# Research Needs for the IPCC 6th Assessment Cycle: Pointers to WG III

## Chapter 5

Behaviour and demand side solutions for mitigation

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# How does this fit in the IPCC process

- New Chapter in AR 6
- Starting points are: SR 1.5 high level messages
- D4.2 1.5C pathways that include low energy demand, low material consumption, low GHG intensive food consumption have the most pronouced synergies and lowest number of trade offs with respect to sustainable development and the SDGs.

**FAQ**: Can Demand side solutions provide less environmental risky options?

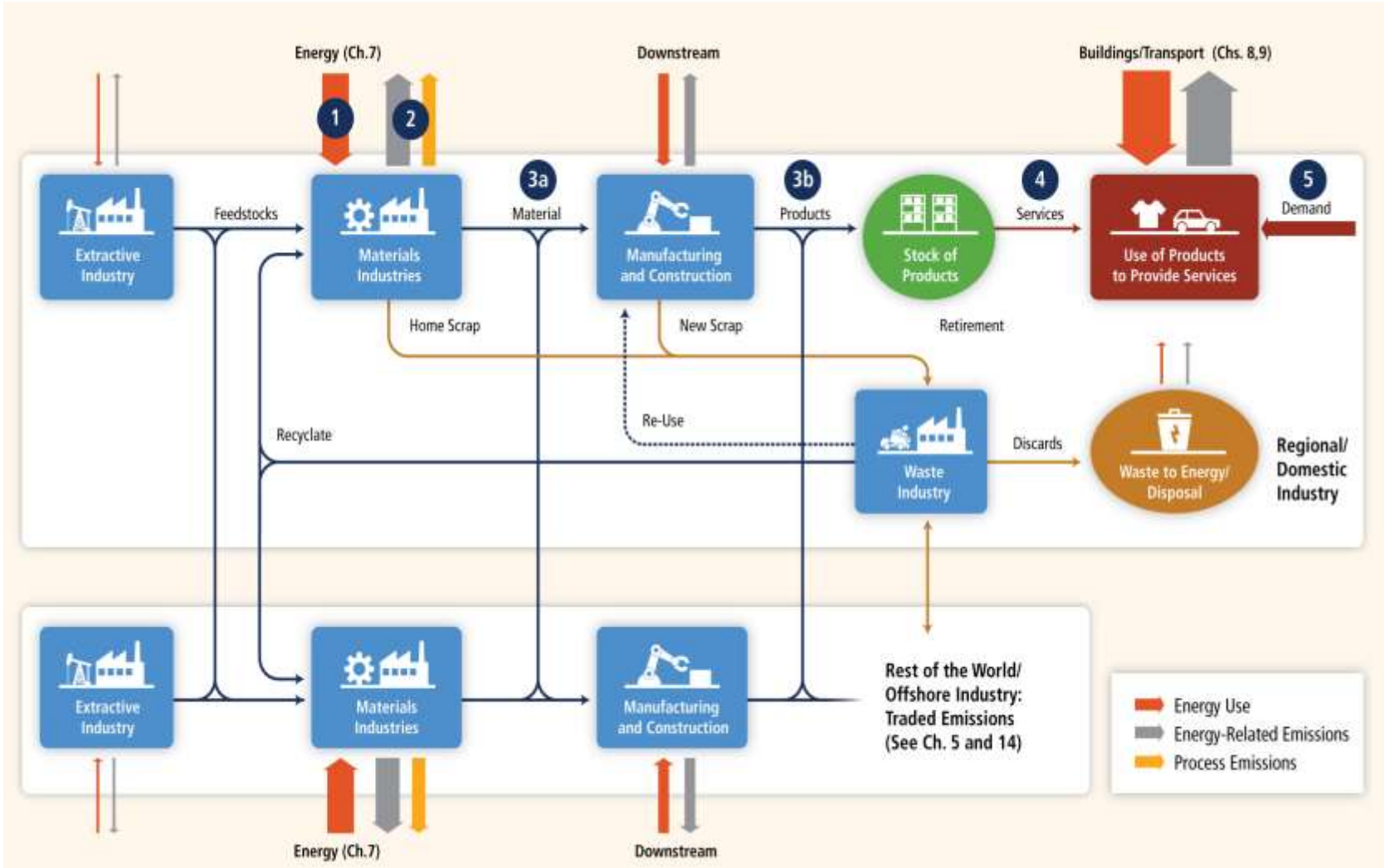
# How does this fit in the IPCC process

**Efficiency enhancements and behavioural changes, in order to reduce energy demand compared to baseline scenarios without compromising development, are a key mitigation strategy in scenarios reaching atmospheric $CO_2$eq concentrations of about 450 to about 500 ppm by 2100** (*robust evidence, high agreement*). Near-term reductions in energy demand are an important element of cost-effective mitigation strategies, provide more flexibility for reducing carbon intensity in the energy supply sector, hedge against related supply-side risks, avoid lock-in to carbon-intensive infrastructures, and are associated with important co-benefits. Both integrated and sectoral studies provide similar estimates for energy demand reductions in the transport, buildings and industry sectors for 2030 and 2050 (Figure SPM.8). [6.3.4, 6.6, 6.8, 7.11, 8.9, 9.8, 10.10]

**Behaviour, lifestyle and culture have a considerable influence on energy use and associated emissions, with high mitigation potential in some sectors, in particular when complementing technological and structural change**[23] (*medium evidence, medium agreement*). Emissions can be substantially lowered through changes in consumption patterns (e.g., mobility demand and mode, energy use in households, choice of longer-lasting products) and dietary change and reduction in food wastes. A number of options including monetary and non-monetary incentives as well as information measures may facilitate behavioural changes. [6.8, 7.9, 8.3.5, 8.9, 9.2, 9.3, 9.10, Box 10.2, 10.4, 11.4, 12.4, 12.6, 12.7, 15.3, 15.5, Table TS.2]

IPCC 2014 WGIII

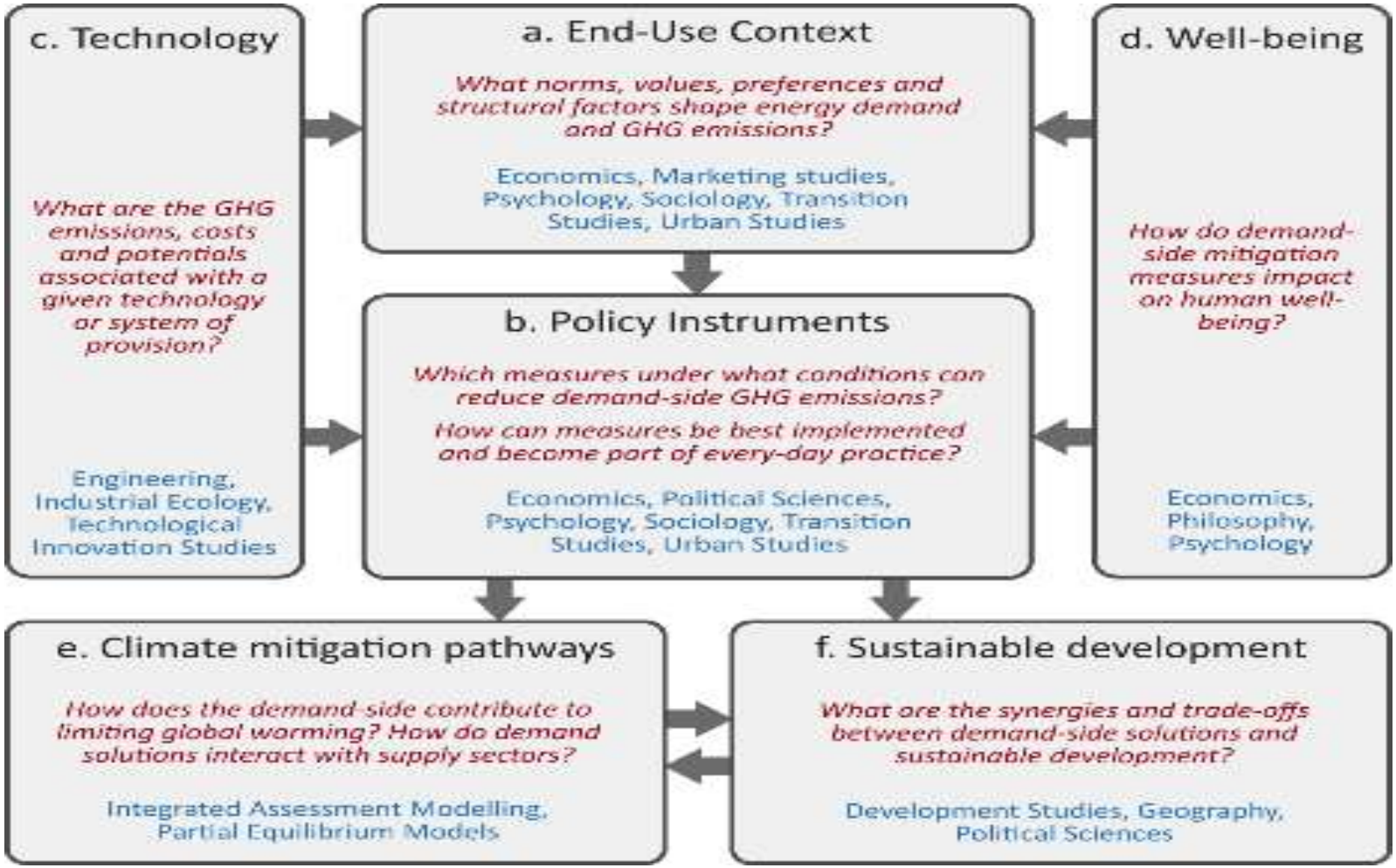
# Five main options for reducing GHG emissions in the industry sector (considering also traded goods)




IPCC 2014 AR5

# Going Beyond Sectoral and Disciplinary Boundary

# Normative plurality, Social science integration, Living standard..




Creutzig, F , Roy, J. et al, (2018) Nature Climate Change.

# Rethinking
# (energy, emission, land use change) demand