

The sectors covered by energy- and climate-economic models are represented through five main categories: industry, transportation, buildings, AFOLU (agriculture, forestry and other land use), and energy. The energy sector, in turn, further disaggregates into commodities (sources), transformation and storage, thereby covering the entire cycle of the energy system. Due to their focus, all PARIS REINFORCE models are able to address energy commodities in most forms, such as wind, solar, coal, oil and gas, as well as transformation processes like oil refining and electricity. Some models cover passenger and freight transport alike as well as most of the industrial sectors, such as cement, iron and steel and chemical. Only a limited number of models, however, are able to cover/ represent energy storage and public buildings, and even fewer land use. Nevertheless, all sub-sectors are covered by at least one model in the consortium.

Agriculture

E3ME Gemini-E3 ICES CONTO MAPLE MARKAL-India NATEM TIMES-CAC EU-TIMES LEAP NEMESIS

Non ferrous metals

E3ME MUSE TIAM CONTO MAPLE MARKAL-India NATEM TIMES-CAC FORECAST EU-TIMES LEAP

Cement

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Pulp and paper

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Chemicals

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Textiles and leather

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Food processing

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Aggregated

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Iron and steel

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Crops

GCAM ICES MUSE TIMES-CAC

Animals

GCAM ICES MUSE TIMES-CAC

Bio-energy

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Forestry

GCAM ICES MUSE TIAM EU-TIMES

Aggregated

SISGEMA NEMESIS

Electricity

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Hydrogen

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Oil refining

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Gas-to-liquids

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Coal-to-liquids

GCAM MUSE TIAM MAPLE EU-TIMES LEAP

Coal-to-gas

GCAM MUSE EU-TIMES LEAP

Bio-to-liquids

GCAM MUSE TIAM MARKAL-India NATEM TIMES-CAC EU-TIMES LEAP NEMESIS

Bio-to-gas

GCAM MUSE TIAM NATEM TIMES-CAC EU-TIMES LEAP

Coal

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Lignite

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Oil

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Natural Gas

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Nuclear

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Biomass

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Hydro

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Solar

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Wind

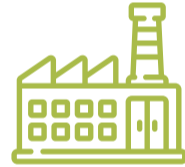
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Geothermal

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Tidal / Wave

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Industry



Agriculture, Forestry, Land Use (AFOLU)



Energy transformation



Energy sources



Energy storage



Buildings



Transportation

Residential

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Commercial

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Public

NATEM FORECAST LEAP

Aggregated

Gemini-E3 ICES CONTO NEMESIS

Passenger (including airborne, seaborne, rail, road, non-motorised)

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Freight (including airborne, seaborne, rail, road)

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