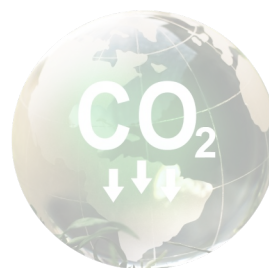




# CARBONTECH DEVELOPMENT INITIATIVE

## INFORMATION SESSION

December 20, 2022



# LEADERSHIP



**ASSOCIATE DIRECTOR  
JOHN CORNWELL**



**MANAGING DIRECTOR  
ERIK FUNKHOUSER**



**COMMERCIALIZATION  
DIRECTOR  
JIM ALOISE**



# AGENDA

☐ ABOUT CDI

☐ PROGRAM DESCRIPTIONS AND ELIGIBILITY

☐ EVALUATION PROCESS

☐ HOW TO APPLY





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# ABOUT CDI

**CDI is a large-scale market transformation grant-seeding and commercialization hub for carbontech science and technology. CDI will bring new companies into New York's carbontech ecosystem via translational research and development and commercialization support.**

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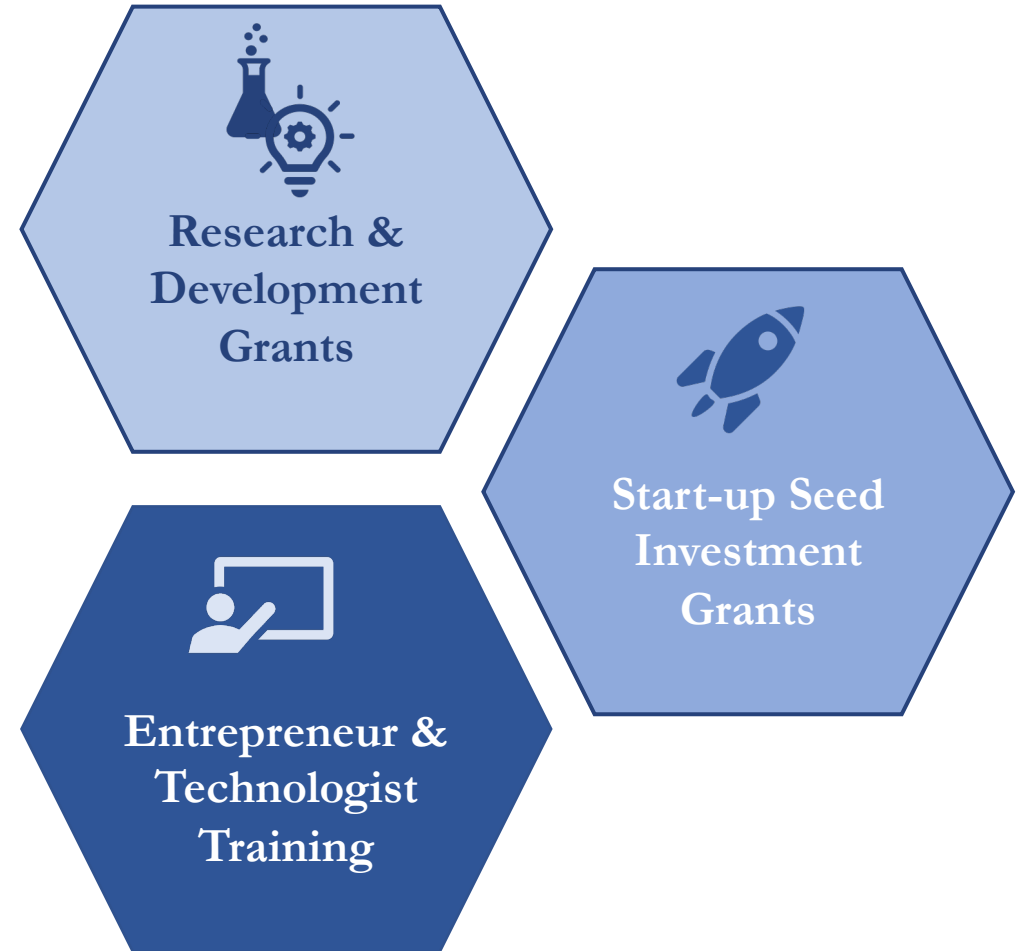
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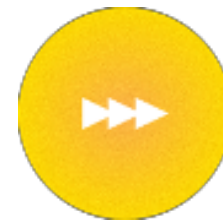




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☐ ELIGIBLE TECHNOLOGY AREAS

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# ELIGIBLE TECHNOLOGY AREAS



## CO<sub>2</sub> Capture Technology\*

Direct Air Capture (DAC)

Direct Ocean Capture (DOC)

CO<sub>2</sub> capture from waste-to-energy and cement plants

Innovative Sorbent  
Regenerative Technology

\*Point source CO<sub>2</sub> capture technologies targeting fossil fuel burning power plants are excluded

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## CO<sub>2</sub>-to-Building Materials

Carbon Mineralization of Waste

CO<sub>2</sub> Curing of Concretes

Mg-based Construction Materials



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Mg-based Construction Materials



## CO<sub>2</sub>-to-Chemicals/ Fuels/ Materials

Electrochemical Conversion of CO<sub>2</sub>

Dual – functional Materials





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# CDI PROGRAMS

## RESEARCH PROGRAMS

### Propel Carbontech



Grant funding to public and private universities and for profit entities for scientific research to resolve critical technical carbontech barriers across CDI's technology topic areas.



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## RESEARCH PROGRAMS

### Propel Carbontech



Grant funding to public and private universities and for profit entities for scientific research to resolve critical technical carbontech barriers across CDI's technology topic areas.

### Columbia Only Programs

- Carbontech Leap
- New Directions

Info Session: January 4, 2023



# CDI PROGRAMS

## RESEARCH PROGRAMS

### Propel Carbontech



Grant funding to public and private universities and for profit entities for scientific research to resolve critical technical carbontech barriers across CDI's technology topic areas.

## COMMERCIALIZATION PROGRAMS

### Bridge Carbontech



Grant funding, technical and business training, and customized support for mid- and late-stage technology start-ups to unlock rapid carbontech commercialization.

### Accelerate Carbontech



No-cost, robust, carbontech specific technical and business acceleration training for start-ups and innovators without grant funding.



# PROPEL CARBONTECH

## Project Eligibility Criteria

**Projects must:**



**Be at Tech. Readiness Level (TRL) 2 or 3.**



**Have a product at ideation or minimum viable product (MVP) / prototype stage.**



**Have an established team with clear roles with at least one Principal Investigator (PI) identified.**



**Stage of Funding: Pre Series A**



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Stage of Funding: Pre Series A

## Program Offerings

### Awardees will receive:



Grants between \$50,000 and \$150,000 for 12 – 18 month project.



Access to commercialization training



Access and support of network of researchers and academics

|                  |              |
|------------------|--------------|
| Number of awards | 4 to 8       |
| Total Grants     | \$500,000    |
| Duration         | 12-18 months |



## Project Eligibility Criteria

### Projects must:

 Be at:  
Mid-stage commercialization – TRL 4 - 6  
Late-stage commercialization – TRL 6 - 9

 Have a MVP or prototype, product not in market, or product in market with sales





 Have a qualified team with established roles.

 Stage of Funding:  
Mid-stage: Pre Series A  
Late-stage: Seed funding through post Series A funding

# BRIDGE CARBONTECH




## Project Eligibility Criteria

### Projects must:

-  Be at:
  - Mid-stage commercialization – TRL 4 - 6
  - Late-stage commercialization – TRL 6 - 9
-  Have a MVP or prototype, product not in market, or product in market with sales
-  Have a qualified team with established roles.
-  Stage of Funding:
  - Mid-stage: Pre Series A
  - Late-stage: Seed funding through post Series A funding

## Program Offerings

### Awardees will receive:

-  Grant awards between \$287,500 to \$375,000
-  Carbontech commercialization training, and customized direct support
-  Access to network of researchers, entrepreneurs, and mentors

|                  |              |
|------------------|--------------|
| Number of awards | 4 to 6       |
| Total Grants     | \$1,725,000  |
| Duration         | 18-24 months |

# ACCELERATE CARBONTECH

## Project Eligibility Criteria

### Projects:



Must be at TRL 2 to 9



Can have product at any development stage  
(ideation, MVP, product)



Have an established team with clear roles



Stage of Funding: Any



# ACCELERATE CARBONTECH

## Project Eligibility Criteria

### Projects:



Must be at TRL 2 to 9



Can have product at any development stage (ideation, MVP, product)



Have an established team with clear roles



Can have raised funds at any stage

## Program Offerings

### Awardees will receive:



Carbontech commercialization training.



Access and support of network of researchers, entrepreneurs, and mentors

|                  |           |
|------------------|-----------|
| Number of awards | 20 - 30   |
| Total Grants     | N/A       |
| Duration         | 12 months |



# DEMONSTRATED BENEFIT TO NEW YORK STATE

All projects must either:

- be located within New York State; or
- have a demonstrated benefit to New York State.



**Demonstrated Benefit to New York State means:**

The project involves business or related activity that teams are involved with in New York State. Examples of activities that represent a demonstrated benefit to New York State” include:

- Having some portion of an organization’s workforce (beyond at least one employee), such as research and development, manufacturing, and/or sales, based in New York State; and/or
- Benefiting supply chain partners, vendors, investors, and/or service providers in New York State; and/or
- Having an addressable market of current or future customers within New York State.



# CARBONTECH COMMERCIALIZATION TRAINING

## Core Curriculum

**Commercialization training specific to carbontech.**

- **Skills Labs**
- **Bootcamps**
- **Workshops**

## Carbontech Training

**Technical training in CDI technology topic areas:**

- **CO2 Capture Technology**
- **CO2-to-Building Materials**
- **CO2-to-Chemicals/ Fuels/ Materials**

## Networking and Events

**Large events to increase awardee visibility to peers and potential partners.**

- **Tech. Showcase**
- **Investor and Founder Meetups**
- **Pitch Competitions**

# CDI PROGRAMS SUMMARY

PROGRAMS



**Propel  
Carbontech**



**Bridge  
Carbontech**



**Accelerate  
Carbontech**

OFFERING

Grants: \$50,000 - \$150,000

Grants: \$287,500 - \$375,000

Custom Direct Support

No-Cost Commercialization Training





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# EVALUATION PROCESS

1

## Proposal Adequacy and Team Qualifications

Responsiveness to the  
Objectives and  
Requirements of the RFP

Appropriateness of the  
Proposed Activities

Team Qualification

35%



# EVALUATION PROCESS

1

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2

## Advances Global Carbontech Market

Potential Market Impacts

Likelihood of Market Impacts

40%



# EVALUATION PROCESS

1

## Proposal Adequacy and Team Qualifications

Responsiveness to the Objectives and Requirements of the RFP

Appropriateness of the Proposed Activities

Team Qualification

35%



2

## Advances Global Carbontech Market

Potential Market Impacts

Likelihood of Market Impacts

40%



3

## Advances NYS Carbontech Ecosystem

Likelihood of Translational Impacts

Potential Environmental Impacts

Relevancy to NYS

25%





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# APPLICATION PORTAL

Apply by Friday January 13<sup>th</sup> at 11:59 PM ET



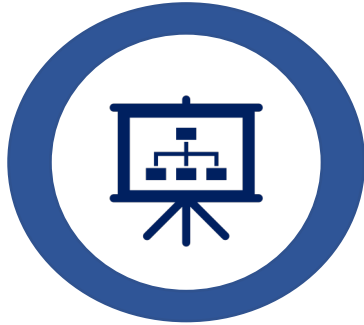
<https://carbontech.columbia.edu/apply-for-funding-overview>



# APPLICATION PROCESS

- **Apply using the Submittable Platform**
  - Emailed and other application submissions will not be reviewed
  - Integrates applicants, reviewers, program administrators, awardees
- **Start/Save your application early to be sure that you understand what is required**
  - If you plan to do start-to-finish, allow at least 2 hours
- **Questions? See links to FAQ, RFP (Request for Proposal)**
  - Email [cdi-applications@columbia.edu](mailto:cdi-applications@columbia.edu)
- **Applications that do not meet eligibility requirements will not be reviewed**
- **Award notification**
  - Preliminary notification/invitation
  - Negotiate terms and set milestone criteria

# APPLICATION REQUIREMENTS



## Project

- **Project Title**
- **Company/Project Website (if applicable)**
- **Stage of Financing (if applicable)**
- **Summary Statement of proposed project and team objectives**



## Team

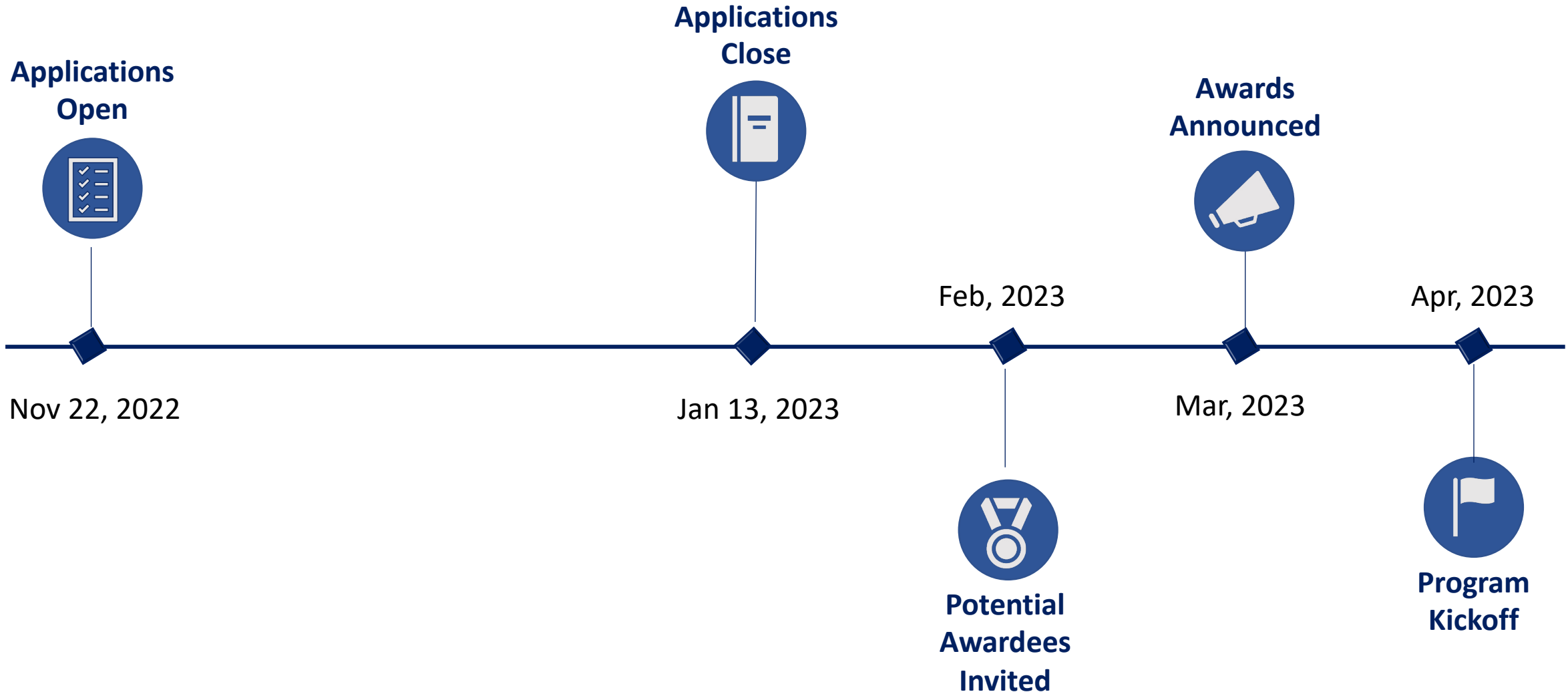
- **Project Lead Contact Information**
- **Project Lead CV/Resume**
- **Co-Lead Contact Information (if applicable)**
- **Co-Lead CV/Resume (if applicable)**
- **Additional Team Member Information**



## Project Proposal

- **Background/Introduction**
- **Detailed Description of Project**
- **Tech-to-Market Plan**
- **Scope of Work**
- **Gantt Chart of Activities**
- **Funding Requested (if applicable)**

# APPLICATION TIMELINE



# QUESTIONS



**To apply, please visit the CDI website:**

<https://carbontech.columbia.edu/apply-for-funding-overview>

**For application questions, please email:**

[CDI-Applications@Columbia.edu](mailto:CDI-Applications@Columbia.edu)

(also see CDI FAQ document – link in chat)

**For general information please email:**

[CDI-Information@Columbia.edu](mailto:CDI-Information@Columbia.edu)