

# FUSION 2040 – Research on the way to a fusion power plant The new funding programme



#### The path to the new programme



<sup>1</sup><u>https://www.bmbf.de/SharedDocs/Downloads/de/2023/230522-memorandum-laser-inertial-fusion-energy.html</u> <sup>2</sup>https://www.bmbf.de/SharedDocs/Publikationen/de/bmbf/7/775804 Positionspapier Fusionsforschung.html



## Fusion 2040 – Research on the way to a power plant

Overarching Goal: Fusion Power Plant		Funding for MFE and IFE		Duration: 1 Jan 2024 – 31 Dec 2033	
Fields Scientific and	of Action I I technical issues			Fields of Action II Ecosystem	
<ul> <li>Tritium</li> <li>Material developm</li> <li>Blanket</li> <li>Neutron (sources)</li> <li>Plasma confineme</li> <li>Laser systems</li> <li>Targets</li> <li>Simulations</li> <li>(Design) studies</li> </ul>	nent, First Wall and nt		<ul> <li>Infrastruc</li> <li>Training a</li> <li>specialists</li> <li>Networkin</li> <li>industry)</li> <li>Public dia</li> <li>Regulation</li> </ul>	tures nd further education of ng (especially research and log & information n	



## Fusion 2040 – Research on the way to a power plant

Overarching Go Fu	al:	Funding for MFE and I	FE	Duration: – 31 Dec 2033				
	planned to be released in December 2023							
	370 Mio. € until 2028							
	Submission of applications in the context of specific calls							
<ul> <li>Laser systems</li> <li>Targets</li> <li>Simulations</li> <li>(Design) studie</li> </ul>	25	↔ Pi � Ri	ublic dialog & info egulation	rmation				



## Linked to Government's ...



Future Research and Innovation Strategy



Energy Research Program



# Planned Calls



# Planned Call 1: Basic Technologies

#### MODULE A: Key Technologies MODULE B: Test and Measurement Infrastructure

- Strengthen technological sovereignty in Germany and Europe
- Cooperation between science and industry
- Strengthen resilience of the value chains
- Strengthen the German fusion community
- Progress and economic implementation of fusion in Germany



### Basic Technologies – Scope for Modules A & B





# Conditions and Requirements I

- Clearly defined tasks and quantified objectives
- Significant progress compared to the state of the art (level of innovation)
- High scientific and technical risk of the work
- Sound exploitation plan, broad impact



# Conditions and Requirements II

#### Module A:

- research & industry
- combined funding rate 80 % max.
- deadlines: march / august

#### Module B:

- infrastructures ≠ concrete
- usually research entities
- individual projects possible
- deadline: august



# Conditions and Requirements II

M	odule A	: Module B:	
•	resear	two-stage process	oncrete
•	combi	collaborative projects, 2 – 3 years	ntities
	max.	international partners possible ( ! own money ! )	possible
•	deadli	invest / equipment possible ( ! project specific ! )	



## Evaluation criteria (non exhaustive)

✤ relation to the call

innovation of the concept

quality of consortium (industry, SMEs)

appropriateness of the resources

technical, social and econ. significance

dissemination and exploitation plan



## Planned Call 2: Junior Research Groups





### Junior Research Groups - Scope





# Conditions and Requirements I

- Strong integration in host institution (structure & profile)
- Clearly defined tasks and quantified objectives
- Significant progress compared to the state of the art (level of innovation)
- High scientific and technical risk of the work
- Long-term perspective and continuation concept



# Conditions and Requirements II

- applicant: research institution or university
- sound support and commitment
- funding **linked to the candidate** in person
- deadline: April 2024 & 2025



## Conditions and Requirements II

 applic: two-stage process
 sound individual projects
 fundin 5 years / 5 FTE max
 deadli international cooperation possible (! own money !) invest / equipment possible (! project specific !)



## Evaluation criteria (non exhaustive)

✤ Relation to the call

Innovation of the concept

Scientific excellence of the candidate

Synergies with portfolio of the institution

Long-term concept for continuation

appropriateness of the resources



# How to apply



# First stage

#### **Required:**

- Technical description of the project
   (→ template)
- Financial plan / budget table
   (→ template)

#### **Optional:**

 meaningful LOIs from associated partners

#### Not needed:

- offers for equipment
- CVs of personel (except Junior Research Groups)
- consortium agreement
- creditworthiness documents



# First stage

**Required:** 

 Technical description of the project
 (→ template)

Financial plan /

**Optional:** 

• meaningful LOIs from associated partners

#### Not needed:

- offers for equipment
- CVs of personell (except Junior Research Groups)
- consortium
- budget<br/>(> temFirst stage: one simplified set for whole consortium<br/>Second stage: one set of forms per partner!ment<br/>worthiness<br/>nents



## Stages of project support:





### Contact points at project mangement agency



Dr. Christian Flüchter Phone: 0211 6214 261 Mail: fluechter@vdi.de



**Dr. Christian Busch** 

Phone: 0211 6214 591

Mail: busch@vdi.de