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8:30–12:30

11:45   A platform for landscape ecoefficiency monitoring and jurisdictional certification in the Amazon region

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The process of deforestation in the Brazilian Amazon region during the six last decades has built disorganized landscapes, in terms of agronomic, ecological, economic and social aspects. Pastures were implanted after slash-and-burn, in a spatially systematic diffusion, buffering the road network with a land tenure objective, and with no consideration for topography or other natural resources, except hydrographic network for watering cattle. This spatial pattern of colonization has generated a large waste of space and natural resources. Since ten years, the zero deforestation policies are building a new legal context for land use and natural resources management, opening possibilities for landscape optimization for ecosystemic services and ecological intensification. To repair environmental liabilities, to connect remaining forest and preserve landscapes, to protect hydrolocical resources, to manage the land tenure and agricultural diversification, local actors need a tool to take into account the spatial distribution of the environmental, economic, agronomic and social organization in each jurisdiction.

The authors present in this communication a GIS tool at the municipality level, able to support the local actors' decisions and interrogations to build new ecoefficient landscapes, in order to mitigate emissions, optimize natural resources productivities, farm profitability and to plan local policies such as localizing logistics or agro-industrial plants. The main options about land-use changes, mitigation practices, pasture management practices, use of fire, are informed with a remote sensing set of indicators, crossing land tenure layers, and forest connection metrics.

The participative use of this tool should help local multistakeholders platform to monitor, evaluate and plan innovation, mitigation, diversification and synergies at the landscape scale, and improve the local governance's inclusion of smallholders. An external certification of this system at a jurisdictional level will be provided, demonstrating that local institutions can assume environmental responsibilities, and attracting new investors in a green economy perspective.