

Can companies end deforestation? The limitations, trade-offs and potential opportunities of zero-deforestation commitments in the Brazilian Amazon

Type: PhD thesis

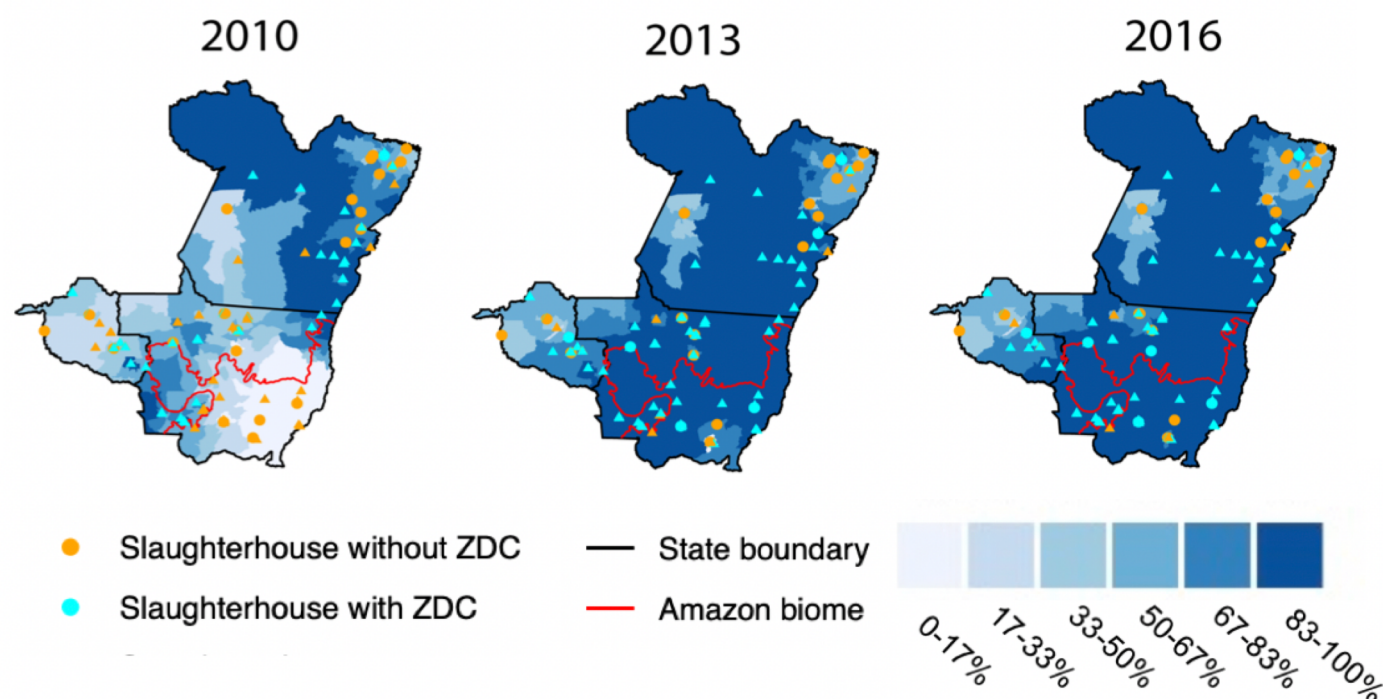
Status: in progress

PhD student: Samuel Levy (EPL)

Supervisor: Rachael Garrett (EPL)

- **Zero-Deforestation Commitments** are voluntary sustainability initiatives that signal a company's intention to eliminate deforestation from its supply chain
- **The Brazilian Amazon** is the most biodiverse region in the world. It also both high deforestation rates and the presence of long running and widely implemented ZDCs in both of the principle commodities driving deforestation – soy and cattle.

Aim: This PhD project seeks to address the questions *What are the impacts of corporate zero-deforestation commitments in the Brazilian Amazon, both in terms of their effectiveness at reducing deforestation and their impacts on human equity and wellbeing?* and *What conditions can best enable zero-deforestation commitments to have positive impacts for the environment and human wellbeing?*



Preliminary mapping of zero-deforestation market share 2010-2016 in states of Mato Grosso, Pará & Rondônia.

- To answer these questions, this PhD will use supply chain data to capture transfers of production from farm to processing plant, land use data on deforestation and degradation, and also a household survey of over 400 cattle producing properties.
- The **first paper** of this PhD will investigate how increases in the market share of zero-deforestation committed companies increases their effectiveness at reducing deforestation (see figure above for preliminary results)
- The **second** will complement this with a quantification of the impacts of indirect suppliers on overall zero-deforestation commitment effectiveness.
- The **third paper** will investigate the human impacts of zero-deforestation commitments by asking are pre-existing socioeconomic differences between producers who do and do not access ZDC supply chains? And how does accessing a ZDC supply chain affect livelihood outcomes for farmers?