**Abstract**:

Through the increasing interconnectedness of social, economic, and environmental systems, the need for a new generation of decision support systems becomes evident to assess the sustainability of development strategies. While existing tools are valuable for conducting detailed assessments within specific sectors, their limitations in establishing cross-sectoral connections and feedback loops often lead to incomplete insights and potential oversight of adverse impacts in other sectors. To address this limitation, we describe an integrated assessment framework that we have successfully applied in collaboration with non-governmental organizations and governments across more than 40 countries. The framework aims to provide a customized analytical approach tailored to specific policy challenges. While System Dynamics serves as the core methodology, the framework promotes the integration of additional methodologies and sectoral modeling results as needed. This integration is achieved through soft-coupling, resulting in a cutting-edge model that offers robust decision support.

**Keywords**: Integrated Assessment Framework; Green Economy Model; System Dynamics; Low Carbon Development; Decision Support Systems; Multi-method modeling

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| **Abbreviation** |  |
| CE | Circular Economy |
| CIRCTER | Circular Economy and Territorial Consequences |
| CLD | Causal Loop Diagram |
| CO2e | CO2 equivalent emissions |
| DSS | Decision Support Systems |
| GDP | Gross Domestic Product |
| GEM | Green Economy Model |
| GIS | Geographic Information Systems |
| GMB | Group Model Building |
| IAF | Integrated Assessment Framework |
| InVEST | Integrated Valuation of Ecosystem Services and Tradeoffs |
| IV2045 | Indonesia Vision 2045 |
| LEAP | Low Emissions Analysis Platform |
| LULUC | land use and land use change |
| NDC | Nationally Determined Contribution |
| NPC | National Planning Commission |
| SD | System Dynamics |
| WRI | World Resources Institute |