

eeFACT 2025 - 70th ICFA Advanced Beam Dynamics Workshop on High Luminosity Circular e+e-Colliders



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Type: **Invited Oral Presentation**

Research Activities Aimed at Decarbonizing the Life Cycle of Accelerator Facilities

Wednesday 5 March 2025 11:50 (30 minutes)

There is no doubt that global warming is accelerating due to greenhouse gas emissions from human activities. All industries are now required to work toward achieving carbon neutrality by 2050. Accelerator facilities are no exception. In particular, life cycle assessment, including construction, operation, and decommissioning periods, is necessary to achieve carbon neutrality. Researchers around the world who are planning large accelerators are actively addressing this issue. For example, during the construction period, the decarbonization of steel products and concrete used there must be considered. During the operation period, the electricity used should be as low carbon emission as possible. In this presentation, I will describe the global trend regarding this activity and the situation in Japan.

Footnotes

Funding Agency

I have read and accept the Privacy Policy Statement

Yes

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