

# National Cybersecurity Center of Excellence (NCCoE) Energy Sector

*Energy Provider Community of Interest*

28 February 2017

# Agenda

- NCCoE Energy Sector Planned Activities
- Overview of NCCoE for New Members
- Status of Energy Sector (and related) Projects
- EPC Open Discussion / Comments / Questions

- ICRMC – Toronto, ON 03/02/17- 03/03/17  
(International Cyber Risk Management Conference)
  
- OSISoft Annual User Conference, 03/20/17 - 03/23/17  
San Francisco, CA
  
- American Council for Technology (ACT) and Industry Advisory  
Council (IAC), Cybersecurity Community of Interest Monthly Meeting  
04/28/2017



## VISION

### ADVANCE CYBERSECURITY

A secure cyber infrastructure that inspires technological innovation and fosters economic growth

## MISSION

### ACCELERATE ADOPTION OF SECURE TECHNOLOGIES

Collaborate with innovators to provide real-world, standards-based cybersecurity capabilities that address business needs



## GOAL 1

### PROVIDE PRACTICAL CYBERSECURITY

Help people secure their data and digital infrastructure by equipping them with practical ways to implement standards-based cybersecurity solutions that are modular, repeatable and scalable

## GOAL 2

### INCREASE RATE OF ADOPTION

Enable companies to rapidly deploy commercially available cybersecurity technologies by reducing technological, educational and economic barriers to adoption

## GOAL 3

### ACCELERATE INNOVATION

Empower innovators to creatively address businesses' most pressing cybersecurity challenges in a state-of-the-art, collaborative environment

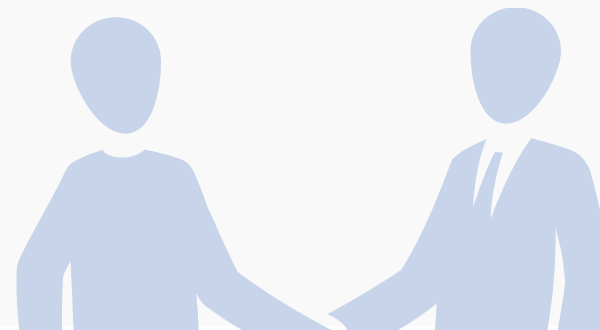


## NIST ITL





The NCCoE is part of the NIST Information Technology Laboratory and operates in close collaboration with the Computer Security Division. As a part of the NIST family, the center has access to a foundation of prodigious expertise, resources, relationships and experience.





## PARTNERSHIPS





Established in 2012 through a partnership between NIST, the State of Maryland and Montgomery County, the NCCoE meets businesses' most pressing cybersecurity needs with reference designs that can be deployed rapidly.



## NIST CYBERSECURITY THOUGHT LEADERSHIP

-  Cryptography
-  Identity management
-  Key management
-  Risk management

-  Secure virtualization
-  Software assurance
-  Security automation
-  Security for cloud and mobility

-  Hardware roots of trust
-  Vulnerability management
-  Secure networking
-  Usability and security



## SPONSORS

Advise and facilitate the center's strategy



White House

NIST

National Institute of Standards and Technology



U.S. Department of Commerce



U.S. Congress



Montgomery County



State of Maryland



## TEAM MEMBERS

Collaborate to build real-world cybersecurity capabilities for end users

*\*Sponsored by NIST, the National Cybersecurity Federally Funded Research & Development Center (FFRDC) is operated by the MITRE Corporation*



NCCoE



Tech firms



Academia



Project managers



National Cybersecurity Excellence Partners (NCEP)



National Cybersecurity FFRDC\*



Industry



Government



Project-specific collaborators



## END USERS

Work with center on use cases to address cybersecurity challenges



Business sectors



Academia



Cybersecurity IT community



Individuals



Government



Systems integrators



## DEFINE + ARTICULATE

Describe the business problem

Define business problems and project descriptions, refine into a specific use case



## ORGANIZE + ENGAGE

Partner with innovators

Collaborate with partners from industry, government, academia and the IT community on reference design



## IMPLEMENT + TEST

Build a usable reference design

Practical, usable, repeatable reference design that addresses the business problem



## TRANSFER + LEARN

Guide users to stronger cybersecurity

Set of all material necessary to implement and easily adopt the reference design

## Cybersecurity solutions that are:



based on standards and best practices



usable, repeatable and can be adopted rapidly



modular, end-to-end and commercially available



developed using open and transparent processes



matched to specific business needs and bridge technology gaps

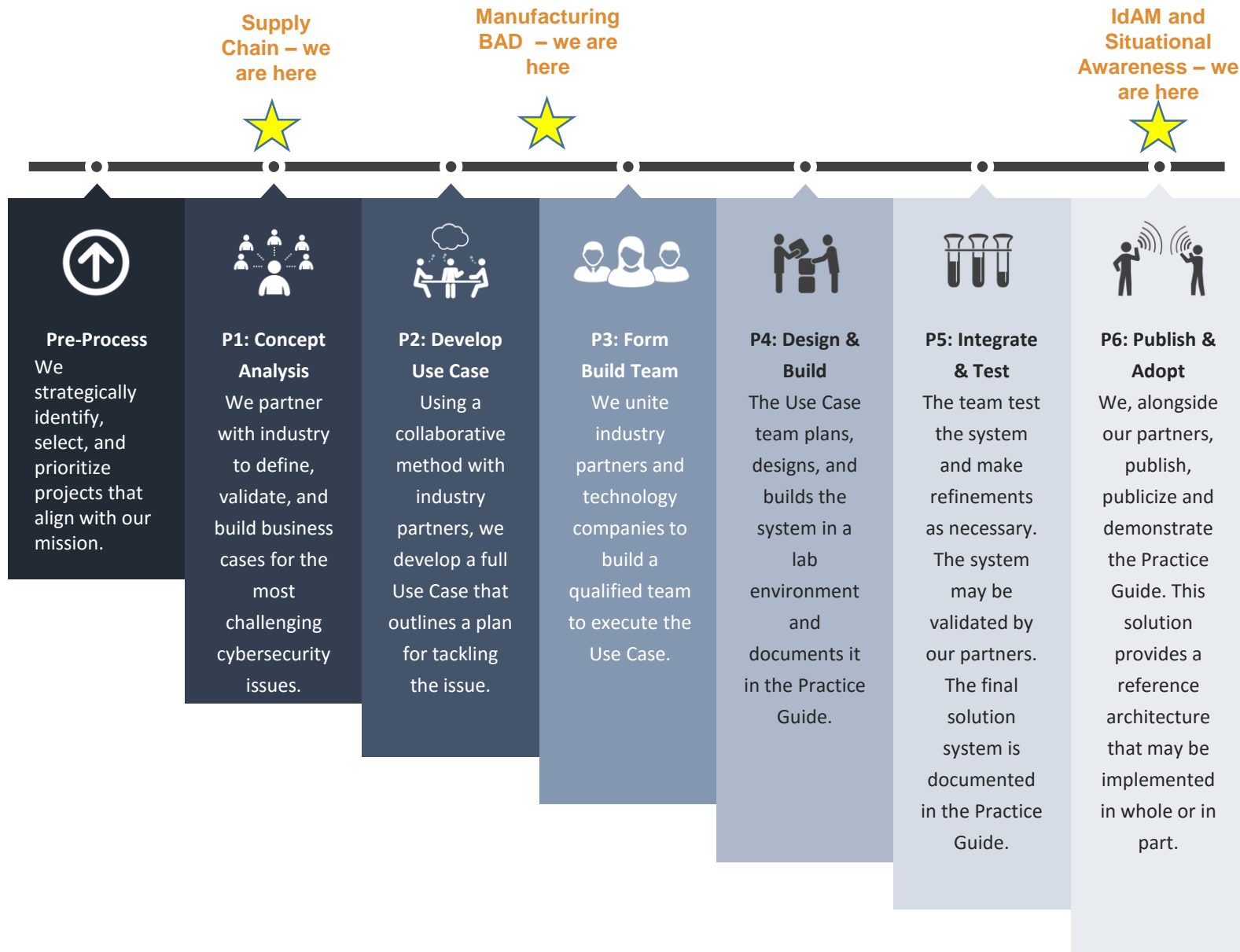


## The NCCoE seeks problems that are:

- ▶ Broadly applicable across much of a sector, or across sectors
- ▶ Addressable through one or more reference designs built in our labs
- ▶ Complex enough that our reference designs will need to be based on the combination of multiple commercially available technologies

## Reference designs address:

- ▶ Sector-specific use cases that focus on a business-driven cybersecurity problem facing a particular sector (e.g., health care, energy, financial services)
- ▶ Technology-specific building blocks that cross sector boundaries (e.g., roots of trust in mobile devices, trusted cloud computing, software asset management, attribute based access control)



- **Situational Awareness SP 1800-7 (a,b,c)**

- Released public draft - 02/16/2017
- Comment period open until - 04/17/2017
- [https://nccoe.nist.gov/projects/use\\_cases/situational\\_awareness](https://nccoe.nist.gov/projects/use_cases/situational_awareness)

- **Cybersecurity for Manufacturing**

- Behavioral Anomaly Detection (BAD)
- Final project description (PD) - 03/2017
- Federal Register Notice - 03/2017
- [https://nccoe.nist.gov/projects/use\\_cases/capabilities-assessment-securing-manufacturing-industrial-control-systems](https://nccoe.nist.gov/projects/use_cases/capabilities-assessment-securing-manufacturing-industrial-control-systems)

- **NCCoE Supply Chain (SC) Sub Working Group (SWG)**
  - Last call held on 02/24/2017
  - Discussed numerous possibilities for use cases from various members (O&G, SDLC)
  - Initial goal was to have one or more use cases by 03/2017, and that has been achieved
  - Future activity – prioritize use cases, all are good ideas with technology as a basis
  
- **Identity and Access Management SP 1800-2 (a,b,c)**
  - Projected release of final - 03/2017
  - [https://nccoe.nist.gov/projects/use\\_cases/idam](https://nccoe.nist.gov/projects/use_cases/idam)

- Questions/comments





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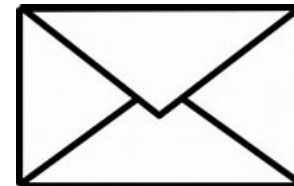


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*Thank You*