO<sub>2</sub> (CCS), nor does China or others have a realistic hope of installing many more gigawatts of nuclear power generation with its low CO<sub>2</sub> pollution in the near future.

Over the short term we must consume energy frugally using more efficient engines using cleaner fuel, and in homes and factories install more insulation. Thus throughout the seminar we will note where there is potential for Knowledge Management and Organisational Learning (KM/OL) to thrive: clearly it may so do in the ‘hard’ systems sciences of logistics and engineering development; and it may have a niche in the ‘softer’ social sciences of demographics, fertility studies and the promotion of the Millennium Goals. We will however assert KM/OL has no place in the search for global cooperation that is needed in the UN-type meetings (as per Kyoto, Bali & Copenhagen) though the intervention of the “Tragedy of the Commons” syndrome as we move to the 2050s and beyond.

### **A caveat**

This seminar does not conform to the usual academic format – introduction, literature review, methodology, and so on. Rather it adopts a reportage mode. This choice was determined by its wide reach, effectively discussing demographics, global trade, logistics and pollution – and of the latter, causes and remedies which have global reach. The seminar is thus set up to be a discussion: informative, and hopefully leading to concerted action.