A South American view on energy transition

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February, 2021
Energy transition has accelerated

Global primary energy demand (post-COVID)

Latam & Caribbean total energy supply


Source: Latin American Energy Organization, 2020

1. Includes onshore wind, offshore wind and solar
2. Includes biomass, hydropower and nuclear
3. Conversion factor used is 1 mmTJ = 0.467 MMb/d
Colombia is to increase its decarbonization efforts

Colombia primary energy demand (post-COVID)

<table>
<thead>
<tr>
<th>Year</th>
<th>Gas</th>
<th>Oil</th>
<th>Coal</th>
<th>Other</th>
<th>Hydro</th>
<th>Renewables</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.1%</td>
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<tr>
<td>2050</td>
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<td>18%</td>
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</tbody>
</table>

% Share
@2019: 11% Gas, 40% Oil, 24% Coal, 12% Hydro, 13% Other, 0.1% Renewables
@2050: 15% Gas, 36% Oil, 15% Coal, 8% Hydro, 8% Other, 18% Renewables

Colombia targets 51% GHG reduction by 2030

GHG emissions, 2015-2030 (MTnCO₂e)

- BAU
- Target

2015: 234 MTnCO₂e
2030: 169 MTnCO₂e


1. Includes onshore wind, offshore wind and solar
2. Includes biomass
3. Conversion factor used is 1 mmTJ = 0.467 MMtCO₂e/d
4. Greenhouse gases
5. Business as usual

Most of the efforts will be focused on reducing emissions generated by deforestation and changes in use of soil

Source: Colombia’s National Determined Contribution, Nov 2020
Ecopetrol’s pillars to face energy transition

Increasing competitiveness to avoid stranded assets

Diversification beyond oil and gas

Accelerating Decarbonization

TESG Driven
Technology Environment Social Governance

Knowledge, Technology & Innovation

Human Talent
ECOPETROL CONTINUES TO INCREASE ITS RENEWABLES PORTFOLIO WITH 6 ADDITIONAL SOLAR FARMS

**SOLAR FARM MAGDALENA**
- Cantagallo, Bolívar

**SOLAR FARM DEL RÍO**
- Yondó, Antioquia

**SOLAR FARM BRISAS**
- Aipe, Huila

**SOLAR FARM AIPE**
- Aipe, Huila

**SOLAR FARM YAGUARÁ**
- Yaguará, Huila

**SOLAR FARM OCELOTE**
- Puerto Gaitán, Meta

**SOLAR FARM CASTILLA**
- Castilla La Nueva, Meta

**SOLAR FARM SAN FERNANDO**
- Castilla La Nueva, Meta

- UNDER CONSTRUCTION

**+155 MW**
- renewable energy supply

**+1 MILLION**
- tons CO₂e
- equivalent to plant 7.7 million trees

**1200 JOB OPPORTUNITIES**
- for communities in areas of influence
ECOPETROL ADVANCES IN ITS TRANSFORMATION TOWARDS A MORE SUSTAINABLE FUTURE TO BE COLOMBIA’S ENERGY COMPANY
DE TODOs, PARA TODOs