

#### Industrial Heat

IPH International, B.V.

18-Month Business Plan

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Statements contained herein (including those relating to current and future market conditions and trends in respect thereof) that are not historical facts are based on current expectations, estimates, projections, opinions and/or beliefs of the Company. Such statements involve known and unknown risks, uncertainties and other factors, and undue reliance should not be placed thereon. There can be no assurance that any strategy or objective of the Company will in fact be realized.



#### Goals and Risks

INDUSTRIAL HEAT

Industrial Heat ("IH") was formed in 2012 by a group of individuals, led by Tom Darden and other principals of Cherokee, with the goal of addressing air pollution by providing clean energy. Low Energy Nuclear Reaction ("LENR") technologies may have the potential to provide clean, scalable energy—ultimately supplanting coal, oil, gas and nuclear fission as primary energy sources.

IH acknowledges the risks inherent in such an endeavor, as well as the colored history of the LENR sector at large. Furthermore, IH is well aware of the often challenging path to commercialization when introducing a novel technology into an established, well-capitalized market. Even considering these risks, inherent challenges and anticipated difficulties, IH is committed to developing its core technology as well as other technologies in the LENR sector. IH will seek to mitigate risks as much as possible by, for example, putting in place a thoughtful IP strategy, and partnering with established technology firms and other LENR experts. Nevertheless, IH does not anticipate a swift or seamless path to commercialization. We are seeking investors who share our determination and long term approach.

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#### Overview and Assumptions

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- IH is raising capital to accomplish several primary objectives:
  - Conduct further validation and replication tests of its core technology using multiple best-inclass experts.
  - 2. Retain premier strategy consulting and investment banking firms to assist in developing and implement IH's business plan.
  - 3. Identify and recruit a CEO and support him/her in building the team; secure and up-fit office space; fully up-fit and instrument the lab.
  - 4. Conduct further R&D on the core technology internally; simultaneously provide a limited license of IH's technology to other top LENR inventors and established technology firms to encourage them to assist in developing the technology. Thereafter, likely work with leading, established technology firms to implement the technology worldwide.
  - 5. Invest in other LENR technologies through: 1) licensing or acquiring IP, 2) incentivizing the top independent LENR inventors to join the IH team, or 3) investing in or acquiring other startups in the sector.
  - 6. Return capital to existing investors. We do not intend to do this until six months post closing, and then only with the consent of Woodford Funds.

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### Overview and Assumptions



- All budget amounts are provisional and subject to change, pending the results
  of:
  - 1. further validation and replication tests, which will be conducted by experts as soon as possible post closing,
  - 2. the strategy development work to be conducted by a premier strategy consulting firm,
  - 3. the performance of Rossi's 1MW reactor, or
  - 4. other unforeseen developments.
- Gating milestones:
  - 1. Successful validation of the core technology by others. Detecting excess heat or changes in isotope concentrations would be considered significant validation.
  - 2. As much as possible, we intend to incrementally fund R&D of our core technology, as well as investments in other LENR technologies. If at any time it becomes apparent that any given LENR technology in which we invest is not likely to achieve worthwhile commercialization, for whatever reason, we will either stop funding its development or seek alternate funding sources for its development (e.g., philanthropic sources), if justified.

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### **Uses of Capital**



#### Funding will be broadly allocated as such:

- **Strategy Consulting**: IH intends to retain premier strategy consulting and investment banking firms to provide counsel on a range of matters, including but not limited:
  - 1. development of a detailed global business strategy, and worldwide capitalization plan
  - 2. identifying and brokering joint development or licensing agreements with large, established technology partners, and
  - 3. Development of international corporate structure and organization design.
- G&A Expenses: the leadership and management team at IH needs to be built
  out. In addition to salaries, the G&A budget will also cover normal operating
  costs such as rent, legal, accounting, travel and insurance costs.
- Research & Development: further R&D needs to be conducted around the
  fuel and the reactor. Initially, IH will seek to replicate preliminary performance
  results using outside experts. Assuming replication is achieved, IH will begin
  working to further understand the nature of the reaction as well as to develop
  IP related to the core technology, such as: controls, packaging, manufacturing,
  storage, monitoring, safety, security, distribution and user interaction
  technologies.

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### **Uses of Capital**

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- Capital Expenditures: IH will need to secure and up-fit office space as well as
  further up-fit its lab in the Research Triangle, in addition to possibly securing
  laboratory space for Rossi in Florida. Significant investment in security will be
  required for IH's facilities and also for its information technology and data
  storage infrastructure.
- Repay Existing Investors: IH has been funded to date by a group of
  individual investors. These investors do not have long time horizons and IH
  would like to return capital to them so as to minimize their impact on any
  future strategic decisions. IH proposes returning capital to the existing
  investors at the 6-month mark, with consent of Woodford Funds.

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### **Uses of Capital**



- **LENR Sector Investments:** IH has invested significant time and resources in building relationships with the top inventors in the LENR sector. We believe it is valuable and important to invest in and support initiatives across the sector, as well as to retain other leading researchers to work on our core technology. Sector investments may include:
  - Dennis Letts
  - Chris Cooper, Dennis Cravens and Tom Claytor, Cooper Core Tech
  - Tony Lagatta, Mike McKubre and Trevor Dardik, UniTsem
  - Peter Hagelstein
  - Tadahiko Mizuno
  - Mitchell Swartz, JET Energy
  - Chava Energy
  - George Miley, Lenuco
  - Curt Brown, PointSource
  - Robert Godes, Brillouin
  - Francesco Piantelli, Nichenergy
  - Advisors: Edmund Storms, Yeong Kim, Mel Miles, Jed Rothwell, Larry Forsley, Pam Boss

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### 18 Month Quarterly Budget

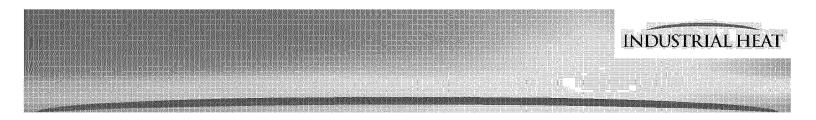
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 Projected quarterly budget for the 12-months post closing. Assuming an initial \$25M in funding, additional funding will be needed by the end of the third quarter. If Rossi is on track to earn his \$89M success fee, then IH may seek up to an additional \$150M as early as Q3.

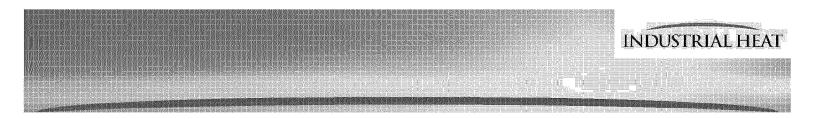
Uses of Capital		Q1	Q2	(	23	Q4
Strategy Consulting	\$	800,000	\$ 700,000	\$	-	\$ -
G&A		600,000	900,000	1,1	00,000	1,350,000
R&D		450,000	950,000	1,5	00,000	2,250,000
LENR Sector Investments		1,150,000	5,500,000	2,5	00,000	650,000
CapEx		-	1,500,000	1,0	00,000	_
Repay Existing Investors		-	5,000,000		-	-
Rossi Contingency		-	-		-	89,000,000
Total	\$	3,000,000	\$14,550,000	\$ 6,1	00,000	\$ 93,250,000
w/o Rossi Payment	\$	3,000,000	\$14,550,000	\$ 6,1	00,000	\$ 4,250,000
Reserves*	\$2	22,000,000	\$ 7,450,000	\$ 1,3	50,000	\$ (91,900,000)
w/o Rossi Payment	\$2	22,000,000	\$ 7,450,000	\$ 1,3	50,000	\$ (2,900,000)
Cumulative Spend	\$	3,000,000	\$17,550,000	\$23,6	50,000	\$ 116,900,000
w/o Rossi Payment	\$	3,000,000	\$17,550,000	\$23,6	50,000	\$ 27,900,000

<sup>\*</sup>Assumes \$25M funding

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IPH International, B.V.
Amsterdam, The Netherlands



## Exhibit 1 LENR SECTOR INVESTMENT OPPORTUNITIES

#### **Dennis Letts**



- Working on an LENR water heater design, based on 24 years of direct research and over 7,000 LENR experiments personally conducted by Letts.
  - Letts was trained by John Bockris and has published more than 10 peer reviewed papers, spanning from 1993-2013.
- The Hagelstein-Letts Excess Heat Prediction Formula has consistently proven accurate in over 40 LENR experiments conducted by Letts.
- Letts's LENR water heater design is based on a Pd/D2 gas charged, high voltage vacuum tube.
  - This design, if successful, will cut the 20-year electricity cost of a 1500W water heater from over \$16,000 to less than \$700.
- Letts has agreed to sign over all IP to IH in exchange for adequate liability protection, invention credit and publication privileges, a small royalty and assurance that IP will be properly protected and exploited.
- Estimated year 1 investment: \$500k; Location: Austin, TX, USA

### Cooper Core Tech, Inc.

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- Team is led by Chris Cooper and his father, Bill Cooper, and also includes Dennis
  Cravens and Tom Claytor, both leading LENR researchers.
- Chris has led the development of multiple break through technologies, including: superconducting circuits for quantum computation at Dartmouth; nuclear reactor / high vacuum systems, cryogenics and micro-machining through work with University of Washington, Lawrence Livermore Labs and Seldon Technologies, his first startup.
- Cooper Core Tech plans to develop a proprietary reel-to-reel nano-scale discovery machine to quickly and efficiently characterize and test the performance of high volumes of various LENR fuel combinations. If successful, this type of discovery machine could tremendously expedite fuel optimization.
- Additionally, Cooper Core Tech plans to test a new type of turbine that may pare especially well with an LENR energy source.
- Estimated year 1 investment: \$2M; Location: Santa Fe / Albuquerque, NM, USA

### UniTSEM



- Team includes Antonio La Gatta, Mike McKubre and Trevor Dardik.
  - Antonio La Gatta is the founder of a successful Italian engineering firm, TSEM s.p.a, which today employs over 80 people. La Gatta has discovered a system for triggering and enhancing LENR reactions in electrolytic Pd/D2 cells.
  - Mike McKubre is the retiring head of LENR research at SRI International in Menlo Park, CA. Mike is a
    well respected researcher in the field and will serve as a scientific advisor. He will spend 6 months/year
    in Lubbock.
- UniTSEM is located in Lubbock, TX and will own the LENR IP developed by La Gatta.
  - La Gatta, McKubre and Dardik are all in the process of relocating to Lubbock to launch UniTSEM and further develop the LENR triggering technology. Lubbock was chosen due to security and resource availability, including significant incentives from the Lubbock Economic Development Agency and technical assistance from Texas Tech University.
- La Gatta's original prototype experiment is believed to have generated a COP in excess of 1,000, with 70mW input power, and a duration of 10 minutes. It was witnessed by Vitoria Violante of ENEA (the Italian Energy Department).
- Estimated year 1 investment: \$1M; Location: Lubbock, TX, USA

#### Peter Hagelstein



- Peter Hagelstein led the Department of Defense nuclear laser project in the late 1980s and was named the youngest "JASON" in US History. Currently, he is a professor at MIT and leads MIT's LENR research, calorimetery and characterization efforts.
- Peter has been working on LENR since 1989 when Fleishman and Pons announced their initial discoveries. He is particularly focused on the supporting math and theory associated with reaction.
- Peter's research team at MIT previously devised a doped copper toroid experiment that has the promise of confirming metal energy. The concept was prototyped and tested by Mike McKubre at SRI with successful detection of energetic particles. Peter intends to use funding to re-start this research.
- Estimated year 1 investment: \$300k; Location: MIT, Cambridge, MA, USA

#### Tadahiko Mizuno



- Mizuno's 1976 PhD thesis focused on the formation process of hydrides on metals. In 2004, he was awarded the Preparata Medal by The International Society for Condensed Matter Nuclear Science in recognition of his work in the LENR field.
- In 1991 Mizuno was operating an LENR experiment that proceeded to "runaway." Even after unhooking the experiment from all external power and placing it in a water bath, it continued to boil water for a week after being unplugged. In all, it boiled 35 liters while unplugged, according to accounts of the experiment. Unfortunately, Mizuno did not replicate this reaction and only he and his lab tech witnessed it.
- Mizuno is currently working on an in-situ plasma generated catalyst for gascharged Ni/H2/D2 reactor design. His goal is to build 1kW and 10kW glow discharge reactors that generate temperatures up to 650C.
- Estimated year 1 investment: \$1M; Location: Sapporo, Japan

### Mitchell Swartz, JET Energy

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- Mitchell Swartz, a research oncologist, clinical psychologist and LENR researcher for the past 25 years, has developed a self-sustaining low power LENR wire called the Nanor.
- The latest generation of the magnetically tempered Nanor wire continues to operate in low power excess heat cycles without degradation.
  - Reported consistent COPs between 100-300 at the mW level
  - COP of 2 at 2W input
- Swartz continues to have IP difficulties with the USPTO, which could be due to
  his relatively aggressive style with USPTO examiners. IH may be able to assist
  in this regard—potentially helping Swartz get one or more patents issued.
- This technology appears to be ready for quality and reliability testing at the 1W to 5W input levels.
- Estimated year 1 investment: \$1.5M; Location: Wellsley, MA, USA

### Chava Energy

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- Chava Energy is led by Hagen Ruff, a successful IT entrepreneur, and Mark Snoswell, a 3D modeling expert and molecular biochemist by training.
- Chava has an intricate understanding of quantum state energy exchange and has developed a computer model to assist in their energy experiments and prototype development.
- Chava is in the process of consolidating their five existing labs into two, with a focus on LENR, specifically fractionated Hydrogen, and quantum vacuum energy exchange.
- Estimated year 1 investment: \$1M; Location: Miami, FL, USA

### George Miley, Lenuco

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- George Miley is Professor Emeritus of Nuclear, Plasma and Radiological Engineering and Electrical/Computer Engineering at the University of Illinois, Urbana-Champaign. He is also the founder of Lenuco, an entity he setup to further his LENR.
- Internationally recognized researcher: Preparata Medal 2006-2007 by The
  International Society of Condensed Matter Nuclear Science, 2006 Itegrity in
  Research Award for fusion research; 2004 ANS Radiation and Isotopes Research
  Award; 2003 IEEE Fusion Technology Award; 1996 Edward Teller Medal for ICF
  research; 1993 ANS Fusion Energy Achievement Award; Guggenheim fellow
  and Senior NATO Fellow.
- Has developed a gas-charged Zr/Pd/Ni/D2 pressure induced reactor design.
   Focused on refined nano-particle manufacturing methods and extending and controlling the reaction runtime.
  - Miley is planning to develop three additional prototypes for verification purposes and would then like to optimize the reactor design and thermoelectic conversion.
- Estimated year 1 investment: \$500k; Location: Chapaign, IL, USA

### Brillouin Energy

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- Robert Godes is the founder and chief scientist at Brillouin. Brillouin's
  technology is focused on a controlled electron capture reaction. Supposedly,
  hydrogen from water is combined with a nickel lattice, which is compressed as
  an electronic pulse passes through the system.
- Brillouin has been working under contract with Mike McKubre at SRI to verify excess heat, He3 and He4 production. Results to-date appear mixed.
- Brillouin has responded positively to input and guidance from SRI and is in the process of revisiting their reactor and validation methodology.
- IH will continue to monitor Brillouin progress and make investment decisions accordingly.
- Estimated year 1 investment: \$500k; Location: Berkley, CA, USA

#### **PointSource**

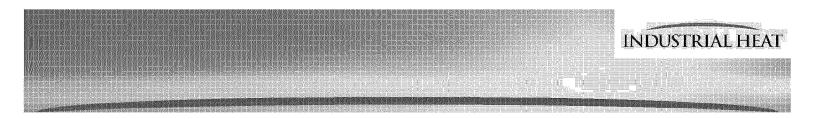
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- PointSource has licensed three LENR patents from Cravens, all of which relate to a solid state tokamak LENR reactor developed by Dennis Cravens.
- PointSource is being assisted by two LENR research verterans: Larry Forsely and Pam Boss. Larry and Pam are helping with materials selection and alloy/catalytic test mixtures.
- PointSource is using a gas-charged, solid state Zr/Pd/D2 fueled reactor with radio frequency and electromagnetic controls.
- PointSource has achieved excess heat and reactor control at the mW level and is preparing to scale the project post funding. They also intend to further develop control and application systems.
- Estimated year 1 investment: \$1M; Location: Nevada City, CA

#### Francesco Piantelli

INDUSTRIAL HEAT

- Piantelli, like Rossi, collaborated with Sergio Focardi. Piantelli is a respected and longstanding LENR researcher.
- Piantelli has developed a Ni/H2 based reactor that evidently consumes 20W and puts out 71W. This reaction has been confirmed by Peter Hagelstein and Mike McKubre.
- Piantelli has been issued a European patent for this reactor. It is specifically
  described as, "...a process for producing energy by nuclear reactions between a
  metal and hydrogen that is absorbed on the crystalline structure of that
  material."
- Estimated year 1 spend: \$500k; Location: Siena, Italy



## Exhibit 2 INTELLECTUAL PROPERTY STRATEGY

#### P Strategy Overview



- Identifying, creating and capturing valuable intellectual property ("IP") is a core component to Industrial Heat's business model. IH believes that most companies over spend and under deliver when it comes to generating and protecting valuable intellectual property.
- IH has retained Paul Morris to establish an IP team and process that will allow IH to manufacture valuable IP at a significantly higher rate and lower cost than most large, IP driven companies.
  - Morris has produced over 300 issued and pending patents, which have generated over \$370M to-date in licensing and royalty fees. His methods and techniques are teachable and replicable.
- IH intends to implement Morris's proprietary, experience-based process to capture more IP, file fewer original applications and harvest valuable IP as it matures. Key goals of our IP program will include:
  - 1. Do not lose IP: most patentable subject matter is never identified at most companies.
  - 2. Low cost: IP costs are higher than stated at most companies. A patent costs between \$1-2M in most large, IP driven companies. IH hopes to generate patents a significantly lower cost.
  - 3. High quality: only about 1% of issued patents have commercial value—IH intends to generate valuable patents at a much better rate.

#### CONFIDENTIAL MEMORANDUM

# Industrial Heat, LLC IPH International B.V.

July 2014

This Confidential Memorandum (the "Memorandum") is furnished on a confidential basis to a limited number of sophisticated investors for the purpose of providing certain information about an investment in IPH International B.V., a company organized under the laws of the Netherlands ("IPH"). IPH is currently a wholly-owned subsidiary of Industrial Heat, LLC, a company organized in the United States under the laws of Delaware ("Industrial Heat" or "IH"). IPH and IH (sometimes referred to herein collectively as the "Companies") are currently developing a low energy nuclear reaction technology that is more particularly described in this Memorandum.

No offering of securities by IPH has been approved or disapproved by the securities regulatory authority of any country or other jurisdiction, including, without limitation, the United States Securities and Exchange Commission, nor has any such securities regulatory authority passed upon the accuracy or adequacy of this Memorandum. No securities of IPH will be registered under the securities laws of any country or any political subdivision thereof, nor is any such registration contemplated. Securities of IPH will be offered and sold only to sophisticated investors qualified to purchase such securities under available exemptions from applicable securities laws in the countries and jurisdictions where the offering will be made. There will be no public market for the securities of IPH and no such market is expected to develop in the future. The securities of IPH will be subject to substantial restrictions on transfer and may not be sold or transferred unless such securities are registered under the applicable securities laws of each relevant country or other jurisdiction or an exemption from such registration is available.

This Memorandum does not constitute an offer to sell or a solicitation of offers to buy securities of IPH. Any such sale of securities will be made only pursuant to such written definitive agreements as may be executed by IPH and an investor, and the investor may rely only upon such representations and warranties as may be made to it by IPH or any other party in any definitive agreement that may be executed in connection with a sale of securities of IPH. In making an investment decision, prospective investors must rely on their own examination of IPH and Industrial Heat, as applicable, and the terms applicable to their investment, including the merits and risks involved. Prospective investors should not construe the contents of this Memorandum as legal, tax, investment or accounting advice, and each prospective investor is urged to consult with its own advisers with respect to the legal, tax, regulatory, financial and accounting consequences of any investment in IPH. This Memorandum does not purport to contain all of the information that a prospective investor may wish to evaluate in connection with such an investment.

Industrial Heat and IPH each reserves the right to provide copies of this Memorandum to such prospective investors as they shall deem appropriate and to negotiate with, or enter into definitive agreements for the sale of securities to, one or more investors or prospective investors as IPH shall deem appropriate, without prior notice to any other recipient of information or any other person. IPH and Industrial Heat each reserves the right to terminate, at any time, discussions with any other person or further participation by any other person in a review and evaluation of the Companies in connection with a proposed investment or other transaction.

The information contained in this Memorandum is furnished solely for use in connection with the consideration of a possible investment in IPH or another business transaction with IPH or Industrial Heat. Such information should be treated in a confidential manner and may not be reproduced or used in whole or in part for any purpose other than consideration of such investment or other potential transaction, nor may it be disclosed to third parties, other than employees, agents and legal and accounting advisors and other representatives of the recipient of this Memorandum who need to know such information in connection with the evaluation of a possible investment or other transaction with IPH or Industrial Heat, provided that each such person is advised of the confidential nature of the contents hereof and agrees to treat the information contained herein as confidential. Each prospective investor who accepts this Memorandum agrees by such acceptance to return it to IPH or Industrial Heat promptly upon a request for such return.

Statements contained in this Memorandum (including those relating to current and future market conditions and trends in respect thereof) that are not historical facts are based on current expectations, estimates, projections, opinions and/or beliefs of the Companies. Such statements involve known and unknown risks, uncertainties and other factors, and undue reliance should not be placed thereon. Certain information contained in this Memorandum constitutes "forward-looking statements," which can be identified by the use of forward-looking terminology such as "may," "can," "will," "would," "seek," "expect," "anticipate," "project," "estimate," "intend," "continue," "target," "believe," or the negatives thereof or other variations thereon or comparable terminology. Due to the various risks and uncertainties associated with an investment in IPH, actual events or results, actual market conditions or the actual performance of IPH or Industrial Heat may differ materially from those reflected or contemplated in any such forward-looking statements.

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An investment in IPH is suitable only for sophisticated investors and requires the financial ability and willingness to accept the extremely high risks and lack of liquidity inherent in an investment in IPH, including the risk of potential loss of the full investment. Investors in IPH must be prepared to bear such risks for an extended period of time. No assurance can be given that IPH will be able to implement its strategy or achieve its objectives. Each prospective investor must conduct such due diligence as the investor may deem appropriate to investigate the technology, business, resources and prospects of IPH and Industrial Heat. Some, but not all, of the risks of an investment in the Company are set forth in Section IV of this Memorandum and should be carefully evaluated before making an investment in IPH or entering into any other transaction with IPH or Industrial Heat.

All inquiries and requests for further information concerning IPH or Industrial Heat or a potential investment or other transaction with either of the Companies should be directed as follows:

Attention: Tom Darden 111 East Hargett Street, Suite 300 Raleigh, North Carolina 27601

Phone: 919-743-2506 Fax: 919-743-2502

Email: tdarden@industrialheat.co

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	A. Published report concerning December 2012 and March 2013 test of E-Cat a "Indication of anomalous heat energy production in a reactor device con hydrogen loaded nickel powder."	
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	C. Industrial Heat LENR Contacts	

- D. E-Cat licensing agreement:
  - o "License Agreement" between Industrial Heat, Andrea Rossi/Leonardo Corporation and AmpEnergo, Inc., including amendment and assignment.
  - o "Contribution Agreement" between Industrial Heat and AmpEnergo, Inc., including amendment and Letter Agreement.
- E. Intellectual property filed by Industrial Heat

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F. Report by Engineer Fabio Penon on the May 2013 Ferrara test

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#### I. EXECUTIVE SUMMARY

The investment opportunity described in this Memorandum has the potential for substantial environmental and economic impact. Because the merits of this investment are generally apparent, prospective investors should focus primarily on downside risks. Therefore, please begin by reading the entire Risk Factors section (Section IV).

Industrial Heat Business Overview: Industrial Heat ("IH") is focused on identifying and developing promising low energy nuclear reaction ("LENR") technologies and working with leading industrial partners to commercialize these technologies. Industrial Heat has made an initial investment in what appears to be one of the most promising LENR technologies, the E-Cat developed by Andrea Rossi. In addition, IH has cultivated relationships with a number of other promising LENR inventors, and also plans to invest in and support these inventors as they work to develop further their inventions.

Use of Funds: IH, through its subsidiary, IPH, is undertaking to raise \$50 million currently, as part of a planned \$200 million capitalization. This will cover operational, R&D and investment expenses over the next 12-18 months, and will provide funds to return capital to the initial IH seed investors. In addition, IH will use a portion of this capital to retain consulting and investment banking firms to provide strategy and capitalization advice.

Risk Factors: Investing in Industrial Heat entails investing in a sector with many unproven technologies. IH also faces the normal risks associated with introducing a new technology into a mature market. Any investment in Industrial Heat should be considered highly speculative and subject to substantial risk of loss. Prospective investors should read in detail the Risk Factors section at the end of this Memorandum.

Reorganization: Industrial Heat and IPH are currently operating in a parent-subsidiary structure, with Industrial Heat existing under United States (Delaware) law as the parent entity of IPH, with IPH being organized as a Dutch entity. Prior to closing of an additional investment in IPH, the Companies intend to consummate a reorganization pursuant to which such parent-subsidiary structure will be collapsed, with IPH, organized under Dutch law, being the surviving and continuing entity. Following this reorganization, the business operations of IPH and Industrial Heat will be conducted going forward through a structure whereby IPH will be the primary entity for intellectual property holdings, with subsidiaries in the United States and other foreign jurisdictions to be organized and utilized as required to carry out research and development and sales and marketing activities in those jurisdictions where IPH elects to do business. Prospective investors should consider an investment in IPH in light of this expected operating structure. References herein to "Industrial Heat" or "IH" should be construed to mean the surviving entity in the contemplated combination and reorganization, and, with respect to periods prior to such reorganization, such references should also be construed to include IPH as Industrial Heat's wholly-owned subsidiary, in each case as the context may require.

**Exhibits:** All exhibits should be reviewed in detail. Exhibits include: the E-Cat independent test reports, Industrial Heat LENR Contacts, the E-Cat licensing agreement and a list of intellectual property filed by Industrial Heat.

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#### II. INDUSTRIAL HEAT BUSINESS OVERVIEW

#### A. History

Industrial Heat was formed by a group of individual investors in the fall of 2012 to support and invest in LENR technologies, beginning with the E-Cat developed by Andrea Rossi of Leonardo Corporation ("Leonardo"). If proven reliable and controllable, LENR technologies will be highly important because they provide significant energy density without using radioactive material or generating radioactive waste, and they emit no carbon dioxide or other pollutants.

The founders of Industrial Heat have a long background investing together in early-stage companies, many in the environmental sector. Thomas F. Darden left Bain and Company in 1983 to acquire a North Carolina business using fossil fuel energy and converted it to biomass energy. He joined Joseph D. Pike in the purchase of a medical product business in 1986, leading to a continuous business relationship where each invested in and helped manage the other's environmental or medical companies. Pike moved to San Diego in 1991, which became the focus of the medical activity. John A. Mazzarino left Bain and Company in 1989 to work with Darden in North Carolina, as they increased their focus on investing in businesses affected by environmental policy or environmental objectives. Since the initial investment, these three individuals have started or invested in well over 100 separate private transactions, the majority being early stage venture or startup deals.

Darden and Mazzarino, often assisted by Pike's capital and relationships, invested in or founded many environmentally-related companies. A small subset include: Biosystems Technology, using bacteria for waste remediation, with professors from Virginia Polytechnic University; Cherokee Environmental Group, using multiple technologies for cleaning up contaminated soil; Cherokee Environmental Risk Management, providing insurance for environmental contamination; Brownfield Revitalization, LLC, allocating New Markets Tax Credits to encourage development on brownfield sites located in low income areas; Eco-Site, building cell towers on urban brownfield sites; Power Generation Services, Inc, "(PGSI)" providing smart grid services; and BaseTrace, using DNA fragments to identify specific sources of fracking fluid, radioactive water or other liquid contaminants to be sure they do not leak. Darden was awarded a U.S. patent in 2014 for the technology used by PGSI for controlling broadly-distributed sources of power on electrical grids, and he was nominated for the Zayed Future Energy Prize in 2012.

Redacted - Other Investment

Industrial Heat, LLC was created as a Delaware limited liability company in October 2012, to focus primarily on Rossi's technology, but also to approach other inventors. JT Vaughn became the manager, with substantial involvement by Darden and management oversight by Mazzarino and Pike.

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Thomas Barker Dameron, a retired GlaxoSmithKline engineer and energy specialist, began managing the technical support for Rossi as well as the technology assessment and verification process, focusing on energy measurement and test protocols for the performance tests IH used in making the initial investment decision. Others supporting Industrial Heat include the accounting and finance team at Cherokee Investment Services, LLC; corporate counsel (Schell Bray PLLC and Weidema von Tol); patent counsel (Myers Bigel Sibley & Sajovek); tax consultants and accountants; and intellectual property consultants (Deep River Ventures, LLC).

Industrial Heat, LLC was organized in the U.S. as a Delaware company in anticipation of IH being a globally focused business with international investors and subsidiaries. Management decided early on to set up a Dutch subsidiary, IPH International B.V. to own all IH intellectual property. The Netherlands was selected as the home jurisdiction for this subsidiary based on a variety of tax, legal and regulatory issues that were considered by management at that time. As previously noted, management now anticipates a reorganization in which the parent-subsidiary structure will be collapsed and the Dutch entity, IPH International B.V. will be the surviving and continuing entity. All existing investors in Industrial Heat, LLC will be transferred to IPH International B.V. and new investors will purchase stock or other securities in IPH International B.V. (Dutch) as opposed to Industrial Heat, LLC (U.S.).

Rossi has a history of failed business relationships and conflicts, and he is difficult to communicate and work with. However, he appeared to have a remarkable technology, so the principals of IH were willing to invest a great deal of time and to be more tolerant of eccentric or difficult interpersonal characteristics than one normally would, or than Rossi had experienced with others in his prior business relationships. This led to an unusual but relatively attractive business structure. IH took excessive risk with relatively small amounts of capital up front, but no large payments would be owed unless the technology proved to be extremely successful. Furthermore, IH is not obligated to pay any future royalties, and the Company owns all of the equity, i.e. this was not structured as an investment into an entity that Rossi owns part of or controls, as is often the case with early stage deals.

IH paid Rossi \$1.5 million in advance, to buy a 1 MW plant that he had begun to build but had not finished or tested. Rossi would have been obligated to return the funds if the machine had failed to meet its performance requirements, but collecting on this obligation would have been unlikely in that event. He used these funds for the plant but also to satisfy other unrelated financial obligations, which clearly were distracting him. IH agreed to pay him an additional \$10 million for the technology rights in IH's markets—representing 57% of world energy demand—if the plant could pass a 24 hour test at a Coefficient of Production ("COP"), which is the ratio of energy produced versus energy input, of 4 or better.

IH hired a consultant, Fabio Penon, who also does consulting work for Bureau Veritas in Italy, to certify the test results for the 1 MW plant and to be responsible for the measurement of energy input and output. The test was performed on April 30, 2013, and the calculated COP was 10.85. Rossi requested that he be able to operate only 18 of the 107 reactors in the 1 MW plant, because he said he could not get local permits to operate a generator with enough output to run the whole machine. IH agreed, because success with 18 reactors seemed to be sufficient. IH personnel filmed the entire test and collected data to confirm the measurements. While there is always uncertainty about any single test because of questions about measurement, the results of the 24 hour test broadly were compelling. Rossi also operated several

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other reactors after the test ended, for shorter periods of time, with good results. The Penon test report is attached as Exhibit F.

When JT Vaughn arrived in Ferrara for the April test, Rossi gave him a draft of an article by a group of professors who performed two prior tests on high-temperature E-Cats which were very different from the steam reactors in the 1 MW plant. Rossi had mentioned the tests previously, and he indicated the results were likely to be good, although he did not have the actual data. The article described a December 2012 test in Bologna, Italy and a March 2013 test in Ferrara, Italy, using devices capable of achieving temperatures over 700 degrees Celsius, which is much higher than the older technology 1 MW plant. The report by the professors, attached here as Exhibit A, increased the IH management team's confidence in the technology and willingness to accommodate Rossi's request to operate only 18 reactors for the test.

After the test, Rossi closed his operation in Italy and moved permanently to Florida, where he had been spending half his time before. He shipped the 1 MW plant and all the contents of his Ferrara facility to a laboratory facility IH established near Research Triangle Park in North Carolina. Most of the equipment was in North Carolina by August 2013. Immediately, he began a testing and development process intended to create a new type of reactor that would be operated for a minimum one month test, overseen by the same group of professors who managed the December 2012 and March 2013 tests. This test, to be sponsored by the Swedish Royal Academy of sciences, was planned for December 2013, either in Europe or in the IH facility in North Carolina.

For four months ending in December 2013, IH personnel built perhaps 20 different reactors to Rossi's specifications, each with a different design. He operated each one to the point of destruction, usually due to electrical failures, although sometimes due to melting of the containment cylinders. The devices never showed evidence of significant radiation, as measured by Geiger counters and neutron detectors, while they operated or after they failed. While some reactors appeared to produce excess energy, others did not, and in any event IH was not sufficiently confident of its ability to measure energy output to form conclusions about reactor performance. Rossi was extremely confident throughout, and he did not seem to care about absolute energy measurement, but only relative performance of one design compared to another. Rossi's thermal measurement methods could determine whether one device outperformed another (as long as both were made of the same material), so he could tell if he was making progress even if one could not measure the COP of the machines accurately.

In December, Rossi finalized the specification for the device to be tested, and IH produced a number of them and shipped them to the test site, along with an electrical control system built by IH. With IH's agreement, Rossi chose not to hold the test in North Carolina. It would have been inconvenient for the professors, all of whom are from Europe, who wanted to be present for much of the 30 day test. The most prominent of the professors, Sven Kullander from Sweden, was undergoing cancer treatments and could not travel to North Carolina. Rossi found an industrial site in Lugano, Switzerland where they could operate the test reasonably conveniently. After this decision was made, Kullander died unexpectedly from a heart attack, perhaps associated with his treatments. While this took away an important reason for holding the test in Europe, IH management still felt this was the best location. IH did not want to be associated with the test, because it could have affected the appearance of independence. And, it would be best for as many outsiders to spend as much time at the test site as possible.

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IH shipped the devices and equipment to Lugano in January 2014, but the test did not start until the end of February due to logistics and set up time. The first reactor failed after a day of operation due to a crack in the ceramic material, which was suspended between two supports. Rossi replaced it with a backup reactor, along with another supporting bracket so it would be less inclined to fail. The reactor was operated without fuel initially so the professors could assess its thermal characteristics and calibrate their equipment. Then it was fueled and operated at a moderate power input for 10 days. At that point, the power was increased substantially, and it operated at that level until the professors stopped the test after 32 days. IH personnel made a total of 5 trips to the test site and met all of the professors at one time or another. They were positive about the test after the first few days of operation, and they made comments about observing history being made. However, they provided no data or actual results to Rossi or to IH at that time.

The equipment was returned to North Carolina in April, and the professors began the process of aggregating their data and preparing their report. IH received a draft copy of the report in June, showing a COP of 3.1 at the lower power setting, and 3.6 at the higher setting. The analysis seemed thorough, and it addressed several criticisms from prior reports. The description of their instrument calibration process was impressive. Also, they did not fluctuate the power input, which Rossi believes substantially increases COP. They held it at a constant level, aside from the one power increase after the tenth day, because changing it would complicate their measurements. The thermal infrared camera settings vary with temperature, so if the temperature was changing in cyclical pattern, the camera settings would have to be changing constantly.

Rossi returned to the U.S. after the test, and he has begun to focus on the 1 MW plant. For example, the 1 MW plant's control system was redesigned for automated operation, such that each of the 107 reactors will be controlled based on temperature and water flows. Currently, it has no automated control systems, so each device must be manually adjusted. Rossi wants to operate it on a continuous basis, for a commercial customer. Rossi has reached a tentative agreement with Johnson Matthey, Plc, a U.K. company in the catalyst business, to use steam process heat from the plant for a two-year period beginning in September, in exchange for a payment of \$1,000 per day. Rossi and Fulvio Fabiani would manage the plant, to the extent it needs it. The Johnson Matthey facility is in Miami, FL.

Meanwhile, Industrial Heat personnel continue to meet with other industry participants, contemplating a technology rollup in the LENR sector. A list of LENR thought leaders and inventors that have been contacted by IH or Deep River Ventures, acting for IH, is included with this Memorandum as Exhibit C.

Since October 2012, IH, directly or through IPH, has invested over \$20 million, most of which has gone directly to Rossi and his partner, AmpEnergo, Inc., either for the purchase of rights to Rossi's LENR technology or for the purchase of prototype reactors. The remaining portion has been used to support Rossi's research and development activities over the preceding 18 months, as well as to fund efforts to invent related, supporting technologies and to capture and file for patents on core intellectual property. Some of IH's funding has also been used to identify other potentially promising LENR technologies as noted above.

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Industrial Heat, through IPH, is now raising additional capital in order to: 1) retain premier consulting and investment banking firms to assist in identifying commercialization partners and to provide advice concerning the strategy for building and capitalizing the business, 2) invest in further R&D to develop core technology as well as ancillary, related technology, 3) acquire other LENR technologies and invest in other LENR startups and 4) return initial capital to seed investors. This will allow Industrial Heat to develop a unique knowledge base and intellectual property portfolio in the LENR sector. This will prove advantageous as IH begins to enter joint development and licensing agreements with commercialization partners.

#### B. E-Cat Independent Test Results

In December 2012, Guiseppe Levi, of Bologna University, and Evelyn Foschi, an independent consultant based in Bologna, Italy, conducted a 96-hour test of an E-Cat reactor. In March 2013, Torbjörn Hartman, Bo Höistad, Roland Pettersson and Lars Tegnér, all of Uppsala University, and Hano Essén of the Royal Institute of Technology in Stockholm, Sweden, joined Levi and Foschi to conduct a similar 116-hour test. Collectively, the team published a report of their findings from both the December and March tests, revealing a COP of approximately 5.6 in the December test and a COP of approximately 2.6 in the March test (a copy of the published report concerning these tests is attached as Exhibit A).

Moreover, IH received an unofficial analysis of the fuel used in the March test which showed a change in isotope concentration in the nickel powder. This is encouraging if it is accurate, because an isotope change would indicate that some kind of nuclear reaction had occurred.

In March 2014, the same committee conducted a follow-up test, this time on a slightly different version of the high-temperature reactor. Importantly, however, the test was 32-days—much longer than any previous test. The duration was extended in order to definitively rule out the possibility of a chemical reaction. While the report has not yet been published, a preliminary draft indicates a COP of approximately 3.1 to 3.6. A copy of the preliminary draft report of the March 2014 test is attached as Exhibit B.

In addition, the March, 2014 test detected slightly elevated neutron levels at a 50cm range from the E-Cat (see pages 33-34 of the preliminary draft report, Exhibit B). However, these radiation levels were within one standard deviation of the background level, so they do not appear to be dangerous.

These results, if accurate and replicable, mean this technology could have the potential to significantly decrease the environmental impact of energy production in an extremely cost competitive manner. Based on these results, the technology appears to be able to produce substantial energy without generating any emissions or radioactive waste, all while consuming minute amounts of raw material (primarily nickel and hydrogen). The specific energy density of the technology appears to be well beyond that of any conventional source of energy. In fact, its energy density appears to be close to that of radioactive fuels used in nuclear reactors, such as uranium-235. The preliminary draft report from the March 2014 test concludes:

The quantity of heat emitted constantly by the reactor and the length of time during which the reactor was operating are such as to rule out, beyond any reasonable doubt, a chemical reaction as underlying its operation. This is emphasized by the fact that we stand considerably more than 10 sigma

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from the region of the Ragone plot occupied by conventional energy sources. We are therefore certainly dealing with a new source of energy.

#### C. E-Cat Licensing Agreement Overview

In the fall of 2012, Industrial Heat entered into a licensing agreement with Andrea Rossi/Leonardo Corporation and AmpEnergo, Inc. (a full copy, including amendments, as well as the "Contribution Agreement" between AEG and IH and its amendments, is attached as Exhibit D). This license agreement was subsequently assigned to IPH. The license provides Industrial Heat with the rights to all intellectual property required to manufacture, distribute, operate and service the E-Cat in North America, South America, Central America and the Caribbean, China, Russia, Saudi Arabia and the United Arab Emirates, along with the right of first offer with respect to any new licenses offered outside this territory.

The licensing agreement contemplates a total capital outlay of about \$150 million, paid over three installments, described below:

- 1) Installment I: The initial installment was paid in October 2012, and totaled \$2 million, of which \$500,000 went to AmpEnergo ("AEG") with the remaining \$1.5 million going to Rossi's company, Leonardo Corporation for the purchase of a 1 MW LENR device. AEG is a long-time partner of Rossi and, in exchange for funding Rossi's research over the years and connecting Rossi to the investors behind Industrial Heat, AEG is entitled to approximately 1/3 of the total proceeds that would have otherwise been payable from the licensing agreement. No IP or trade secrets were provided to Industrial Heat after making the initial payment of \$2 million. Instead, Rossi used these funds to further develop the technology and to build the 1MW LENR device, which he tested in Ferrara, Italy in April-May 2013.
- 2) Installment II: In May, 2013, Rossi generally achieved the performance milestones required in section 3.2(b) of the licensing agreement by operating a portion of the 1 MW device in Ferrara, in a test overseen and certified by a validation consultant. Rossi requested that he operate only a portion of the 1 MW plant, because he said he was unable to get noise permits allowing the operation of a generator large enough to power the entire 1 MW E-Cat plant. IH consented, and he operated 18 of the 107 reactors in the plant. Those 18 produced a COP of 10.85, according to Fabio Penon, the certification engineer whose data and process were reviewed by Industrial Heat. Consequently, pursuant to the terms of the agreement with Rossi, Industrial Heat paid an additional \$10 million in May, 2013. Payment of the \$10 million triggered a complete intellectual property disclosure from Rossi, which occurred in June 2013. This event also triggered an additional obligation to AEG, which after various modifications resulted in IH paying AEG \$4.2 million in cash plus \$505,050 in the form of a 1% equity membership interest in Industrial Heat, LLC.
- 3) Installment III: Pursuant to section 5 of the License Agreement, if Rossi is able to successfully operate a 1 MW plant at a COP of 4 or greater for 350 out of 400 consecutive days after delivery of the plant to IH, and the plant operates at the level at which validation was achieved in the April-May 2013 Ferrara test, he would be entitled to receive \$89 million.

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If, however, the COP was greater than 4, but less than the validation level, the payment would be decreased proportionally. If the COP is less than 4, Industrial Heat would not owe Rossi any additional money nor would be be entitled to an equity share in Industrial Heat.

Rossi has not operated the 1 MW plant since it left Ferrara in 2013, and only recently has he begun to focus on preparing the 1 MW plant for operation. The 1 MW unit will not be ready to operate until September 2014 or later, according to Rossi.

At the appropriate time, Industrial Heat intends to acquire the rights to the E-Cat in territories it does not currently own, such as Africa, Europe and Australia. Rossi has indicated a strong desire to sell these rights to Industrial Heat, because he does not want to create and operate a business himself. IH has the right to acquire them if he offers them for sale to anyone else.

#### D. Industrial Heat Intellectual Property

Since the E-Cat trade secrets and related intellectual property were disclosed to Industrial Heat in the spring of 2013, IH has focused on identifying and protecting core intellectual property associated with the E-Cat fuel and the reactor designs. This work has resulted in a small number of potentially high value patent applications filed by Industrial Heat. Filing these patent applications has entailed a significant amount of time and relationship management with Rossi. Although not required by the agreements, IH management prefers that Rossi be involved in IP filing decisions related to anything he has invented or co-invented. These and other filings are listed in Exhibit E, which provides a list of Industrial Heat's filed intellectual property to-date. Consistent with IH's intellectual property strategy, final patents will be issues to and owned by IPH.

Going forward, IH intends to continue to expand upon its initial patent filings. IH believes valuable LENR intellectual property, beyond the core technology, lies in controls, packaging, manufacturing, storage, monitoring, safety, security, distribution, and user interaction technologies. IH has identified over 80 concepts in these areas, a significant number of which management feels can be developed into potentially high value patents. In order to capture the value of this intellectual property, IH will need to develop these concepts further, including building prototypes or performing technical tests. IH will also need to refine, test and develop its core technology further in order to capture as much potential IP associated with the fuel and the reactor as possible. This work could be accomplished by: 1) contracting with outside research and development firms; and/or 2) entering into joint venture relationships with larger corporate partners; and/or 3)staffing and outfitting an internal R&D arm.

Industrial Heat is working with Deep River Ventures ("DRV"), an intellectual property consulting firm, to identify and retain valuable intellectual property in the LENR sector. One of the principals of DRV, Paul Morris, is a prolific inventor with over 60 issued patents and an additional 250 pending patents. Morris has a long standing track recording of generating high value IP—his portfolio todate has generated over \$370 million in IP licensing and royalty revenues across a broad range of products, services and features. Morris believes inventing is an acquired skill that can be taught and developed when working with the right types of experts in any given field. DRV will work with Industrial Heat inventors as well as its contracted R&D firms to train and develop them in order to increase the quality and quantity of assets in Industrial Heat's IP portfolio.

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In all cases, IH will continue doing internal R&D, because management intends to support Rossi in his future work. This is prudent for relationship reasons, but also because he continues to create new ideas, some of which could be important. However, IH believes that most of the development work will be accomplished through outside firms. As a practical matter, it seems unlikely that IH could create the kind of team needed to implement this technology fully, across all of its applications, many of which cannot be imagined at this time. So, management's current thinking is that the immediate R&D decisions relate to choosing and negotiating relationships with outside entities, and evaluating whether to staff internally beyond the minimum needed to support Rossi.

L.	LENR Sector Strategy		
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Redacted - Other Investment

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#### F. Market for Heat and Electricity

In 2010, the world consumed the energy equivalent of 8,677 million tons of oil. Global energy demand is estimated to increase 1.6% per year through 2035. According to the International Energy Agency (IEA), heat and electricity represent 64% of the world's final energy consumption (i.e., energy that is supplied to the consumer for all final energy uses such as heating, cooling and lighting).

While it is difficult to know the monetary value of global energy consumed, the crude oil equivalent in 2010 would have totaled more than \$5.85 trillion at \$95 per barrel, its kilowatt-hour equivalent would have totaled more than \$3.5 trillion at \$0.10/kWh and a 33% conversion efficiency, and its natural gas equivalent would have totaled more than \$1.5 trillion at a price of \$4.50 per million BTU's.

At 64% of worldwide energy consumption, the global market for heat and electricity would total nearly \$1 trillion if supplied entirely by natural gas, and more than \$3.7 trillion if supplied by oil. This does not include the market for capital equipment associated with producing this heat.

Below is an overview of the market for heat and electricity supplied by only coal, oil and natural gas in China, the United States and Russia—estimated to be more than \$358 billion per year.

All vai	ues	177	USD	Mil	lions

China, US and Russia: Market for Heat and Electricity\*

Country	Electricity**		Heat***	Com	bined Total
China	143,000		13,000		156,000
US	112,000		2,000		114,000
Russia	62,000		26,000		88,000
Total	\$ 317,000	Ş	41,000	\$	358,000

<sup>\*</sup>Based on the value of heat and electricity consumed from coal, oil and natural gas sources. Does not include heat and electricity derived from nuclear, renewables, waste or other sources.

Source of primary data: International Energy Agency, www.iea.org, 2011 data

China: http://www.iea.org/statistics/statisticssearch/report/?&country=CHINA&year=2011&product=ElectricityandHeat

US: http://www.iea.org/statistics/statisticssearch/report/?country=USA=&product=electricityandheat&year=Select

 $\textbf{Russia:} \ http://www.iea.org/statistics/statisticssearch/report/?country=RUSSIA\&product=electricityandheat&year=2011.$ 

<sup>\*\*</sup>Assumes electricity at \$0.10kWh, and values the assoc. thermal energy at 40% of the price of electricity.

<sup>\*\*\*</sup>Assumes coal at \$45/ton, oil at \$95/barrel, natural gas at \$4.50/Mcf.

<sup>&</sup>lt;sup>1</sup> 2012 Key World Energy Statistics, International Energy Agency, pg. 28, http://tinyurl.com/b6psbfj

<sup>&</sup>lt;sup>2</sup> International Energy Outlook 2011, US Energy Information Administration, September 2011, pg. 10 http://www.eia.gov/forecasts/ieo/

<sup>&</sup>lt;sup>3</sup> International Energy Agency website, http://www.iea.org/topics/heat/

If IH succeeds in commercializing a device that is capable of generating 4 times its electrical input energy, it will have created a technology that can displace traditional fuel sources in generating both heat and electricity without generating any emissions or creating any radioactive waste. In the US, China and Russia alone, such a technology would be entering a market worth more than \$350 billion/year.

Industrial Heat believes this initial addressable market size justifies a sector-based approach in the LENR field. The E-Cat may be ahead of the competition at this point, but it is important to invest in or acquire other LENR technologies and thereby diversify upside exposure, increase access to inventors and aggregate valuable LENR IP into Industrial Heat.

#### III. USE OF FUNDS

Industrial Heat is raising \$50 million of growth capital to cover operational, R&D and investment expenses over the next 12-18 months and to provide for the return of capital to certain seed investors. Capital will be used as follows:

## 1) G&A expenses: \$3.5 million

This includes costs such as office and laboratory rent, salaries, contractors, legal, accounting, equipment rental, lab and office supplies, travel, public relations and miscellaneous other expenses, such as insurance.

#### 2) Strategy consulting: \$5 million

Industrial Heat intends to retain top consulting and investment banking firms to provide counsel on a range of matters, including but not limited to: a) a worldwide capitalization and goto-market strategy, b) identifying and brokering joint development or licensing agreements with large, established technology partners (such as BAE, Boeing and Texas Instruments), c) international corporate structure.

#### 3) Research & Development: \$10 million

Industrial Heat intends to work with outside R&D firms to conduct additional research and development around the fuel and the reactor. In addition, IH intends to contract out the development of IP related to the core technology, such as: controls, packaging, manufacturing, storage, monitoring, safety, security, distribution, and user interaction technologies. In addition to using outside firms, IH intends to support the research and development activities of Andrea Rossi as well as other inventors, and also to retain some staff and facilities for internal research and development and testing.

#### 4) Returning capital to early investors: \$15 million

Industrial Heat to date has been funded by a group of individual investors. These investors do not have long time horizons, if for no other reason than because of age—most are in their 60's or 70's. They are business friends of Tom Darden who supported IH because they were asked to, and because they understood there was a critical, high-risk moment when IH could capture Rossi's technology under acceptable terms, if the company had the necessary capital available to it. They also realized that inaction literally might deprive the world of the potential benefit of the

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E-Cat technology, because it was not clear that Rossi would ever find a way to get the E-Cat to market on his own. Accordingly, management wants to return most or all of these investors' capital. They would retain equity in the business, although without any significant ongoing rights. The largest investor in Industrial Heat, Tom Darden, will leave all of his capital in IH, so he will not participate in the early investor return of capital.

## 5) LENR sector strategy: \$16.5 million

As outlined above, Industrial Heat sees significant value in pursuing a LENR sector strategy. Though IH was formed initially to invest in the E-Cat technology, management believes a prudent use of capital is to license or acquire other LENR IP and/or to acquire an equity interest in other LENR startups. Funding other LENR inventors increases IH's inventor-base and enhances its ability to streamline and organize the efficient generation of valuable LENR IP. Acquiring an equity interest in other LENR startups is less ideal but it still achieves diversification and increases upside exposure. More capital will be needed in the future to provide follow on investments and to invest in new opportunities, but \$16.5 million is sufficient to make a number of significant early commitments over the next year.

## IV. RISK FACTORS

# Lack of Operating History; Funding Risks

Industrial Heat<sup>4</sup> is a newly formed entity with no operating history upon which to evaluate its likely performance. Industrial Heat is in a very early stage of development and it is not possible at this time to provide any projection or prediction of its financial performance. Industrial Heat's business plan is still being developed and is evolving. Although IH anticipates that it will be profitable if it is able to carry out its business objectives, Industrial Heat is also focused on positively impacting the world by providing an energy solution that will be significantly more cost effective and environmentally favorable than other sources. Investors in Industrial Heat should be similarly motivated. The IH business plan could include making the technology open source, such that much of the technology could be publicly available for further development and exploitation by third parties.

The assets of Industrial Heat are (1) the License Agreement with Leonardo Corporation ("Leonardo") and its sole shareholder, Dr. Andrea Rossi, pursuant to which IH purchased a 1 MW E-Cat plant as well as intellectual property associated with the E-Cat reaction, (2) a passive investment in an Redacted - Other Investment (3) a portfolio of intellectual property assets and contacts that have been developed by IH since its inception. There can be no assurance that IH will be able to commercialize any of its IP or that IH's targeted results will be attained. Additionally, significant capital will be required in order for the Companies to acquire and maintain the IP that it will need and then develop, manufacture, and commercialize the E-Cat technology and products. There can be no assurance that the Companies will be able to generate or raise the capital required to continue the rights under the License Agreement or to implement their business plan.

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<sup>&</sup>lt;sup>4</sup> Please note that references in this Risk Factors section and elsewhere in this Memorandum to "Industrial Heat" or "IH" shall be deemed to include its subsidiary, IPH International B.V., as the context may require.

Industrial Heat's business plan may also include negotiating with other inventors and companies to obtain commercialization rights in other promising LENR technologies and/or making investments in such technologies, as well as developing and patenting IH's own proprietary intellectual property involving systems ancillary to the development of LENR. There can be no assurance that Industrial Heat will be successful in such endeavors.

## Unproven Technology

Industrial Heat's business involves certain developing and unproven technologies. The technology that IH will attempt to commercialize is a form of low energy nuclear reaction ("LENR") technology. LENR technology has been rejected by some members of the mainstream scientific community because many experimental results could not be replicated consistently and reliably, and because there is no accepted theoretical model of these types of reactions. Although IH believes that the technology that has been licensed from Leonardo produces substantial excess energy, and although it has been independently tested and validated, the technology or its acceptance in the marketplace cannot be guaranteed. Previous testing of Leonardo's technology has had mixed results. Some tests have failed, while others have appeared to succeed. Despite the initial validation, there is no guarantee that the E-Cats will continue to operate at the specified levels, or at all.

#### Radiation

The inventor represents that both the fuel for the E-Cat and the remaining waste from producing energy in the E-Cat are not radioactive or otherwise harmful. According to the inventor, E-Cats produce energy in the form of radiation, either gamma rays or x-rays or both. This radiation is contained by the structure of the E-Cat, so it is not detected outside the reactor, or the levels are very low. However, if a reactor unit were to be opened while operating, either intentionally, by accident or due to a defect or explosion, it could emit harmful gamma rays or x-rays outside the device. In IH's limited experience, some reactors have melted or cracked open while operating, without any detected release of radiation. However, IH has not had the opportunity to study these reactions in detail, or the resulting waste, so the company cannot verify the extent of the risk that could be created by such an event, nor is it clear that the fuel and waste are never harmful.

## Delivery of IP; IP Protection/Infringement

After Industrial Heat made its second payment to Leonardo Corp. in May 2013, Rossi delivered drawings, specifications and detailed technical information to designated IH personnel. This intellectual property, which IH has undertaken to protect with patent applications, is IPH's primary asset and the primary asset of the Companies. The E-Cat IP deliverables included books with the construction drawings and instructions necessary to manufacture the E-Cat, operate the E-Cat, manufacture the control systems and operate the control systems, one issued patent, and eight pending patent applications. The Companies cannot be certain that the E-Cat IP delivered by Rossi is complete or sufficient to enable the Companies to carry out their objectives.

Of the nine patents included in the original E-Cat IP disclosure, eight are pending applications and one has been issued. The patent applications filed by Rossi or IH since May 2013, all are pending. The issued patent was approved by the Italian Patent and Trademark Office on April 6, 2011, and is valid only in Italy. Italy is not within IPH's territory under the License Agreement. Under then-current Italian

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law, the examination of the application was more formal and less technical than for the corresponding Patent Cooperation Treaty application. The United States is the only country within IH's territory under the License Agreement with pending patent applications. It should be noted that the United States Patent and Trademark Office has generally rejected patent applications for "cold fusion" technology on the basis that such devices do not work and the inventor is unable to establish the utility of the device. However, at least one US patent for LENR technology has been issued; a LENR patent was issued to George Miley in July 2012 (US Patent No. 8,227,020). It should be further noted that an application in 2008 to patent Dr. Rossi's device internationally had received an unfavorable preliminary report on patentability at the World Intellectual Property Organization from the European Patent Office, noting that the description of the device was based on "general statements and speculations" and citing "numerous deficiencies in both the description and in the evidence provided to support its feasibility" as well as incompatibilities with "generally accepted laws of physics and established theories." The patent application was published on October 15, 2009. The European Patent Office recently issued a LENR patent to Francesco Piantelli in January 2013 (EU Patent No. 2,368,252).

Industrial Heat believes that it has been given access to all pending patent applications included in the E-Cat IP or filed by Rossi afterwards. IH considers those that it has reviewed to be poorly written. IH has no assurances that the pending patent applications will be approved. Further, competitors in the LENR space may challenge the validity or scope of patents and other intellectual property in the E-Cat IP. IH does not currently know whether the E-Cat IP will infringe existing rights.

The success of Industrial Heat will depend in large part on learning and understanding the E-Cat IP and utilizing it as proprietary technology. IH will rely on various intellectual property rights, including patents, copyrights, trademarks and trade secrets, as well as confidentiality provisions and licensing arrangements, to establish its proprietary rights. IH may need to spend significant resources monitoring its intellectual property rights and may or may not be able to detect infringement by third parties. IH's competitive position may be harmed if it cannot detect infringement and enforce its intellectual property rights quickly or at all. In some circumstances, IH may choose not to pursue enforcement because an infringer has a dominant intellectual property position or for other business reasons. In addition, competitors might avoid infringement by designing around IH's intellectual property rights or by developing non-infringing competing technologies. Intellectual property rights and the ability of IH to enforce them may be unavailable or limited in some countries which could make it easier for competitors to capture market share and could result in lost revenues.

#### Global Risks

IH's territory under the License Agreement (the "Territory") includes North America, South America, Central America and the Caribbean, China, Russia, Saudi Arabia, and the United Arab Emirates. Additionally, the License Agreement requires that any new licenses outside the territory first must be offered to IPH. The ability of IH to operate in various countries may be adversely affected by a number of local influences, including political, economic, social and religious instability; inadequate investor protection; tax laws; changes in laws or regulations; international relations with other nations; natural disasters; corruption and military activity. The economies of some countries may differ from the economies of other countries in many respects, such as rate of growth, inflation, capital reinvestment, resource self-sufficiency, financial system stability, the national balance of payments position and

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sensitivity to changes in global trade. The legal systems of some countries are still in early stages, making it more difficult to obtain and/or enforce judgments and take other legal action that may impact IH. Intellectual property rights and the ability to enforce them may be unavailable or limited in some countries where IH or its affiliates may have facilities or transact business.

#### Regulatory Matters

Industrial Heat is investigating existing laws and regulations that may impact IH's proposed operations in various countries. It is not yet known where IH will finally base its operations or what impact existing laws and regulations will have on the operations of IH. Because LENR technology is continuing to develop and is not in active use, it may not be subject to specific regulation in certain countries at this time; however, additional regulation may develop as the use of the technology increases. The adoption of any future U.S. federal, state, or foreign laws or implementing regulations imposing reporting or financial obligations on, or limiting or banning, LENR devices could make it more difficult for IH to operate and could have a material adverse effect on IH.

The operations outside the US of any company subject to US law that is included in the Industrial Heat group will require that company to comply with a number of US and international regulations. For example, operations in countries outside the US are subject to the Foreign Corrupt Practices Act (FCPA), which prohibits US companies or their agents and employees from providing anything of value to a foreign official for the purposes of influencing any act or decision of these individuals in their official capacity to help obtain or retain business, direct business to any person or corporate entity, or obtain any unfair advantage. The activities of IH may create the risk of unauthorized payments or offers of payments by one of its employees, agents, or joint venture partners that could be in violation of the FCPA, even though these parties are not always subject to IH's control. Industrial Heat will have internal control policies and procedures as appropriate with respect to the FCPA. Allegations of violations of applicable anti-corruption laws, including the FCPA, may result in internal, independent, or government investigations. Violations of the FCPA may result in severe criminal or civil sanctions, and the Companies may be subject to other liabilities, which could have a material adverse effect on its business, operations and financial condition. In addition, investigations by governmental authorities as well as legal, social, economic, and political issues in these countries could have a material adverse effect on IH's business and results of operations. IH is also subject to the risks that any employees, joint venture partners, and agents outside of the US may fail to comply with other applicable laws.

## Competition

LENR technology is not yet commercially available. However, similar technology is under development by others and a competing technology could become commercially available prior to IH being able to make the E-Cat technology or other LENR technology commercially available. Further, competing technologies could be superior to the technology being licensed to and developed by IH and existing or later obtained patents on competing technology could limit IH's ability to compete. Competitors of the Companies may have greater financial resources than IH, thus giving them a competitive advantage. The ability of IH's competitors to acquire or develop and introduce new technologies, products and services more quickly than IH may adversely affect IH's competitive position. Further, after IH has incurred substantial costs to develop the E-Cat technology and products or other LENR technology and products, one or more of such products could become obsolete prior to it being

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made available to consumers. New technologies could also create new competitors for IH. In addition, the uncertainty of the costs for obtaining necessary intellectual property rights from third parties could impact IH's ability to respond to existing competing technologies or to technological advances in a timely manner. Further, changes in the regulatory and legislative environments in the Territory may result in changes to the competitive landscape.

## Dependence on Key Personnel

The future success of Industrial Heat is heavily dependent upon one key individual, Dr. Andrea Rossi, and if the services of such individual were no longer to be available to IH, its future success would likely be materially and adversely affected. The License Agreement requires Dr. Rossi to provide ongoing training and support to IH for a period of not less than twelve months following the successful 24 hour validation. Further, IH and Dr. Rossi anticipate that IH will engage Dr. Rossi as its chief scientist. However, IH cannot be certain that Dr. Rossi will be available or willing to provide services as contemplated by the License Agreement or as otherwise requested. Additionally, some have questioned Dr. Rossi's credibility. IH is informed and believes that Dr. Rossi has been convicted of and imprisoned in Italy for tax crimes, and has been acquitted of other charges. Critics of Dr. Rossi have accused him of fraud, including deceptive actions in connection with past demonstrations of the E-Cat. IH attempted to lessen these risks by requiring validation of the E-Cat (which was achieved) by a validation agent jointly agreed upon by IH and Leonardo and by requiring that the documents evidencing the E-Cat IP (exclusive of the catalyzer formula) be delivered to any combination of one or more United States Patent attorneys and a nuclear engineer (in each case, who were not an affiliate of Rossi, but were selected by Leonardo) for verification prior to payment being made to Leonardo following a successful 24 hour validation. IH is also informed that Dr. Rossi has previously been associated with Dr. Piantelli (through a joint association with Sergio Focardi) and with the company Defkalion Green Technologies ("Defkalion"), both potential competitors of IH. At one point, Defkalion claimed to have the formula for the proprietary E-Cat LT catalyzer; Defkalion subsequently withdrew that claim and has not publicly produced evidence of a functioning LENR device. However, it appears that Defkalion continues to work on developing a functioning LENR device. IH cannot express an opinion as to whether Defkalion will or will not be successful with its efforts. If Defkalion were to succeed in developing a functioning LENR device, such a result could have an adverse impact upon IH and its proposed operations.

The success of Industrial Heat will also be substantially dependent on any other inventors with which IH subsequently enters into agreements or in whose companies IH invests, as well as the management team's ability to implement the business strategy of IH. Should one or more of such inventors or the individuals who comprise the management team become incapacitated or in some other way cease to participate in IH, its performance could be adversely affected. There can be no assurance that any of these individuals will continue to be affiliated with IH throughout its existence.

# Availability of Debt

Given the immaturity of the LENR technology and the other risk associated with LENR, it is not known if banks or other sources of capital will provide debt financing to IH or if the terms of any such financing will be commercially reasonable.

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#### No Market for Securities

No securities to be issued by IH have been registered under the securities laws of any country or jurisdiction, and, therefore, cannot be sold unless they are subsequently registered under applicable securities laws or an exemption from registration is available. It is not contemplated that registration under any such securities laws will ever be effected. There is no public market for the securities of IH and one is not expected to develop. Each investor will be required to represent that it is a permitted investor under applicable securities laws and that it is acquiring any securities of IH for investment purposes and not with a view to resale or distribution and that it will only sell and transfer such securities to a permitted investor under applicable securities laws and in a manner permitted by and consistent with such laws. Investors must be prepared to bear the risks of owning securities of IH for an extended period of time.

#### Tax Considerations

IPH is organized as a Dutch B.V. and IH is not undertaking in this Memorandum to address the tax consequences of an investment in IPH securities. Each prospective investor is urged to consult its own tax adviser as to the tax consequences of an investment in the securities of IPH.

#### Liability for Return of Distributions

Any investor's capital contributions to IPH are susceptible to risk of loss as a result of any liability of IPH. If IPH is otherwise unable to meet its obligations, investors in IPH may, under applicable law, be obligated to return, with interest, distributions previously received by them to fund IPH's obligations. In addition, an investor may be liable under applicable bankruptcy or insolvency laws to return a distribution made during IPH's insolvency.

## Availability of Insurance against Certain Catastrophic Losses

Certain losses and events of a catastrophic nature, such as wars, earthquakes, terrorist attacks or other similar events, may be either uninsurable or insurable at such high rates that to maintain such coverage would cause an adverse impact on the related assets. In general, losses related to terrorism are becoming harder and more expensive to insure against. Some insurers are excluding terrorism coverage from their all-risk policies. In some cases, the insurers are offering significantly limited coverage against terrorist acts for additional premiums, which can greatly increase the total costs of casualty insurance. As a result, all assets of Industrial Heat may not be insured against terrorism. If a major uninsured loss occurs, the Companies could lose both invested capital in and anticipated profits related to the affected assets.

#### V. EXHIBITS

- **A.** Published report concerning December 2012 and March 2013 test of E-Cat reactor: "Indication of anomalous heat energy production in a reactor device containing hydrogen loaded nickel powder."
- **B.** Preliminary draft report concerning March 2014 test of E-Cat reactor: "Report on the Lugano Test—Preliminary Draft"

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- C. Industrial Heat LENR Contacts
- **D.** E-Cat licensing agreement and related documentation
- E. Intellectual property filed by Industrial Heat
- F. Report by Engineer Fabio Penon on the May 2013 Ferrara test

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