There are multiple signs that both the science and business of LENR are coming of age. On the scientific side, there are now three formal university programs for research on LENR, whose purpose is to seek to understand the origins of excess heat observed in thousands of LENR experiments. On the business side, some relatively new companies, funded by smart institutional investors or experienced angel investors, or both, and programs within larger well-established companies, are seeking to develop LENR systems to produce heat and electricity.

These and other examples of the combined advancement of the scientific and business activities within the field represent a growing interest in the practical possibilities of LENR, and have moved us to found an international Industrial Association to serve the field. It is named LENRIA.

What is an industrial association? It is an association of people, companies and other organizations in a particular business or field, organized to promote their common interests. Industrial, trade and other associations number in the tens of thousands globally. They are so key to the development of various fields of endeavor that there are even associations of associations.

Jim Collins, author of the books Good to Great and Built to Last, wrote regarding the significance of associations: “Associations are the glue of our society and economy. Like the mortar that hold the bricks of a building in place, associations go largely unnoticed, yet they do much to hold the entire structure together.”

LENRIA, the new organization for LENR energy, is a global association. Its formation required the entity being organized in some jurisdiction, so its domicile in the U.S. is simply because of the founders living there.

In the U.S., there is the possibility for LENRIA to become a member of the United States Energy Association (USEA), that itself is an association of energy associations. The mission of the USEA is “to promote the sustainable supply and use of energy for the greatest benefit of all.” Current members include energy associations representing nuclear, coal, petroleum, gas, hydro, wind and solar, as well as many others. Importantly, none of the existing energy associations in the USEA will represent LENR. We shall seek membership in the USEA once the viability and utility of LENR are sufficiently established.

Internationally, examples of renewable energy councils for us to potentially liaise with are the European Renewable Energy Council (EREC) and the Japan Council for Renewable

LENRIA, the New Industrial Association for Commercialization of LENR

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Figure 1. Covers of publications that compile the names and characteristics of industrial and trade associations and other such organizations. Note that they have already been published for many editions.

Figure 2. The current LENR ecosystem includes a variety of government related organizations (GOV), institutional organizations (ORGS), core resources (CORE), news and information groups (INFO) and businesses (BUS), small and large.
Energy (JCRE). Cooperative arrangements will be explored in other geographical areas.

The variety of organizations now working on or interested in LENR was one of the drivers for forming the new industrial organization. These groups are illustrated in Figure 2. This new representation of the LENR ecosystem is useful and augumentable. It is meant to illustrate organizations and activities already in place. There are several recent additions including Texas Tech University, Tohoku University and Energiforsk.

A key component of the ecosystem represented on the diagram is described as the Core, and is the current foundation of our community. This Core includes the International Advisory Committee (IAC) and the ICCF Conferences, which together constitute the backbone of the field. There are other key shared assets represented, including the International Society for Condensed Matter Nuclear Science (ISCMNS), its Journal of Condensed Matter Nuclear Science and library, the CMNS Google group, lenr-canr.org, and the New Energy Foundation that publishes Infinite Energy magazine. It is here in this Core that the new industrial association shall endeavor to earn a place.

The business sub-ecosystem represented in the full ecosystem diagram was subjectively abridged because it has become so large. A more comprehensive business satellite, itself limited because it has become so large, is seen in Figure 3 and contains about 30 companies. We may do further classification into sub-areas such as energy generation, materials, equipment, sales, maintenance and other common categories as the set expands.

Given the multiplicity of organizations that have heretofore been involved with LENR, we asked if any of them can broadly represent the field. We were unable to determine that any of the existing units would perform the functions needed to promote the commercialization of LENR.

Figure 4 shows key existing international organizations on both the scientific and commercialization sides of the field. We have well-established organizations on the scientific side. The International Advisory Committee is comprised of former ICCF conference chairman. It has been the caretaker of the ICCF Conferences, providing continuity and oversight for the field’s most important shared asset. Nothing is more responsible for the field constituting itself as a functional and productive community. On the commercial side we have the recent emergence of the for-profit LENR-Cities group in 2014. It has an interesting model for creating an ecosystem that represents a subset of the field. But, there is no existing LENR organization that will perform the needed functions of an industrial association.

In light of (a) the multiple organizations now involved in LENR across the categories of Science, Business, Academia, Government, Media and Finance; (b) the increasing activity levels within these categories; and (c) the absence of an existing organization without historical baggage related to LENR or an inherent conflict of interest, or both, we formed the new industrial association in April of this year.

The new LENR Industrial Association has a discernibly pertinent name, LENRIA, that is directly relatable and compatible to its mission of representing its members’ interests and those of the field. With LENRIA, we believe we have established a solid identity to build upon in pursuit of current and future objectives. The domain address for the organization’s email and web presence is lenria.org. The website was established soon after the conclusion of ICCF-19 in Padua.

Who will be members of LENRIA? The core of the membership should include organizations and individuals already active in the field, in addition to those who are just entering. For organizations, this includes LENR companies, other companies, including investment concerns and equipment suppliers, government agencies, university laboratories, related associations, think tanks and industry publishers. For individuals, those who are business professionals, engineers, scientists, consultants, technical personnel, writers, students and others are welcome to join, and are encouraged to do so. Becoming a member is one means to promote our common interests. We plan to accept applications for membership near the end of 2015.

What is the status of other activities by LENRIA now underway? There are two administrative actions in their early stages. One is to complete the formal organization of LENRIA. That includes development of a Mission Statement. The other is to achieve tax-exempt status. Petitioning the U.S. Internal Revenue Service and waiting for its response will take well into 2016. Our goal is to have these actions completed, and a robust charter membership in place, by the time of ICCF-20 in Sendai, Japan, in October of 2016.

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**Figure 3.** A more complete display of the businesses active in some form within the LENR field as of Q2 2015.

**Figure 4.** The scientific side of LENR has two good organizations. The International Advisory Committee (IAC) was started in 1990. It organizes the International Conferences of Cold Fusion (ICCF). The International Society for Condensed Matter Nuclear Science (ISCMNS), founded in 2003, performs multiple functions for the science of LENR, as noted on its website: iscmns.org. The recently formed group, LENR-Cities, and the new Industrial Association LENRIA, focus on the commercialization of LENR.
There will be many longer-term activities by LENRIA. The advocacy role of the association shall become more traditional once the change of perception of the field has been achieved. Until that time, our advocacy approach shall include helping promote a change of perception for the field that we expect to result in a substantial increase of resources for research by orders of magnitude. In that light, we are a proponent of a long overdue plan to put identical experiment-ready devices into the hands of up to five highly regarded international labs, for the purpose of measurements and the coordinated publication of the resulting papers. A successful program would accelerate the basis for recognition of the field as a legitimate area of scientific research, with promising practical applications.

In support of our advocacy, we plan to prepare constituency-specific informational materials for LENR. Further, we may create an online database of organizations relevant to LENR, to complement our ecosystem diagrams. We are also evaluating interest for seedling LENR clubs at a few universities, where multi-disciplinary groups of students and faculty could come together to explore the science of LENR.

In the longer term, we expect to serve by leading industry public relations initiatives, promoting or organizing commercial conferences and exhibitions, serving as a forum for industry standards and safety criteria, enabling accreditation of individuals, and establishing professional and safety standards.

Additionally, LENRIA can be the forum for the sharing of pre-competitive information among companies, as well as a representative of the LENR community at all levels and venues, from lobbying to global government relations. Such activities might provide the context for more interactions between academia, government and industry, as well as a catalyst for propelling a wide range of grassroots efforts. Another type of activity would be the possibility of developing and providing educational materials in the form of webinars and short courses.

The eventual commercial success of LENR seems to have a good probability. The timing of this realization is as yet uncertain. There are ongoing programs that put important developments within sight, but leave them, at present, just beyond our collective grasp. This situation can change in a day. It does not take much imagination to envision the possibilities if one keeps abreast of what is published in the public sphere, let alone the hints of what is happening in more stealthy contexts.

LENRIA, with the uncertainty of such timing, shall calibrate its activities so as to not outrun its attainable resources. An inflection or tipping point for the field, if and when it comes, can occur much faster, and with less portent than we might imagine. We purposely chose to be early, while striving to not be too early. We selected the timing so as to be able to participate in the important change of perception of LENR that is forthcoming. During this time, we are going to work on the challenges we perceive and that are presented, while also remaining determined to be left standing and effective once broad-based commercialization begins.

Whatever the time scale, we are dedicated to managing LENRIA to promote successful commercialization and diverse applications of LENR for the good of humankind.

References
1. ASAE - American Society of Association Executives
2. USEA - United States Energy Association