# NEU: AN ACI CENTER OF EXCELLENCE FOR **CARBON** NEUTRAL CONCRETE MEMBER PROSPECTUS





NEU: AN ACI CENTER OF Excellence For Carbon Neutral Concrete

### VISION

NEU envisions a concrete industry where all partners have access to technologies and the knowledge needed to effectively and safely produce and place carbon-neutral concrete and concrete products in the built environment.

## MISSION

NEU will collaborate globally to drive education, awareness, and adoption of the use of carbon-neutral concrete materials and technologies in the built environment.

## STRUCTURE

American Concrete Institute—Center administration, oversight, and standards developer, certification program management, technical document developer and publisher, developer, and provider of professional development education.

## **MEMBERS** AND ALLIED ORGANIZATIONS

Organizations across the value chain will financially and philosophically support and collaborate on executing the core functions and meeting NEU's objectives, for example:

- Owners/operators
- Construction companies and developers
- Manufacturers of concrete products
- Standards development organizations (SDOs)
- Technical societies/institutes
- Universities/research centers
- Training centers/trade schools
- Cement producers
- Ready mixed concrete producers
- Architects/consulting engineers
- Environmentally focused non-governmental organizations (NGOs)
- Federal and state agencies involved in standards-setting and adoption, construction, environmental protection, or workforce development

## **BUSINESS** MODEL

NEU is incorporated as a U.S. (Michigan)-based, 501(c)(3) non-profit, professional organization and is wholly owned and managed by ACI. NEU has a Board of Directors (BOD), Advisory Committee (AC), and Task Groups (TG).

The current staffing of NEU includes an Executive Director who will be supported by a Technical Director and administrative staff. NEU is located at ACI headquarters in the U.S. and draws from ACI's technical and administrative support services. Funding for NEU will be provided by ACI and Sustaining, Supporting, and Affiliate members.

## **MEMBERSHIP** LEVELS

Membership fees are used to support the operation and core functions of NEU at three membership levels with differing Member benefits at each level:

## NEU **SUSTAINING** MEMBER BENEFITS

- The appointment of one representative to the NEU Board of Directors, and one vote on each matter submitted to a vote of the Board of Directors.
- Dedicated consulting hours from NEU Staff and ACI subject matter experts on special projects as jointly determined by member organization and NEU.
- The appointment of one representative to the NEU Advisory Committee.
- Access to all NEU published documents and guides.
- Prominent recognition on the NEU website and during industry events.

## NEU SUPPORTING MEMBER BENEFITS

- Opportunity for election to an at-large seat on Board of Directors.
- The appointment of one representative to the NEU Advisory Committee.
- Access to all NEU published documents and guides.
- Recognition on the NEU website and at industry events.

## NEU AFFILIATE MEMBER BENEFITS

- Opportunity for election to an at-large seat on the NEU Advisory Committee.
- Access to all NEU published documents and guides.
- Recognition on the NEU website and at industry events.

Please visit the NEU website for a <u>membership application</u> and more information. If you have any questions, please reach out to us at <u>info@neuconcrete.org</u>.

## NEU ALLIED ORGANIZATION BENEFITS

(Open by invitation only to industry non-profits, government agencies, and select NGOs)

The Allied Organizations of NEU are non-member, non-dues-paying industry organizations that have a vested interest in the production and placement of carbon neutral concrete in the built environment. To best advance our efforts, NEU will connect these partners with our members to collaborate and cross-pollinate ideas and best practices to reduce redundant efforts. NEU will engage these allied organizations through the development of a Memorandum of Understanding between each organization, outlining the opportunities between both parties.

Please contact the NEU team at **info@neuconcrete.org** for more information about becoming an Allied Organization. The NEU Executive Director will vet all Allied Organization applications.

## **CORE FUNCTIONS** OF NEU

NEU's strategic plan are efforts to transform the culture of the concrete design and construction industry from a fragmented, reactive industry to a proactive, unified group actively engaged in developing and employing existing and new technologies to reduce the carbon footprint of concrete construction. As an industry that is deeply ingrained in our society, the concrete construction sector has long been dominated by the supply side. While there are significant methods of reducing carbon emissions through supply side efforts, the demand side of the industry also has a role in moving our industry toward more carbon neutral practices. NEU works with both the supply and demand side of the construction industry to advance cross-cutting strategies that span the entire cement and concrete cycle.

To achieve this, NEU is establishing transparent policies, streamlined processes, and identifying specific activities within the boundaries of its strategic plan to reach these goals. NEU has completed a critical assessment of the current state of concrete research and has identified technologies that have the potential to significantly impact the carbon footprint of concrete. High-potential materials and technologies that can positively impact greenhouse gas emissions will be identified. NEU has begun working worldwide with industry partners, members, and allied organizations to implement action plans aimed to address the needs of various industry "roadmaps" associated with reducing the carbon footprint of cement and concrete. Within these general thrusts, several anticipated Core Functions are listed.

## ACCELERATE ADOPTION OF NEW TECHNOLOGIES AND MATERIALS

Historically, construction is an industry that is slow to adopt new technologies because new technology is typically viewed as a risk. Also, given the industry's fragmentation, new technologies often have difficulty finding an opportunity or a niche to demonstrate their value. Through its technical committees and entities such as the ACI Foundation's Technology Forum, ACI provides opportunities to showcase technologies or develop supporting technical information, but for accelerated adoption of technology, these existing approaches are not adequate.

NEU is envisioned as the gateway for new technologies to enter the industry and can direct necessary resources to accelerate the adoption of those technologies. Currently, no such entity serves the concrete construction industry, and the lack of such an entity is a major hurdle to innovation.

#### COORDINATION WITH ACI COMMITTEES

The technical, educational, and certification committees of ACI are recognized worldwide as a resource for unbiased consensus information on topics related to concrete. NEU will be recognized as an entity that supports the resources developed by these committees including dissemination.

NEU supports ACI committees by responding to research needs identified by their experts and providing investor feedback on new documents, codes, and specifications that are required.

### TECHNOLOGY TRANSFER AND PROFESSIONAL DEVELOPMENT

Designers, contractors, and owners are not necessarily familiar with new technologies. Technology transfer is at the core of successful deployment. Technology transfer needs include short courses (virtual and in-person), webinars, software tools, and other technical documentation. ACI is a recognized leader in this area, with an established network within industry and higher education institutions worldwide. ACI has robust professional education outreach capabilities through its Professional Development Department and its Educational Activities Committees. NEU has begun to capitalize on this capability. ACI currently holds several seminars on various topics related to concrete design and construction throughout the year using its network of chapters and its headquarters in Farmington Hills. With the resources of NEU, these activities will be expanded significantly.

ACI also has an established online presence in the professional education sector. Through ACI University, ACI provides online educational opportunities to several thousand individuals across the globe every year. These opportunities include live webinars as well as on-demand recordings and courses available 24 hours a day. Access to ACI University continuing education courses are now available free to ACI members, greatly increasing the reach of this online program. NEU already capitalizes on ACI's live and on-demand educational abilities using ACI staff expertise and benefits from the already established network of professionals that look to ACI for the latest knowledge on construction industry issues.

#### TECHNOLOGY ASSESSMENT AND VALIDATION/VERIFICATION

An important function of NEU is to serve as the industry's resource for the evaluation of environmental claims associated with both new and existing materials and technologies. The construction industry is risk-averse, and one failure can quickly negate 1000 successes. Also, some individuals will take advantage of the desire to decarbonize and provide solutions that have no technical merit. It is important that as innovative technologies come forward, they are vetted and assessed for their efficacy. Although ACI cannot take on this responsibility and maintain its independent voice, NEU can and is taking on this responsibility. The process involves the use of technical assessment teams that will evaluate the environmental claims supported by objective evidence in an impartial manner in accordance with international standards and practices.. Quite often, this task will simply require a critical review of existing publications or data. Sometimes additional testing or research may be requested from the client. The role of the technical assessment teams will be significant; they will not pick winners or losers but instead will ensure the required information is made available to allow the industry to make educated and informed decisions when selecting new or existing materials or technologies.

#### **EDUCATIONAL EFFORTS**

Even though much R&D has been conducted on technologies that support a reduced-carbon footprint for the cement and concrete industry, more needs to be done to ensure that efforts for the effective and efficient deployment of these decarbonization technologies are focused. Education is needed throughout the industry so everyone along the value chain has an understanding of the materials and technologies needed to reduce carbon emissions. NEU will continue to provide booklets, webinars, summits, and university materials to reach future professionals and those currently involved in the built community. Through this education the why and how can both be answered.

#### TECHNICAL ADVOCACY AND SUPPORT

ACI has long recognized that advocacy for the adoption of its resources is a major component for the success of its mission. These efforts ensure the resources developed by ACI are incorporated into model codes and jurisdictions' requirements around the world. Resources developed by NEU will be included in these advocacy efforts and are likely to benefit from the direct reference in ACI documents that are already adopted by local jurisdictions.

### INTERNATIONAL AND STUDENT OUTREACH

ACI will leverage the relationships it has built with its network of international partners and international ACI Chapters to meet the global needs of NEU. This international network currently consists of 55 Partners and 99 Chapters operating in 53 countries worldwide, providing the Center of Excellence with a solid base to disseminate the knowledge and increase the acceptance of low-carbon concrete products and methodologies for construction worldwide.

Empowering and motivating the next generation of engineers and technologists to be actively involved and support the decarbonization efforts is imperative. To this end, ACI will engage with its contingent of student members, including over 15,000 individual student members and an additional contingent of students who are members of ACI's 250+ Student Chapters.



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