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Environmental Impact of Future Colliders

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We present the results of the Snowmass Implementation Task Force (ITF) analysis of future collider concepts. We consider both the environmental cost of construction (CO₂ footprint per meter of tunnel) and the carbon footprint associated with collider power consumption. We discuss strategies to mitigate the power consumption of future high-energy colliders, such as energy recovery, and we discuss the benefits of specific advanced accelerator technologies for reducing power consumption.

Acknowledgments

Primary author: GESSNER, Spencer (SLAC)

Presenter: GESSNER, Spencer (SLAC)

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