A pathway to e-waste management

EuroTeQ Waste Challenge

Youlim Son (Infineon Technologies AG)
28th March 2022
Infineon is a globally leading semiconductor player

- **Top 10 semiconductor company**
- **~50,280 employees**\(^1\)

**Leading player**
in automotive, power management energy efficient technologies and the IoT

**9%+ | 19% | 13%**
target operating model\(^2\)

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\(^1\) as of 30 September 2021
\(^2\) over the cycle: 9%+ revenue growth; 19% Segment Result Margin; investment-to-sales ratio of 13%; targets to be approached as Cypress integration progresses
Megatrends, growth areas and growth drivers open up opportunities for semiconductor companies

### Megatrends
- Demographic and social change
- Climate change and scarce resources
- Urbanization
- Digital transformation

### Growth areas
- **Energy efficiency**
- **Mobility**
- **Security**
- **IoT and big data**

### Growth drivers
- **Energy efficiency**
  - Power generation from renewable energy sources
  - Energy transmission and distribution
  - Energy storage
  - Energy usage
- **Mobility**
  - Electromobility
  - Charging infrastructure for electromobility
  - Automated driving
  - Passenger and freight transport
  - Infotainment
- **Security**
  - Mobile devices
  - Authentication for the IoT
  - Smart cards
  - Industrial applications
  - Connected vehicles
  - Integrity of devices
- **IoT and big data**
  - Human-machine-interaction
  - Consumer IoT
  - Industrial IoT
  - Data and communication infrastructure
  - Edge computing

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**Megatrends, Growth areas and Growth Drivers**

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We contribute a net CO₂ reduction of more than 70 million tons

Infineon is excellent in resource efficiency
We are committed to CO₂ neutrality by 2030
Our CO₂-saving applications are high-growth, we are part of the solution!
The ~1:33 ratio is expected to further improve in the coming years

Net ecological benefit: CO₂ emissions reduction of more than 70 million tons

1 For explanatory notes see “ESG footnotes” in the appendix.
Note: Compared to the last fiscal year, the increase in CO₂ burden can be mainly explained by the inclusion of the data from Cypress
Infineon is excellent in resource efficiency and committed to CO₂ neutrality – sustainability is in our DNA

Infineon ranks among the 10 percent most sustainable companies in the world¹

In CY20, we used resources in our manufacturing processes much more efficiently than the global average of the semiconductor industry:

- 44% less electricity consumed per cm² manufactured wafer
- 17% less water consumed per cm² manufactured wafer
- 67% less waste generated per cm² manufactured wafer

Infineon’s CO₂ target² by 2025 and 2030

Net CO₂ emissions in million tons of CO₂ equivalents²

<table>
<thead>
<tr>
<th>Year</th>
<th>Emissions (M tons CO₂ equivalents)</th>
<th>Reduction (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY19</td>
<td>1.15</td>
<td></td>
</tr>
<tr>
<td>Target FY25</td>
<td>0.35</td>
<td>-70%</td>
</tr>
<tr>
<td>Target FY30</td>
<td>0.35</td>
<td>-100%</td>
</tr>
</tbody>
</table>

1. Based on the results of The Sustainability Yearbook 2022 by S&P Global in cooperation with RobecoSam
2. Related to Scope 1 and 2 emissions

1. Avoiding direct emissions and further reducing energy consumption
2. Purchasing green electricity with guarantees of origin
3. Compensate the smallest part by certificates that combine development support and CO₂ abatement
Electronic waste or e-waste

Is the fastest growing waste stream

Key Challenge Questions

- How are e-wastes managed at the moment?

- How can the e-wastes be reused or recycled efficiently with technologies using semiconductors?

- What are the strengths, weaknesses, opportunities, and threats of the e-waste management system you suggested and how can the risks be managed?

- What are the environmental, social, and governmental implications of your e-waste management?
In the tsunami of electronic waste, our e-waste management system will bring our society…

UN Sustainable Development Goals (SDGs)

› GOAL 3: Good Health and Well-being
› GOAL 6: Clean Water and Sanitation
› GOAL 8: Decent Work and Economic Growth
› GOAL 9: Industry, Innovation and Infrastructure
› GOAL 11: Sustainable Cities and Communities
› GOAL 12: Responsible Consumption and Production
› GOAL 14: Life Below Water
› GOAL 15: Life On Land
Give your electrical appliances a second life!
Part of your life. Part of tomorrow.