Role of Government Break-out Instructions

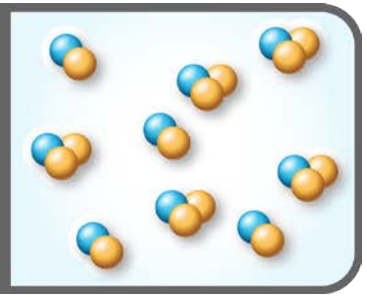
Introduction

- Path to a fusion power plant will be long and difficult
  - In addition to fusion core development, there are significant timescales and costs for power plant engineering, licensing the build and operation of a novel nuclear facility
- There are a number of different historical models, each with a different level of involvement for government, industry, and investors
- Fusion is a unique challenge, and we will need to be creative in how we proceed
- We would like to use this breakout to identify and prioritize the resources, services, and roles for government throughout the development path

FUSION CORE VIABILITY

Few $100Ms | 5-10 years

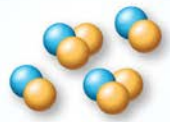
Energy breakeven equivalent



REACTOR SUBSYSTEM DEVELOPMENT

Many $100Ms | 5-10 years

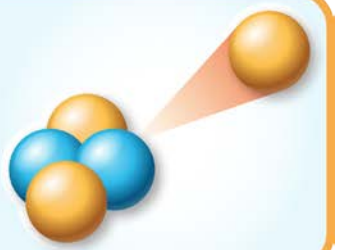
Fuel and neutron handling, operating cycle



PROTOTYPE PLANT DEMONSTRATION

>$1B | 5-10 years

Full system integration and operation; design certification



The Role of Government

- Discuss the importance of the following government resources/roles during each of the three phases:
  - Funding
  - Technical guidance
  - Convening stakeholders
  - Independent testing and validation
  - Access to expertise (e.g., National Labs)
  - Access to supercomputing capabilities
  - Access to development facilities
  - Access to tritium
  - Assistance with licensing
  - Market support

- After discussion concludes, participants will vote on their priorities based on the resource and phase