

Potential policy actions to drive a reduction in the environmental impact of online shopping and last-mile deliveries

If carried out in an efficient manner with sustainability in mind, online shopping has the potential to reduce total shopping-related transport activity and its associated environmental impacts including greenhouse gas (GHG) emissions and local air pollution. Online shopping can also result in other environmental, social and health impacts related to packaging use and waste, international freight transport including air freight, computing and building energy use, and the behaviour and treatment of last-mile delivery personnel that need to be taken into account.

Improvements in existing online shopping and last-mile delivery strategies and operations require behaviour-change among the various stakeholders involved including policy makers, consumers, retailers, and delivery operators. Policy makers have an important role to play in reducing the negative impacts of online shopping and deliveries and there are many actions that can be taken to help achieve this. This set of actions for policy makers comes from SRF Policy Briefing 'Online Shopping and Last Mile Delivery' which is available at: <http://www.csrf.ac.uk/publication/future-mapping/>.

- Actively **promote greater use of non-car modes for personal shopping trips** (including those to view, collect and return items).
- Work with online retailers and delivery operators to **develop agnostic collection point services and locker bank networks** which are located for easy access collection by non-car modes.
- **Address logistics land provision for micro logistics hubs and delivery depots** to identify, safeguard and provide suitable locations in dense, busy urban areas to reduce trip distances and enable the use of clean vehicles including cargo cycle and walking porters.
- **Consider enabling micro logistics hubs** to serve the buildings and surrounding local area in major commercial and residential building development applications.
- **Review and enforce any planning conditions related to noise disturbance** and nuisance caused to residents by last-mile delivery operations, especially ready-to-eat meals delivered late at night,
- **Consider implementing training requirements for last-mile delivery workers**, especially those self-employed where the company they provide services to currently has no training obligations
- **Ensure rapid uptake of renewable electricity and** increase requirements for energy saving technology for computers and smartphones.
- **Plan and provide suitable energy infrastructure for zero emission vehicles.**
- **Consider implementing delivery taxes/charges to discourage 'free' delivery** and incentivise 'green' last-mile deliveries to reduce transport intensity of online shopping and last-mile delivery.
- **Use the planning system to mandate internal logistics systems** for large buildings.
- **Require the relocation of computer server farms** to locations with cooler ambient temperatures.
- **Clarify laws on employment status of self-employed workers** in last-mile delivery and improve working conditions.
- **Review competition law to ensure last-mile collaboration between delivery operators is permissible**
- Disseminate online shopping and last-mile delivery information and **advice to consumers and other stakeholders.**
- Provide **targeted information and education** on the impacts of product disposability and waste.