



STACKS

THE STEEP DESCENT TO NET-ZERO AVIATION

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Aviation poses a difficult challenge to the global effort to decarbonize transportation. Air travel is popular, and emissions from the sector are growing rapidly. But the low-carbon technologies required to decarbonize aviation are immature and expensive. For this reason, aviation (along with shipping and energy-intensive industrial sectors such as steelmaking) is often described as “hard to abate.” Decarbonizing aviation will not be easy.

Still, strategies to bring about a low-carbon aviation sector are emerging. This card stack aims to summarize how cleaner fuels, new aircraft designs, smarter operational practices, improved aircraft technology, effective policy incentives, and more selective use of air travel could, in principle, combine to greatly reduce the greenhouse gas footprint of aviation. None of these is a silver bullet. The full range of these diverse measures will be needed to achieve meaningful decarbonization of the sector.

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