Stimulating Industry Action towards End-Use Decarbonisation

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Despite progress, tripling renewables by 2030 is still off-track

<table>
<thead>
<tr>
<th>Key Indicators</th>
<th>2023</th>
<th>2030 (1.5°C Scenario)</th>
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</thead>
<tbody>
<tr>
<td>Total installed renewable capacity</td>
<td>3,870 GW</td>
<td>11,174 GW</td>
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<tr>
<td>Renewable power capacity additions</td>
<td>473 GW</td>
<td>1,043 GW/yr</td>
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<tr>
<th>Additional Indicators</th>
<th>2023</th>
<th>2030 (1.5°C Scenario)</th>
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<tbody>
<tr>
<td>Electric and plug-in hybrid light passenger vehicles stock</td>
<td>40 million</td>
<td>360 million</td>
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<th>Finance and Investment</th>
<th>2023</th>
<th>2024-2030 (1.5°C Scenario)</th>
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<tbody>
<tr>
<td>Investment in renewable power generation capacity</td>
<td>570 USD billion/yr</td>
<td>1,550 USD billion/yr</td>
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<tr>
<td>Investment needs for power grids and flexibility</td>
<td>368 USD billion/yr</td>
<td>720 USD billion/yr</td>
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Decarbonisation of end-use is central to net zero ambitions

Less than a decade is left to achieve the 2030 Agenda and secure a fighting chance for a 1.5-degree world.

A renewables-based energy transition can be a powerful equaliser in a world where disparities and gaps between communities, nations and regions continue to widen.

A 1.5-degree world requires wide-reaching actions across multiple dimensions to maximise benefits and carefully manage adverse effects, including the private sector.

Industrial sector produces about ¼ of global GDP and emits up to 40% of GHG emissions.
A combination of technological solutions is needed
Alliance for Industry Decarbonisation (AFID)

Foster action for decarbonization of industrial value chains

Promote understanding of renewables-based solutions and their adoption by industry

Contribute to country-specific net-zero goals
Total 71 members and partners with IRENA hosting the Secretariat

Source: Alliance for Industry Decarbonization
Alliance focus areas

Technology
- Renewables
- Bioenergy with CCUS

Process
- Green hydrogen
- Heat process optimization and integration

Enablers
- Human Capital
- Finance

Through collective efforts of the industrial sector, the Alliance is accelerating the achievement of a net-zero future

Source: Alliance for Industry Decarbonization
2\textsuperscript{nd} CEO Roundtable at COP28 adopted “Decarbonization Commitment”

Reduce Scope 1 + 2 emissions

-50% to -40%

Increasing Renewables

Installed capacity by 2023

-85 GW

Planned capacity by 2030

-190 GW

Increasing Bioenergy with CCUS

+2800 times

14,000 t CO2

Re-skilling Human Capital

91% Re-Skilled Quote

15% Re-skilled quote by 2023

Increasing financing

+260%

50 USD bn

19 USD bn
**1. Collaboration and policy support**
- Stimulate collaboration among governments, industry stakeholders, and research institutions to create supportive policies & incentives for adopting decarbonisation strategies
- Provide financial support, tax incentives, and research grants to accelerate the transition

**2. Investment in research and development**
- Allocate resources to research and develop innovative technologies
- Focus on improving the efficiency and scalability of CCUS technologies

**3. Pilot projects and demonstrations**
- Implement pilot projects to test and validate decarbonization strategies
- Learn from real world experiences and adapt accordingly

**4. Capacity building and training**
- Train steel industry professionals in the use of new technologies
- Foster a skilled workforce capable of implementing and maintaining these changes

**5. Lifecycle assessment and circular economy**
- Consider the entire lifecycle of steel products, from raw materials to end-of-cycling
- Promote circular economy practices

**6. Public awareness and consumer demand**
- Educate consumers about the importance of sustainable steel production
- Encourage demand for low-carbon and/or green steel products
AFID invites new members and partners to join

For more information visit [https://www.allianceforindustrydecarbonization.org/](https://www.allianceforindustrydecarbonization.org/)

Are you interested in **collaboration** and coming together as a **global decarbonization community**?

Do you see value in **working collaboratively with leading companies** under the guidance of **IRENA** and supported by **eco-system support partners** to address barriers and advance decarbonization solutions?

Please contact us to learn more about the AFID and prospective partnership at [AFID@irena.org](mailto:AFID@irena.org)