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Contributions to Understand the Systemic Barriers for Upscaling Car Share in the UK.

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Mass-produced cars - like any other mass produced good - create environmental impacts in the ecosystem, first from the extraction of raw materials and second, from the energy to transport and transform such raw materials into the final product through consumption to disposal.

User intensive products are generally classified as products that are used more intensively for a relatively short time by one or more users until replaced by a new product. Hiring, sharing and borrowing through business and informal channels are practised strategies to intensify the usage of such products. The benefits of this approach are the reduction of material and energy demand and throughput of products from industry. In the automotive sector, car-hiring is a well-known and established user-intensive business model where users rent a car, on a daily rate for a number of days. Another less known alternative is car-sharing, where cars are rented by the hour and generally, but not exclusively, serve roundtrip journeys.

Car sharing in the UK is a relatively unknown activity and has to overcome several social, political and business barriers to become a more, but arguably not totally, mainstream activity that may help reduce material and energy demand, throughput but also congestion and air quality issues, especially in large conurbations. The UK has 36.5M vehicles registered of which 30.3M are passenger cars. There are 207,000 registered members and 3,600 cars mainly in car clubs. The ratio of user/car is 57.5. By far, London is the largest market for car sharing with 65% of members living in this area.

Following last year's paper 'User-intensive Cars: Design Contributions for More Sustainable Approaches to Personal Transportation' - which concluded that a systemic approach would be required in order to create a favourable market for such vehicles - this paper explores systemic barriers and opportunities for the upscale of car sharing in the UK. Such market, already exists in the form of car-sharing in its different iterations. However, it uses normal passenger cars, with little or no design modifications and it is marginal in size when compared to conventional car ownership models available.

Through a set of semi-structured interviews exploring the upscale of car-sharing in this country, the paper contributes to understand the barriers for, but also the opportunities to upscale car-sharing and the potential of this mode of transport as a contributor for the reduction of material, energy and throughput demand in the UK.