

6.11.6 Understanding Gas Implications

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The OMG members recommend the Federal Reserve invest [Research Development Test & Evaluation \(RDT&E\) Funding](#) in developing and perfecting the concept of [Gas](#) that is a measurement roughly equivalent to computational steps (for Ethereum). Every transaction is required to include a gas limit and a fee that it is willing to pay per gas; miners have the choice of including the transaction and collecting the fee or not. Every operation has a gas expenditure; for most operations, it is ~3-10, although some expensive operations have expenditures up to 700 and a transaction itself has an expenditure of 21000.

For an explanation of what Gas is, how Gas price is determined for processing and for Data Storage, and a detailed example of how the actual costs are calculated, see the OMG DIDO-RA section on [Understanding Gas](#)

In order to successfully operate the U.S. CBDC based on Cryptocurrencies, even if they are [Stablecoins](#), it is important to determine if Gas is necessary and if so how much it will cost and who will pick up the cost of processing. Based on the example provided in the DIDO-RA on Gas costs on Ethereum, the cost is about is approximately 40 Million to 400 Million times more expensive than using [Amazon Web Services \(AWS\)](#).

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