



# FUSION INDUSTRY ASSOCIATION

The Voice  
of a new  
Industry

The Fusion Industry Association is an international coalition of companies working to electrify the world with fusion - the unparalleled power of the stars. Energy from fusion will provide clean power for everyone that's safe, affordable, and limitless.

# Building the Fusion Economy

*Fusion energy will revolutionize the global energy system. It can solve the climate crisis and build energy abundance.*

- The Fusion Industry Association is **accelerating commercially viable fusion energy** by advocating for policies that support our 22 member companies as they develop commercial fusion power.
- The FIA is **building a movement** to tell the world should know how important clean, safe, affordable, and secure fusion will be to the future energy system. The FIA is educating key stakeholders in the private, public, and philanthropic sectors about the importance of tomorrow's fusion power economy.

*Fusion must be deployed fast enough to meet the world's challenges.*

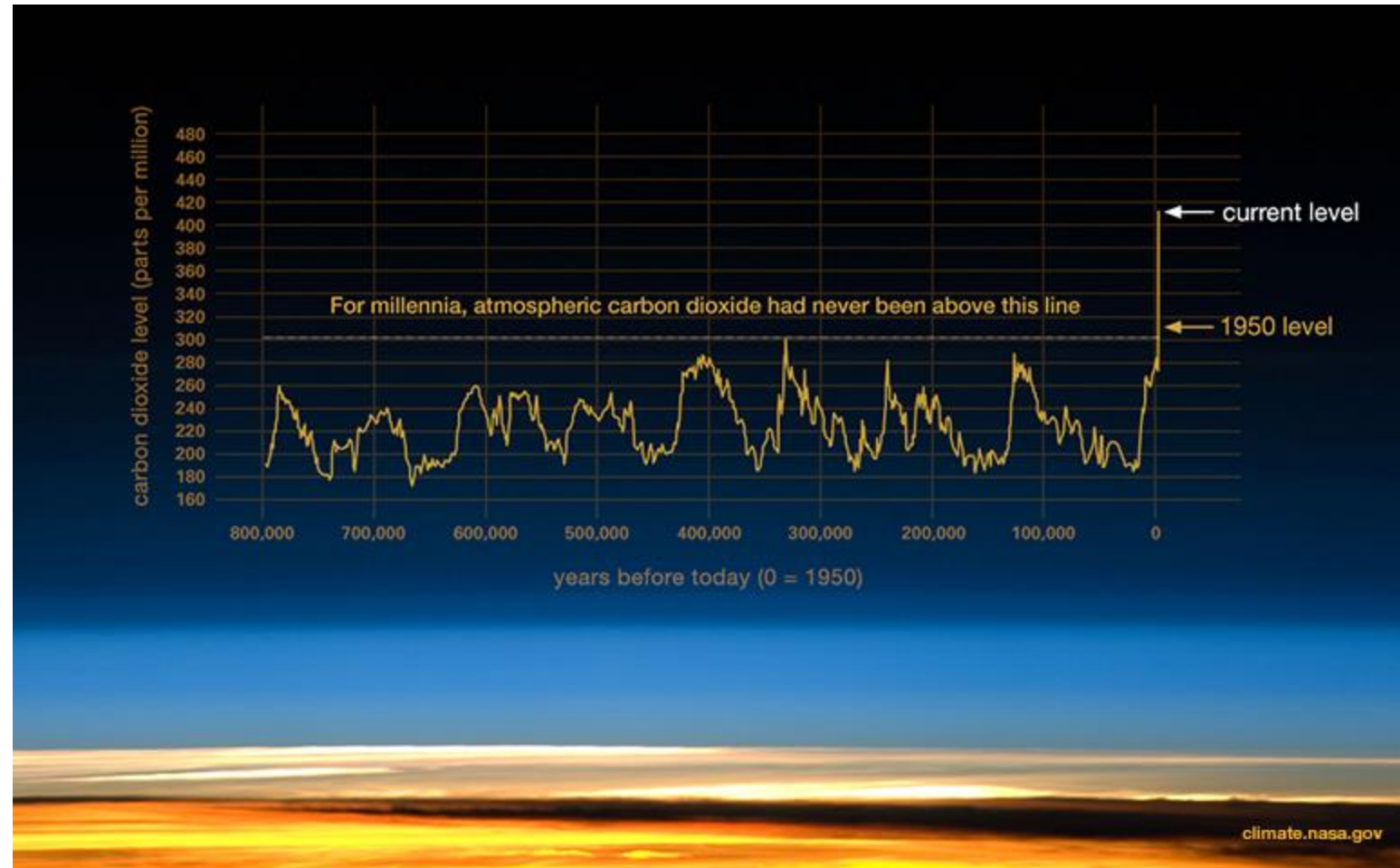
# Why Fusion?

*To solve our generation's  
biggest challenge:*

## ***The Climate Crisis***

Current clean energy technologies will prove insufficient to reduce carbon emissions enough to solve climate change.

**Fusion is a breakthrough energy source uniquely suited for rapid, widespread adoption to disrupt and displace fossil fuels around the world.**





# Why Fusion?

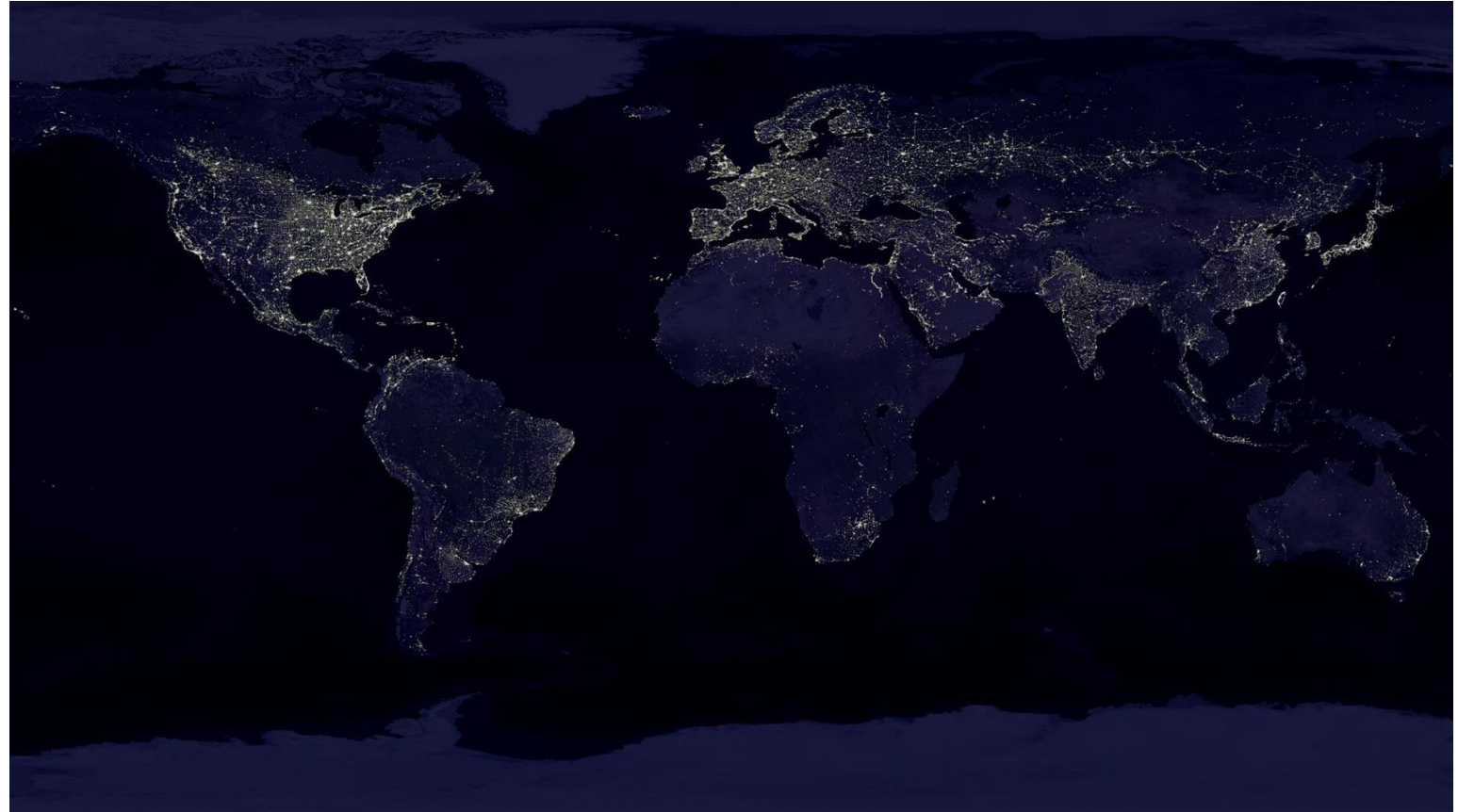
*To solve our species' biggest challenge:*

## **Resource Scarcity**

Clean, safe, affordable, and inexhaustible fusion energy will power the economy of the future.

It will **raise living standards** and meet growing global energy demand without environmental sacrifices.

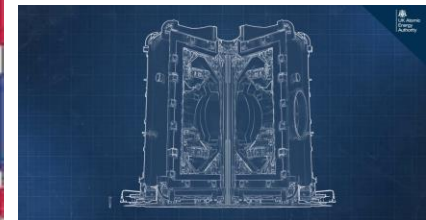
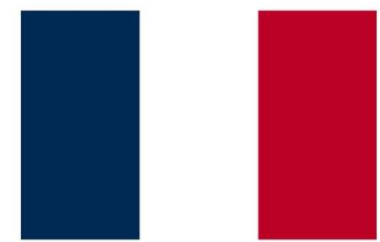
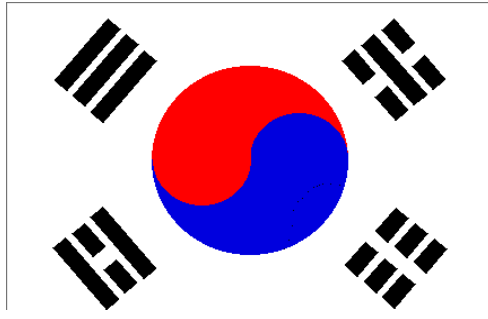
It will **break the geopolitics of energy**, so a country's destiny is not determine by the size of its hydrocarbon deposits.



# Mission of the FIA

*The Fusion Industry Association is the voice of the growing fusion industry. It supports efforts to **accelerate commercially viable fusion** research and development. The Association promotes the interests of the fusion industry around the world by advocating for ways to commercialize fusion power on a time-scale that matters.*

# A Global Race to Fusion Power



# Membership

FUSION  
INDUSTRY  
ASSOCIATION

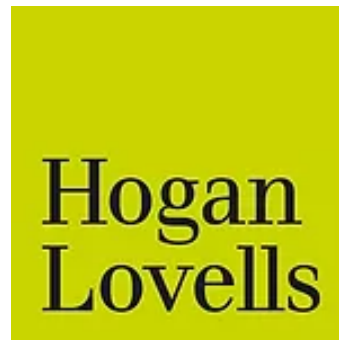
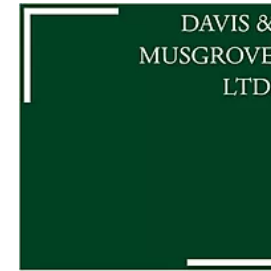


generalfusion®



# Affiliate Members

**FUSION**  
INDUSTRY  
ASSOCIATION





# How does the Fusion Industry Association advance fusion?

*Three strategic priorities for accelerating fusion energy*

# How does the Fusion Industry Association advance fusion?

## 1. Partnering with Governments

The private sector should have access to the scientific research that governments have pursued for decades. *Public-Private Partnerships* that include government support to private fusion companies can rapidly accelerate fusion development by driving private financial support.

## 2. Building a Fusion Movement

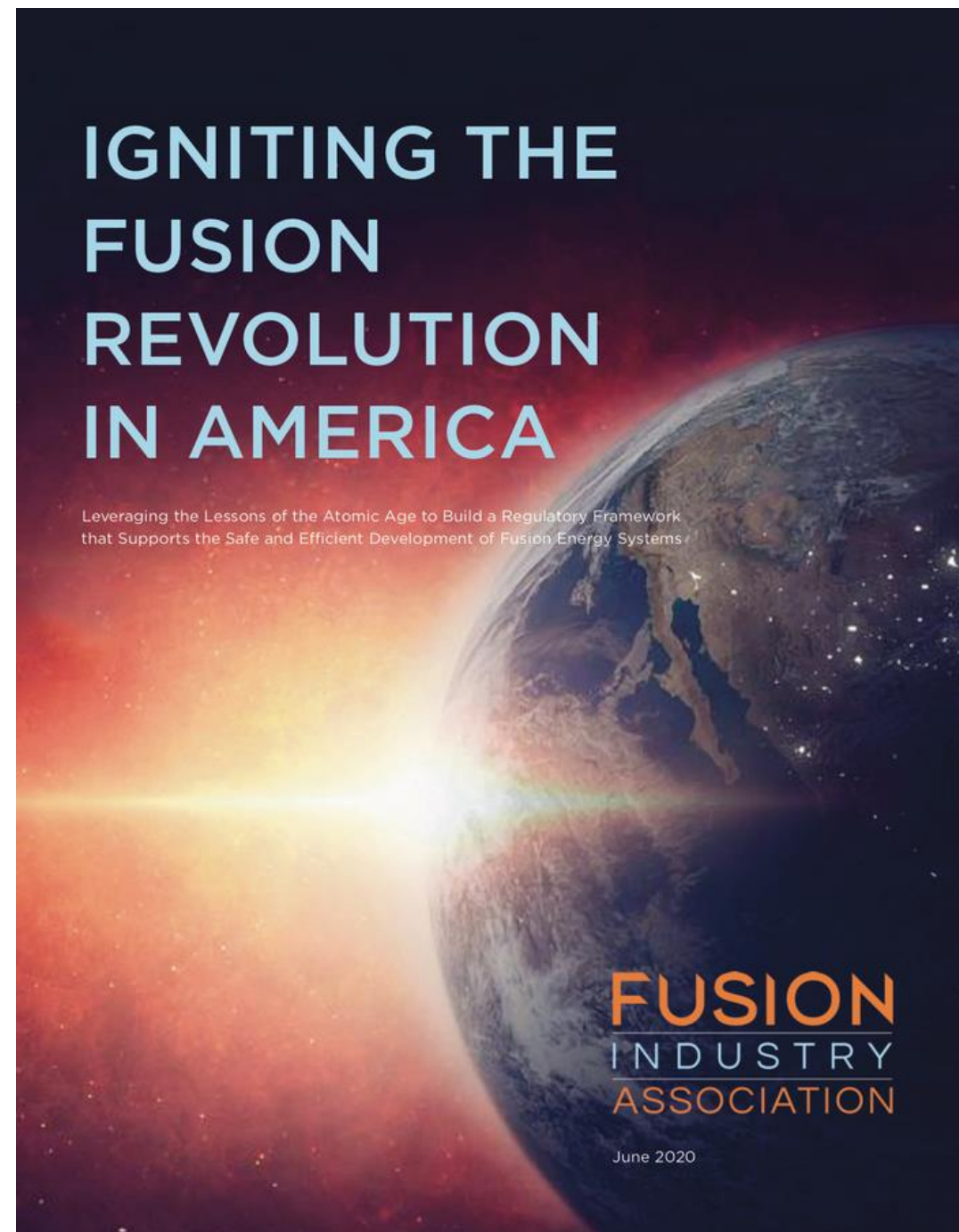
The world should know how important clean, safe, affordable, and secure fusion will be to the future energy system. FIA is educating key stakeholders in the private, public, and philanthropic sectors about the importance of tomorrow's fusion power economy.

## 3. Ensuring Regulatory Certainty

Fusion research, development, and deployment should be subject to appropriate, risk-informed regulation when experiments are built and sited.

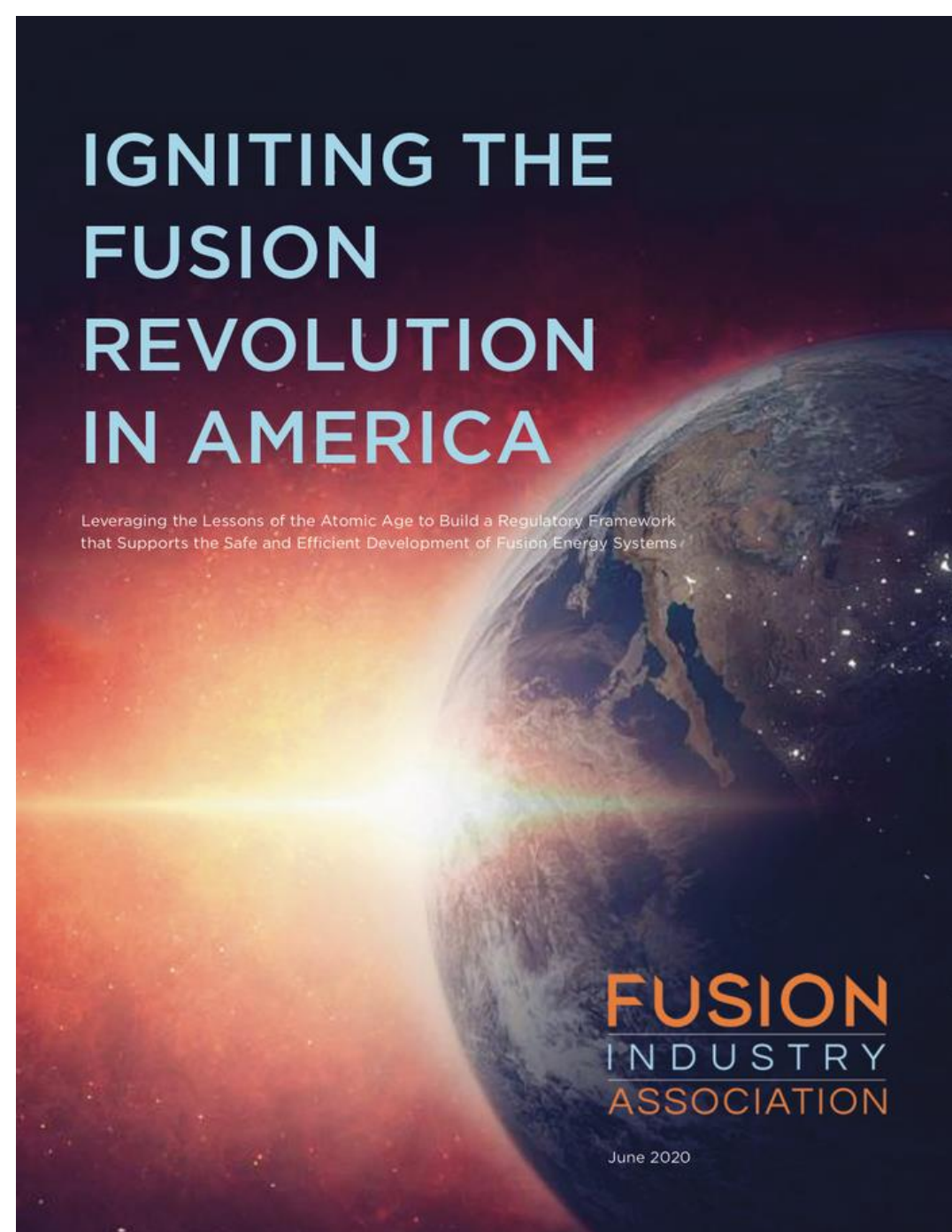
# *Ensuring Regulatory Certainty*

*U.S. policymakers should establish a broad legislative and regulatory framework that **explicitly and permanently** removes fusion energy from the regulatory approaches that the federal government has taken towards fission power plants.*



# Ensuring Regulatory Certainty

- The NRC's Part 50, 52 and proposed 53 regulations for large commercial fission reactors address a **different suite of risks** compared to risks that fusion facilities could create and therefore are not appropriate for fusion systems.
- Rules like the NRC's Part 20 regulations for general radiation protection and Part 30 rules for handling byproduct material would **properly address fusion** facilities' risk profiles.
- The DOE has created a framework for safe **construction and operation of experimental fusion energy devices** that has worked well for decades.





# ITER: ASN Regulated

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- The French Regulator imposed its existing fully deterministic fission facility regulatory approach to evaluate the ITER experiment
- This increased construction costs and timeline because it failed to appreciate the significant difference in risk between fusion and fission facilities



# IGNITING THE FUSION REVOLUTION IN AMERICA

Leveraging the Lessons of the Atomic Age to Build a Regulatory Framework  
that Supports the Safe and Efficient Development of Fusion Energy Systems

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INDUSTRY  
ASSOCIATION

June 2020

## Thank You

<https://www.fusionindustryassociation.org/post/fusion-regulatory-white-paper>