Policy Note: Exploring the theoretical link between profitability and luxury emissions

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The sixth assessment report of the IPCC (2021) has finally settled a debated issue: climate change is caused by human actions. The bad news is that climate extremes are already affecting every region across the globe and the acceleration of rising global temperatures is much faster than expected up to now. The good news is that there is still time to act to limit global warming within the limit of 1.5°C or 2°C if we drastically drop greenhouse gas (GHG) emissions by the next two decades. It is therefore more urgent than ever to take actions and design suitable targets to reach these targets. With this paper we contribute to understanding the origins of profits in a capitalist economy and their connection to the empirical evidence showing that luxury consumption by richer classes is a major determinant of CO_2 emissions (Kenner, 2015; Lynch et al., 2019). Arguably, the richest 10% of the world population is responsible for more than half of global GHG emissions between 1990 and 2015 (Chancel and Piketty, 2015; Gore, 2020), even more so if accounting also for emissions embedded in imports (Arto *et al.* 2016).

Due to the impossibility to substitute fossil fuels with the same amount of renewable energies given the limited availability of the required rare minerals, whose extraction is also highly energy- and resource-intensive (e.g., Hickel et al., 2021), a sustainable transition, as well as the attainment of the Sustainable Development Goals (SDGs), will not be possible without changing and downscaling consumption patterns in such a way as to stick to the ecological limits posed by planetary boundaries and resources availability (Röckstrom et al., 2009; O'Neill et al., 2018). This must happen, of course, while ensuring social limits in addition to ecological limits (Raworth, 2017). Some studies demonstrate that decent living standards (DLS) can be met for all without exceeding 2°C global warming (Grubler et al., 2018; Burke, 2020) and redistribution can be the key to ensure wellbeing to all while minimising energy use (Steinberger and Roberts, 2010; Oswald et al. 2020). As argued by Mastini *et al*. (2021), there is room in the Green New Deal (especially in the version advanced by US Democrats) for policies aimed at jointly addressing compliance with both boundaries.

Starting from such considerations we discuss three alternative scenarios (green growth, reformist and just transition) that can describe the direction to be pursued to keep the economy within a social and an environmental boundary.

In the green growth scenario, production decisions are scheduled so as to progressively achieve more sustainable consumption patterns by reducing the carbon footprint of production and consumption. This can be achieved, for instance, by progressively banning the production of

carbon-intensive luxury goods. Hence, this scenario brings about an amelioration of the violated environmental boundary condition since all the goods produced have a low carbon content. However, the social boundary remains violated: the absence of any limit on the quantities produced and distributed would cause surplus to remain unscathed.

In the reformist scenario we imagine a situation in which physical surplus production ceases to exist, and with it the rate of profit. Therefore, the social boundary is respected but the environmental boundary is again violated. The problem rests in the physical composition of production: the fact that workers appropriate the swimming pool they produced is certainly appealing from a socio-political viewpoint, but luxury consumption is still environmentally harmful.

Finally, the just transition scenario combines compliance with both social and ecological boundaries and shows that emissions reduction and improved income distribution go hand in hand. It proposes to rethink production to reverse the logic guiding the production process itself. The scale and composition of production are deliberately designed to maintain production within 'sustainable consumption corridors' (Di Giulio and Fuchs, 2014), allowing consumption not to trespass ecological limits, while fulfilling social needs. A boundary is then imposed on production, which would be limited to carbon-neutral (or low-carbon) goods, that consumers would be fully free to choose to consume.

For such a transition to be enacted, central States need to play as key actors to define the lines of production that can be allowed in compliance with ecological boundaries and to expand the welfare state to guarantee social boundaries are respected.

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