



Since 1999 - Waste to energy Hitech

A E S nrg ltd.

JMK Building Bluebell Business Centre

Old Naas Road

Dublin 12, Eire

VAT Nr: IE 3467526CH

(gsm1) 00353.89.21.333.56 (gms2) (o) 89 203 16.51

Ph. 00353 (1) 53.32.841

Fax 00353 (1) 53.32.843

www.altair-pyro.com

DOCUMENTO ON LINE IN LINEA SUL SITO WWW.AES-NRG.EU

Spettabile

Clientela , Signori Agenti

& Appaltatori Tecnici

Oggetto : consorzio imprese e mercati mondiali

Abbiamo il piacere di informarVi che www.altair-pyro.com e la nostra azienda AES hanno ufficialmente iniziato le loro attività consortili nel mondo con le seguenti imprese

<http://hysytech.com>

<http://teamgemini.us>

<http://pyroxitalia.com>

Ognuna rappresenta un'eccezione nel proprio settore, completando le capacità Altair per la pirolisi e la gassificazione. GEMINI USA è una azienda tedesco-americana di progettazione e costruzione di impianti per l'utilizzo agroalimentare e zootecnico del calore e dell'energia.

I nostri nuovi partners hanno scelto www.nico-cerni.com e www.altair-pyro.com per completare la gamma dei propri impianti con **pirolisi, gassificazione, biogas, biometano, idrogeno e refrigerazione** in tutte le fasce di potenza, *nei regimi di co-tri e quadrigerazione*. Accanto alle attività commerciali, il nostro consorzio di fatto offre un comitato scientifico con tecnologi di valore mondiale nei campi della termochimica, biotecnologia, mecatronica e IT impiantistica.

Con questa nuova realtà saremo in grado di affrontare progetti e realizzazioni di medie e grandi dimensioni (2.000 – 15.000 MWe), oltre le potenze già servite (10 -3.000 kWe) unendovi anche le risorse finanziarie richieste.

Per informazioni potete rivolgervi a N Cerni 350 045 37.35 oppure 00353 89 2133356 per richieste di offerta solo via http://www.altair-international.com/it_IT/contact-form/

We have 350 cumulated years of experience in : Energy management, Renewable Energy Turn Key solutions, Power stations, Wind Farms, Hydro Power, Wind, Solar PV, HVAC and Refrigeration (Heating Ventilation Air Conditioning), Emissions Abatement and IAQ Airquality, Geothermals, Powerlines, Geomarine , Water Treatments, WTE Waste to Energy, BTE Biomass to Energy, Drop in Fuels, Co-tri and quad-generation. Hydrogen HHO units. SCADA controls, metering , remote plant diagnosis. Utility and Facility Management

sabato 20 maggio 2017

Oggetto :

Inizio attivita' AES nrg ltd Dublino EX AES gmbh

Con la presente siamo lieti di comunicarLe che la AEs nrg ltd ha iniziato le sue attivita' e continua il lavoro della disciolta AES gmbh, con tutte le garanzie bancarie ed assicurative A sostegno degli appalti tecnici in esecuzione e progettazione nel mondo.

Gradite i nostri piu' distinti saluti

A E S NRG LTD

Nico Cerni, M Sc ASHRAE USA

direttore tecnico

cerni@altair-international.com

+39 340 830 6797



22/3/2017

Ladies and gentlemen,

we are pleased to inform you that AES nrg ltd Eire has been established and is now fully up and running in 10 days from now . AES nrg ltd inherits all the expertise, knowledge and business portfolio of N Cerni and AES gmbh Germany . At AES Nrg we can design , manufacture , install, service, retrofit, relocate control and improve any power station , regardless of its technology, age, status and location.

We can be also global trading partners for strategic products and components. Finance in form of equity and debt lending is always available subject to our feasibility study and/or business modeling approval at banks and insurance companies.

We look forward to receiving your inquires

With our best compliments

Nico Cerni



Focused On Environmentally Conscious Industrial Energy Solutions

As our name suggests, AES. (all in one energy service , german Allgemeine Energy Service) is a environmentally conscious industrial energy company focused on providing renewable and alternative energy solutions. We pay special attention to the implementation of resource-recovery and recycling solutions which aid in the development and creation of the circular economy we all want and need.

AES Nrg ltd. is a specialized international company using advanced "clean" technologies to develop projects that provide environmentally beneficial solutions to energy and waste-management challenges using only the best commercially available technologies.

The company is headquartered i and is committed to solving problems large and small in a commercially viable and environmentally responsible manner, with a primary focus on converting high calorific waste streams into valuable commodities. To apply the best-of-class technologies to recover energy and resources from niche waste streams,

- *To own facilities that are not only "GREEN" but extremely profitable,*
- *To produce and market high quality commodities that have a worldwide demand,*
- *To own and operate businesses that generate significant carbon credits from their operations,*
- *To own and operate facilities on a commercial basis without special subsidies,*
- *To earning attractive, low-risk returns for customers and investors alike.*

Our Technology

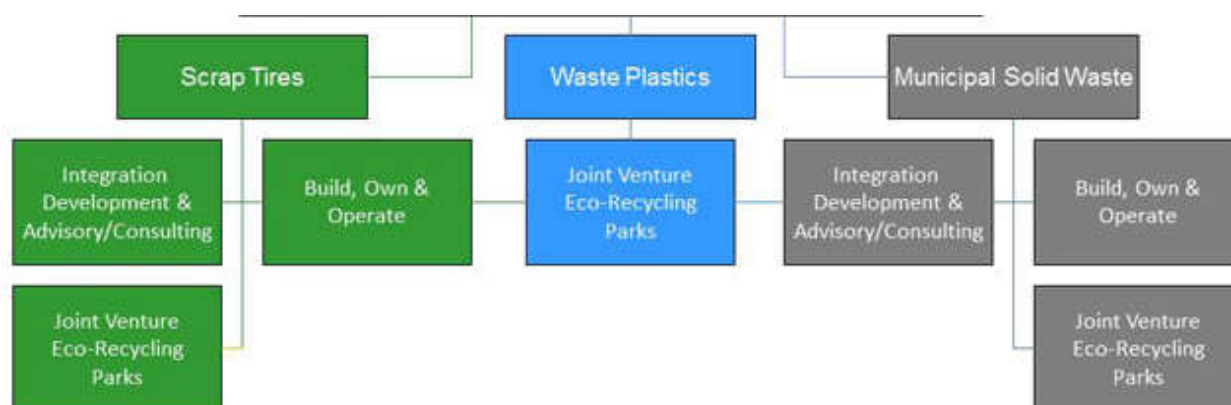
AES utilizes the combined technologies and expertise of several different and unique German, Italian, and Japanese engineering companies which previously specialized in quite different market sectors - namely thermal structural engineering, waste management and oil refining. This combined, multi-industry background has allowed AES to develop a technologically unique range of waste recycling products and systems. With a very large population (over 125 million) but very limited space, Japanese industry was forced to confront the problem of too much waste many years ago and as a result, many of the leading waste management technologies have emerged from Japan. It soon became clear that waste materials should no longer be considered worthless and sent to landfill sites, but should be viewed and treated as a valuable resource. Vital to the development of the technologies was a thorough understanding and knowledge of waste materials, their composition, treatment and disposal as well as the problems facing the waste management industry. It was from this perspective that our team, partners and technology developers were able to maximize the strengths of their various designs and processes, leading to the unique range of non-combustion recycling and recovery systems offered by AES Nrg ltd.. The initial technologies were deployed commercially in 1965 and are still in operation today. AES offers then more than 45 years of continuous research and development combined with hundreds of commercial operations have produced a series of processing systems that outperform any other technologies currently available.

Systems Advantage:

- *AES's systems are an environmentally friendly and commercially viable alternative to traditional methods of processing waste. Meet some of AES's advantages:*
- *Most of our systems do not require any pre-processing of feedstock;*
- *Produce high-quality carbon and oil at a lower cost than other recycling systems;*
- *Designed to be virtually energy self-sufficient;*
- *Many of the systems are modular and capable of being truck-mounted and transported directly to the waste resources;*
- *Many of the systems can be delivered and installed within six months;*

Designed to handle almost any commonly generated waste stream, whether liquid, solid, mixed or unmixed (Eireluding whole tires, all types of plastics, e-waste, shredder residues, sewage sludge, animal wastes, biomass, ligneous and infectious biohazard medical waste).

Learn more about waste to energy systems, our core applications and how Pyrolysis and Gasification works.



Proven Track Record - Proven Operating Assets - Proven Economically

Besides a pioneering and dedicated management team, highly experienced technical team and a large network of industry experts and professionals, AES Nrg ltd. boasts a portfolio of "clean" technologies that have multiple feedstock capability. Some of these technologies have been optimized to process the niche waste streams that the Company is currently focused on, such as scrap tires, mixed plastics and municipal solid wastes. There are multiple reference facilities dedicated to these waste streams, which are some of the largest and longest running plants in the world.

By using only technologies that have a long history of safe and efficient operations, AES Nrg ltd. can draw on over forty years of engineering excellence to ensure that any new project can be delivered with confidence

that only comes from such experience. These fully mature technologies have been continually refined, upgraded and improved since first conception in the 1960's, they are now fully optimized and extremely efficient, using only a fraction of the end products for process heat.

Unique operational features that can save significant operating costs are proprietary in AES's technology, for example the continuous tyre carbonisation process is able to take tyres whole into the reactor thus avoiding pre-treatment such as shredding and chipping. This also allows for the steel to be extracted whole rather than shredded, which would have a lower market value. With the plastic depolymerization technology, this process has been perfected so that large volumes of PET and PVC can be included within the mixed plastic waste, without detrimental effect to the reactor itself or the end products.

Access to and knowledge of different feedstocks is another key strength of AES Nrg Ltd., who continue to access sources of supply around the globe. Controlling feedstock at source allows the Company secure supplies for their operations to run at full capacity. By producing the highest quality end products that fit today's supply chain, the Company has already attracted significant demand for its cost effective, green and low-carbon-footprint commodities. This has meant AES Nrg Ltd. has been able to forward sell much of its production in advance, reinforcing the business model.

The AES Advantage:

- *Environmentally-friendly process with a +60 year commercially proven history*
- *Clean technology has been implemented on a large scale for world leading industrials*
- *Cost effective technology portfolio over 500 plants installed and operating*
- *Economic self-sufficiency, projects are feasible on a stand-alone basis*
- *Modular EPC standardized packaged plants capable of deployment in less than 12 months*
- *Scalable designs as small as 5 million litres per year*
- *Dozens of tyre and plastic specific plants built commercially*
- *A large and established market that is rapidly growing*
- *Strong financial support institutionally, with government backing*
- *Proven management team with world class advisors who have done this all before*
- *Multiple feedstock flexibility with a focus on tyres and plastics, under long-term contracts*
- *High grade commodities with 10 year "take or pay" off take agreements in place*

- See more at: <http://www.altair-pyro.com> – www.hysytech.com – www.pyroxitalia.com

Because Sometimes You Need Technology & Sometimes You Don't

AES provides alternative energy consulting services for companies that are developing, manufacturing, distributing, selling or simply using energy products or commodities. The AES Team is made up of engineers, economists and environmental consulting specialists who can help you find the right sustainable energy solutions. AES has provided professional engineering and socio-economic services to address sustainable energy issues around the world.

The alternative energy industry is a complicated business that demands the expertise of a dedicated team of innovative, experienced professionals who have the know-how to develop and implement alternative fuel and other renewable energy strategies. Our Team provides consulting for companies that are looking for ways to use alternative fuels and renewable energies to help gain new market share and ease business from their existing customers.

Our rich mix of over 30 years of experience in business and government gives our customers the edge they need to overcome the obstacles to the commercialization of alternative energy. AES understands the technology marketplace and has the acumen to bring stakeholders together for profitable business

AIB Business Banking • Dublin North & West Business Centre • Naas Road • Dublin 22 • Account Number: 03406040
IBAN: IE98 AIBK 9310 0403 406040 BIC - AIBKIE2DXXX

collaboration. As our customer, we guarantee you our dedication to excellent services will help identify the most favourable opportunities and funding options to make your project commercially viable.

We look at each project individually because, as no two projects are completely identical, a standard boilerplate approach is inappropriate for most projects. A lot of time and effort is required to develop a solid and bankable business plan, and some of the key elements can be more effectively targeted when you have the experience of the "AES TEAM" on your side. AES understands the business and regulatory drivers behind alternative fuels and their providers. Part of the success of AES's solutions lies in securing the right fuel partners and supply contracts from local vendors. AES will help you understand and navigate this new marketplace to ensure the long-term success of your project.

AES offers a full range of project management, design, engineering, marketing, communications, public and government relations, sales, funding and related support services that are tailored for project developers and other customers. We offer technical design services as well as related business planning, consulting and financial modeling services that create value and help to define project parameters and economics. AES's fees are listed right on our website.

We build alternative energy businesses with the most cost-effective solutions - anywhere in the world!

Ask a copy, Energy Consulting
Ask a copy, Engineering Services
Ask a copy, Consulting Terms & Conditions
Ask a copy, Renewable Energy Due Diligence Services

**Energy Advisory Services: Energy
Technology Experience:**

- Project management services
- An array of sustainable energy options
- Marketing diagnostic, strategy programs & execution
- Market analysis & sizing
- Competitive assessments
- Economic (ROI, TCO) assessments
- Feedstock analysis & proposition testing
- Pre-design & design consulting
- Business plan assistance
- Corporate branding & product positioning
- Detailed market infrastructure mapping Total target market & segment validation with profiling
- Large scale gas-to-liquid plants
- Rural electrification, working both on and off-grid.
- Improving energy efficiency in commercial buildings
- Pyrolysis & gasification facilities
- Large scale waste-to-energy plants
- Integrated bio-refineries
- Biomass & biofuel energy plants
- Digester plants
- Fuel cell integration
- Hydrocarbon waste product recycling systems
- Wind & solar-power production systems
- Small hydro-electricity projects
- New alternative-energy technology products
- Traditional combustion boiler power plants

Properly Matched Solutions - All In One Package

AES Nrg ltd. Eire. provides a variety of packaged services and solutions that are essential to the integration of any clean technology into your business. We tailor each project individually and use only those technologies and solutions that can be vertically and seamlessly integrated into your business infrastructure. Your sustainable success is our ultimate goal, and our hybrid engineering solutions are designed to yield proven results to achieve that goal.

We have over 40 years of experience in providing "green" solutions, having been involved in the renewable energy, resource recovery, recycling, waste management and alternative & conventional energy nrg ltd. sEiree the 1960's. Our team has consistently delivered projects on time and under budget. The team has sourced, supplied, consulted and constructed a multitude of renewable energy projects that many industry professionals said were impossible to build.

Our Team is made up of world-class, highly regarded Cleantech professionals with a "can-do" credo. We have a long list of widely recognized projects that have been featured in documentaries by National Geographic and the Discovery Channel. We are one of the leading and most qualified Cleantech Teams on the planet and our achievements speak for themselves. Our core staff of dedicated industry professionals specialize in the execution of design-build projects from the conceptual and design stage right through to installation, commissioning and successful operation.

Our services are delivered by AES's highly-qualified and experienced staff, consulting and engineering associates as well as through regional professional service providers and networks. We provide our customers with world-class products and services, cutting-edge technologies and quality workmanship. All of our equipment and systems are manufactured to the highest of standards under strict conditions and are thoroughly tested and guaranteed. AES continues to focus on new technology innovations and product development, adding a competitive edge through our research, development and production teams.

Our project execution methodology allows us to assemble the best commercially available technology and integrate it into a system to meet our customers' particular needs. This approach enables us to evaluate standard industry technology and apply it in unique ways, which has given us the opportunity to execute several commercial first-of-a-kind projects, many of which have consisted of the conversion of a waste product into a revenue stream.

Our complete packaged service solutions for cleantech systems Eirelude:

- *Gasification & Pyrolysis Plant Procurement*
- *Feedstock Identification & Procurement*
- *Combine Heat & Power Plants*
- *Detailed Engineering*
- *Mineral Processing Plants*
- *Pipe & Valve Station Design & Layout*
- *Biogas Production Facilities*
- *Telemetry Management Software Integration*
- *Solvent Extraction Plants*
- *Milling & Crushing Plants*
- *Material & Conveyor Handling Systems*
- *Capital Cost Estimations*
- *Waste-Water Treatment plants*
- *Operator Training*
- *Sourced Financing*
- *Technology Due Diligence*
- *Specialised Consulting*
- *Construction Management*
- *Engineering Study & Feasibility Analysis*

FEASIBILITY STUDIES

Our typical study and feasibility analysis includes the technical and economic evaluation of:

- *Reviews of New Advanced Thermal Treatment Recycling Systems*
- *Biofuel Production Plants & Systems*
- *New or existing Steam & Power Generation Systems*
- *Biomass Dryers*
- *Pyrolysis Plants*
- *Gasification Reactors*
- *Carbon Burnout Systems*
- *Material Handling Systems*
- *Instrumentation and Controls*
- *Carbon Upgrading Technologies*
- *New Resource Recovery Systems*
- *Waste Water Treatment Systems*
- *Environmental Compliance Eireluding NSPS, MACT*
- *First-of-a-kind Systems (utilizing new technology & opportunity fuels)*



The Liffey Bridge (Irish: Droichead na Life).....Dublin



Mr. John Martin McTiernan is a director of AESNRG Ltd. He is 51 years of age and is head of the legal department with AESNRG. He is a qualified Barrister and Solicitor and in-house-counsel with

AESNRG. He formerly worked as a practicing Barrister-at-Law for many years. His qualifications are as follows: He holds an Honors Law Degree from Griffith College Dublin, a Barrister-at-Law degree from the Honorable Society of Kings Inns, a Diploma in Stockbroking Investment from Dublin Business School, a Diploma in Advanced Finance from the Incorporated Law Society of Ireland and is a qualified and accredited Mediator. He currently advises AESNRG Ltd on matters of a legal nature and in particular legal issues pertaining to all aspects of commercial business

Nicolo Cerni, (1957), is a HVAC + R Ashrae MSc engineer, he has been working as manager in 500 fortune companies such as Wabco Westinghouse , Trane and York since 1990, After establishing Altair International in Los Angeles 1998 and Orlando FL, 1999, 2001 he started Hi-tech business development and know how transfer as a fellow of John



Mungenast and Myron Miller Seniors of Silicon Community at Camarillo US CA State University Campus, and at the Michigan University Faculty of Mechanics, entering the RES Renewable Energy market in USA and

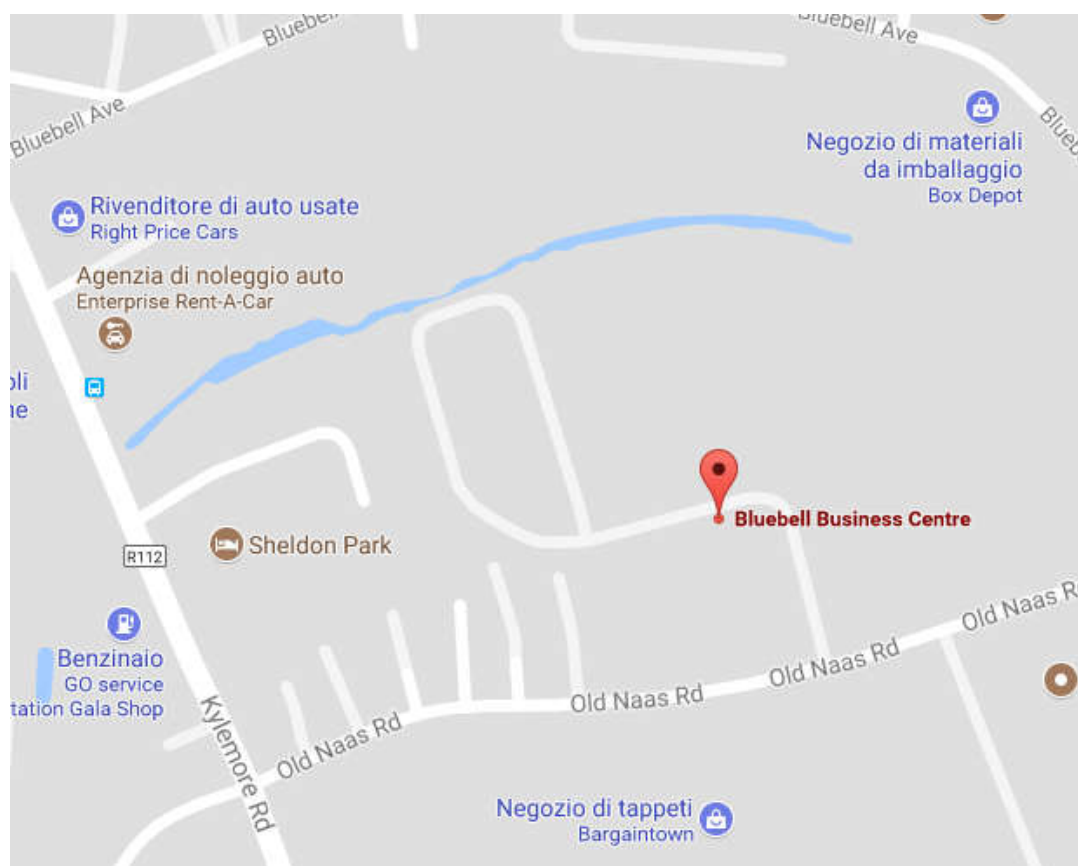
later in Germany where he keeps his engineering practice (2004). His experience in Hitech ranges from CFD (Computerized Fluid Dynamics) applied

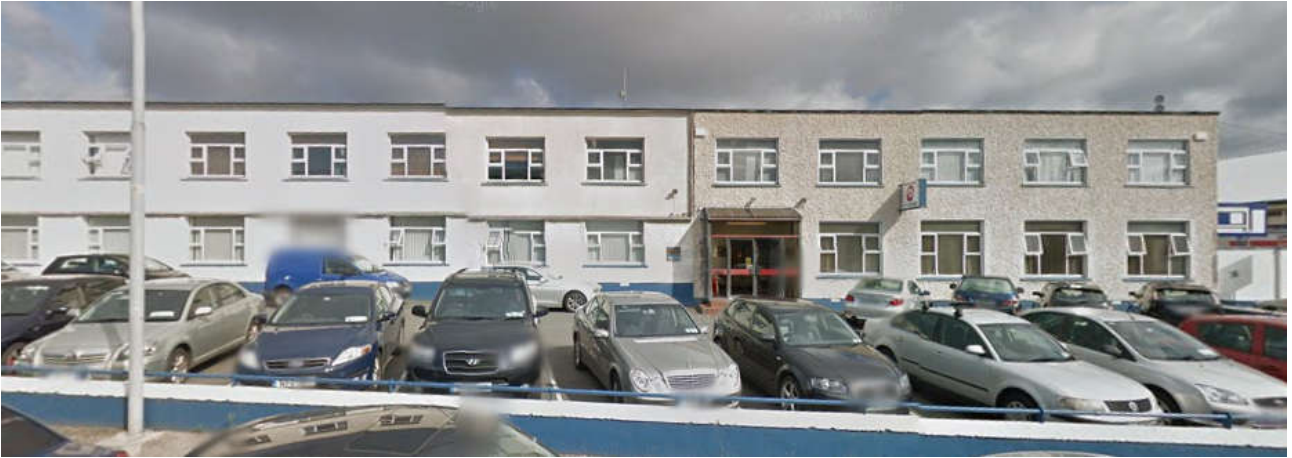
AIB Business Banking • Dublin North & West Business Centre • Naas Road • Dublin 22 • Account Number: 03406040 IBAN: IE98 AIBK 9310 0403 406040 BIC - AIBKIE2DXXX

to energetics , carbothermic reduction, casting tech, galvanic reactions, metallization, fast and flash waste to fuel technologies such as pyro, gasification, fermentation, catalized , vacuum, MWave and Plasma. He joined AES nrg ltd 2016 as technical director. Nicolo Cerni works together with a professional association and technologists community known as NCA www.nico-cerni.com



Mr. Ken (Kenneth) Byrne is a director of AESNRG Ltd. He is 57 years of age and is a fully qualified Life Assurance and Financial Advising Broker. For the past 30 years Ken has been advising clients in all aspects of financial and life assurance needs. Within the past number of years Ken has been very instrumental in developing business relationships with various property related Irish based funds in order to help and assist commercial borrowers secure funding to allow them rebuild and develop their business as a result of the economic downturn and crash. Ken has been a very active member of various networking business groups and is a firm advocate of “business people helping and supporting business people”.





AES Nrg ltd Headquarters , Dublin -