C2M2 The Energy Sector's Step-by-Step Process for Implementing the NIST Cyber Security Framework (CSF)

Energy sector business and security leaders are committed to ensuring appropriate cybersecurity of their operations. Many energy firms are using the Cybersecurity Capability Maturity Model (C2M2) to evaluate their cyber maturity and plan improvements. Sector leaders are also interested in adopting the NIST Cyber Security Framework as part of the cyber program.

The good news is that using the C2M2 is a solid approach for implementing the Framework that has specific benefits for energy sector firms.

Organizations that are using the C2M2 to inform their cyber program evolution can confidently claim that they are implementing the Framework.

Top benefits of using C2M2 to implement the Framework:

- Enables benchmarking: C2M2 includes a defined, tool-based evaluation method that produces results that can be used for benchmarking within organizations and across the sector.
- Energy-specific guidance: C2M2 has two variants that have been tailored to address specific concerns of the Oil and Natural Gas (ONG-C2M2) and Electricity (ES-C2M2) subsectors.
- Complete Framework coverage: A Department of Energy (DOE)
 mapping shows that the C2M2 addresses all Framework components
 (Subcategories and Tiers).
- Additional benefits are outlined in the Energy Sector Cybersecurity
 Framework Implementation Guidance, official DOE advice to energy firms for implementing the Framework.

The Framework defines a specific process for implementation. The diagram below shows how the C2M2 is optimally used to accomplish that process.

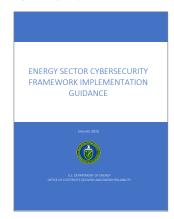
Using C2M2 to Implement the Framework Establish scope for examination (function) Implement the Select in-scope plan, use CSF & assets and C2M2 guidance requirements Prioritize action Perform C2M2 self-evaluation plan to achieve using C2M2 tool target profile Analyze, and Prioritize Gaps 0000000000 Create target profile based on C2M2 Evaluate risk based on C2M2 output 0000000000 -0000000000 C2M2 Output **-000000000**

About the C2M2:

C2M2 was developed by and for energy sector firms under the leadership of the DOE. C2M2 includes an easy-to-use self-evaluation toolkit that produces a graphical summary of results and is available in three versions: Oil and Natural Gas (ONG-C2M2), Electricity (ES-C2M2), and generic (C2M2). The three model versions contain exactly the same 312 practices, organized into the same 10 domains, so the results from any of the model versions are completely comparable.

About the Framework:

The National Institute of
Standards and Technology (NIST)
developed the Framework for
Improving Critical Infrastructure
Cybersecurity in response to
Executive Order (EO) 13636
"Improving Critical Infrastructure
Cybersecurity." The Framework
recommends risk management
processes that inform and
prioritize decisions regarding
cybersecurity based on business
needs, without imposing
regulatory requirements.



DOE Guidance:

Detailed guidelines for Framework implementation by energy firms is available on the DOE website¹. The guidance includes a detailed mapping of Framework elements to C2M2 practices.

¹ http://energy.gov/oe/downloads/energy-sector-cybersecurity-framework-implementation-guidance