

# **Eurotech UN Global Compact Communication On Progress**

Reporting Period: May 2017 - April 2018





[this page intentionally left blank]



### Index

Introduction	5
Statement from Eurotech CEO	8
SECTION: Human Rights	10
SECTION: Labour	12
Collective Bargaining	14
SECTION: Environment	15
Products and Services: Our biggest contribution to preserving the environment	16
SECTION: Anti-corruption	21
Research, community involvement and recognitions	23
Research activities	23
Partnership and Strategic Collaborations	25
Awards	26
Future goals	28
Conclusion	30



[this page intentionally left blank]



#### INTRODUCTION

For decades scientists have cautioned the dangers of global warming and predicted an increase in violent and extreme weather. 2017 served only to validate their forecasts as it was witness to ferocious weather events throughout the world. Hurricanes Maria, Harvey and Irma left devastation in their paths to the point that some Caribbean nations were left uninhabitable. Landslides and flooding from record rainfall killed thousands and displaced thousands more around Africa, China, South America and South Asia. Wild fires in the US as well as Europe are blamed on climate change and were responsible for the loss of human life as well as wildlife. Thousands of acres of forest were decimated leaving people homeless and destroying delicate natural habitats.

Scenes from the on-going conflict in Syria and Iraq are the subject of daily news stories and remind us that political unrest and instability claim as many lives as the catastrophic weather phenomena we are witnessing at ever increasing rates. The genocide and resulting humanitarian crisis in Myanmar represents a giant step back for the country and their once esteemed leader. Africa, the world's richest continent with its vast reserves of natural resources and credited as the cradle of civilization, continues to be a fountainhead of corruption, conflict, famine and disease.

As the world bemoaned US policy makers while they denied climate change and promised to pull out of the Paris Climate Agreement, it also witnessed the disgrace of Nelson Mandela protégé, Jacob Zuma as well as Nobel Peace Prize winning Aung San Suu Kyi and their countries' hard fought victories lost to corruption and greed. The world's frustration would again be voiced when women came together for the #Me too and #Time's up movements which highlighted sexual harassment, abuse and unequal pay, proving again that long standing battles have not yet been won.

The UN Global Compact addresses these issues and aims to lift those trapped in poverty, inequality and underdevelopment. It outlines 10 basic principles meant to guide companies in their daily operation. They go beyond national laws and regulations that mandate certain protections, to elevate their status and is, in this globally



connected planet, also an important social obligation. A coalition of companies across a range of industries working together may be the best weapon in this global fight towards sustainability. Its subscription is voluntary and its humanitarian nature makes it the perfect vehicle to effect change unlike partisan governments struggling with the mismanagement or absence of resources to overcome these challenges.

#### This document contains:

- A statement from our CEO expressing Eurotech's continued support of the Global Compact
- An illustration of Eurotech's actions to promote Sustainable Development and specific response to each of the principles of the Global Compact
- Future goals and conclusions

#### The 10 Principles of the Global Compact

#### **Human Rights**

Principle 1	Businesses	should	support	and	respect	the	protection	of
	internationall	y recogni	zed procla	imed l	numan rigl	nts; ar	nd	
Principle 2	Make sure that they are not complicit in human rights abuses							

#### Labour

Principle 3	Businesses should uphold the freedom of association and the						
	effective recognition of the right to collective bargaining;						
Principle 4	The elimination of all forms of forced and compulsory labour						
Principle 5	The effective abolition of child labour; and						
Principle 6	The elimination of discrimination in respect of employment and						
	occupation.						





Principle 7 Businesses should support a precautionary approach to

environmental challenges;

Principle 8 Undertake initiatives to promote greater environmental responsibility;

and

Principle 9 Encourage the development and diffusion of environmentally friendly

technologies

#### **Anti-corruption**

Principle 10 Businesses should work against corruption in all its forms, including extortion and bribery



#### STATEMENT FROM EUROTECH CEO

It's hard to deny that right now is the best time to address sustainability. There are simply no excuses, economic forecasts are positive, there is not only strong social acceptance, thanks to ageing millennials and their predominately liberal views, there is also political will. Above all, there is unprecedented need. No company can debate or delay introducing sustainable practices as a part of their business model. In 2011 the concept of Industry 4.0 was introduced and it

represents the revolution that will conserve the environment and be the biggest push towards an equitable and sustainable planet. Its changes will benefit everyone and companies that choose the status quo over the disruptive power that Industry 4.0 holds will simply become obsolete like their archaic business models.

Investment in innovation is the best step companies can take to combat the ills that our planet currently faces. It is an investment that will not only offer financial returns, the changes that digitalization generate translate into products and services with added value. The Industrial Internet increases productivity and resource efficiency. This is essential given that growth and development are dependent on consumption. Industry 4.0 serves



today's consumers that no longer seek conspicuous consumption but rather follow a philosophy of conscious consumption.

The Global Compact was introduced by the UN at the turn of the millennium in 2000 capitalizing on the excitement and enthusiasm of a new era and increased awareness to unite the private sector with a common agenda and thus, foster change. It serves as a guide for CEOs of both large and small organizations to galvanize them to move from a business culture and



custom of mere economic growth towards the doctrine of sustainable development. Eurotech has been involved since 2009 and in almost ten years of membership we have strived to improve our business practices such that our impact is minimal in our operations but that our catalog of products and services contribute significantly to the Sustainable Development Goals. We look forward to reporting in the Communication on Progress to highlight what we have always done as a part of our everyday operational activities as well as the improvements we have made towards sustainability and equality.

Here in our report we outline the 10 basic principles at the core of the Global Compact and what we do to address them.

April 16<sup>th</sup>, 2018

Signed by
Roberto Siagri
CEO



#### **SECTION: HUMAN RIGHTS**

The first two principles focus on protecting the most fundamental rights, Human Rights. These rights are recognized universally and are protected by national and international laws. They go beyond nationality, race, gender, age religion or any other status and are inclusive of everyone as they are afforded just by being human. Since its founding Eurotech has been a proven supporter of human rights.

**Principle 1** Businesses should support and respect the protection of internationally recognized proclaimed human rights; and

**Principle 2** Make sure that they are not complicit in human rights abuses.

#### Company commitments:

- Eurotech does not employ children and would never employ children at any of its locations.
- Eurotech is unfaltering in its condemnation of Female Genital Mutilation. It is a clear violation of the human rights of girls and women.
- Eurotech stands firmly against forced labor and strives to offer a safe, supportive environment
- Employees are always paid according to local laws with the commitment to offer a real living wage.
- Eurotech actively supports human rights by maintaining its promise of nondiscrimination on the basis of race, gender or religion.
- Our HR Managers regularly attend employment law seminars which include updates on
  equality and human rights. All of its companies are expected to follow nondiscriminatory practices with regards to their customers, partners and employees.

#### Company Example

Conflict minerals are not used in the production of our products. It is a fact that many conflict minerals, natural resources extracted in conflict zones and often sold in support of the conflict, are necessary materials for the production of electronic components. Eurotech does not employ materials sourced from areas of combat and requires that its suppliers demonstrate that they are also in compliance. Eurotech is proudly in compliance with the Dodd-Frank Wall Street reform which specifically addresses this issue, inherent in the protection of human rights. We are currently exploring ways we can monitor our suppliers and verify throughout the supply chain that this is enforced.



#### Company Example

Respecting human rights is equal to understanding the sanctity of personal safety and not only doing everything in one's power to avoid harming another individual, it also means taking steps to help protect those more susceptible and likely to be victimized. It is increasingly clear that women remain a vulnerable target even years after adopting legislation that aims to protect them. Eurotech uses its technology to develop products that not only keep people safe but more importantly, empowers and connects them. For example, Eurotech engineers are currently developing a "Smart Bracelet" tailored to women and designed with their safety in mind. Among its many functions it will feature GPS tracking and a distress alarm should its wearer feel threatened or in danger. It will also incorporate the newest, smartest technology such that even if an attempt is made to steal it, disarm it or break it, it will continue to send data and safeguard the wearer.



#### **SECTION: LABOUR**

Principles 3-6 discuss labor and the basic fair treatment of employees. The right to work for many is a right as basic as the right to liberty or equality under the law. Eurotech agrees wholeheartedly and has always supported its employees. We have long recognized that a well-protected, satisfied workforce is motivated and more productive and absent less. Our employees are important stakeholders and it is our obligation to create a stimulating environment where they feel respected, protected and they are opportunities for professional growth. Moreover, Eurotech understands that in order to produce the best products it must employ the best people. Having the best people means having the largest pool to choose from without regard to nationality, race, gender, age or sexual orientation. Since its inception Eurotech has sought out the highest quality workforce, experts in their field that will create the solutions for the challenges today's world presents.

Eurotech's interest in its employees does not end with recruitment. Eurotech does much to maintain a high level of satisfaction and offer support. In 2017 we proudly celebrated 25 years of activity at our base and headquarters in Italy. We marked the occasion with a special dinner that brought together direction, production staff, marketing and administration employees, as well as our technicians and engineers to reminisce as well as look forward to the future and what we will achieve. Employees listened while CEO Roberto Siagri discussed Eurotech's transformation from a small start-up to the global player it is today thanks to the efforts and contribution of everyone present. It was a special honor that was shared with everyone in the Group as, company shirts were created celebrating the accomplishment and given to all employees at all of our locations.

Further, Eurotech continues each year to recognize its employees with awards and honors throughout its facilities. Formation is a key component of job satisfaction and Eurotech encourages its employees to participate in formation activities for their personal and professional growth. In fact, in 2017 it began a web-based program that is available to all employees and includes a wide range of topics. Employees are able to browse the catalog of courses and choose those that most apply to them and their area of expertise. Employees are also encouraged to continue their formal education and contributes by partially or totally funding their studies and allowing them to miss work in order to be present in the classroom. In 2017 in Amaro two employees decided to continue their higher education by embarking on Master's programs in their field of expertise, all thanks to Eurotech's help and support. Our



global workforce is a great source of pride for us and we do our most to enable our employees to fulfill their ambitions and become the best in their field.

Eurotech understands the pressures of moderrn life and balancing home-life with work. With this in mind every year Eurotech tries to find new programs and initiatives to reinforce its commitment and make life easier for its associates. In addition to its in-office grocery delivery service, Eurotech Italy partnered with a major grocer to provide discount coupons for Eurotech employees.

Interest and participation in activities and programs designed to improve the workplace environment are not limited to our Italian headquarters. Every company in the Group is encouraged to find ways to further involve workers and demonstrate Eurotech's engagement. For example, in 2017 Advanet, Eurotech's subsidiary in Japan, invited employees to bring their children to work where they experienced first-hand their parents' professional environment and they were treated to a special visit by Eurotech founder, Roberto Siagri.

In addition, collective bargaining is a powerful tool for workers to negotiate issues like salary and safety and a variety of other issues important to employees. Eurotech direction continues to support these activities and works closely with these organizations to guarantee its employees their protection under the law and give them a voice to express their views or concerns.

Principle 3	Businesses	should	uphold	the	freedom	of	association	and	the	effective
	recognition of the right to collective bargaining;									

**Principle 4** The elimination of all forms of forced and compulsory labor

**Principle 5** The effective abolition of child labor; and

**Principle 6** The elimination of discrimination in respect of employment and occupation.

#### Company commitments:

- Eurotech is absolute in its adherence to labor laws, particularly those that represent health and safety concerns.
- Employees at all Eurotech locations are trained regarding workplace safety and there are regular checks and audits that guarantee that procedures are respected.

#### Company Example

Eurotech operates in full cooperation with the existent labor laws where it operates. That does not mean that its commitment ends there. Eurotech is extremely proud if its inclusive and non-prejudice culture. We employ people of all religions, races and without regard to their sexual orientation or gender. In fact, Eurotech's 2016 COP reported that it was working to increase



the overall number of women in its organization as well as increase the number of women in direction and technical positions. As promised a third woman was selected for Eurotech's audit board balancing representation at senior levels and demonstrating Eurotech's commitment to equality. In addition, at our Italian facility, a woman was recently promoted to production supervisor, the first time in its history that a woman has held this position. Finally, reorganization in early 2017 at our site in Maryland placed a female at the helm of management assigning her the highest on-site position.

#### Company Example

Collective bargaining is a means for employees and company decision makers to come together and discuss issues. Eurotech regularly engages with labor representatives at its facilities. This year contract negotiations included new benefit options and Italian workers were able to choose from free gas, free grocery or free cinema coupons.

#### **COLLECTIVE BARGAINING**

- All Eurotech employees are represented collectively within each organization by a representative that may be an employee of that company or by an external organization.
- Representatives meet regularly with direction to discuss labor issues and bring forth the
  questions and concerns of those they represent. Workers are encouraged to meet with
  their representatives when there is an issue and they never face discrimination or
  negative repercussions for their actions.
- Where collective bargaining organizations are present and active, Eurotech is compliant
  and meetings are scheduled during the work day and meeting space is offered on the
  premises to accommodate assembly.



#### **SECTION: ENVIRONMENT**

The Environment and its protection is the subject of principles 7, 8 and 9. Eurotech must not boast that it is technology leader and pioneer in M2M and Cloud Computing if it does not apply these technologies and this innovation in its own operations. Eurotech states proudly and clearly in its Code of Ethics that it is constantly seeking new ways to lessen its environmental impact and to adopt measures to avoid pollution and accidents detrimental to the environment. To keep this promise Eurotech uses renewable sources of energy whenever possible at all its facilities. Recycling is an important aspect of our environmental policies. Systems exist throughout our sites that help monitor facility use in order to avoid wasteful and needless energy consumption for heating and lighting. Our travel policies, our new web-based formation program, and our company vehicle fleet management all confirm our commitment to the environment and sustainability.

Eurotech's most important contribution towards sustainability lies in its product catalog. Our products and services offer solutions that will help companies, both large and small, limit waste and pollution while at the same time increasing efficiency, quality and customer satisfaction.

**Principle 7** Businesses should support a precautionary approach to environmental challenges;

Principle 8 Undertake initiatives to promote greater environmental responsibility; and

**Principle 9** Encourage the development and diffusion of environmentally friendly technologies

#### Company commitments:

- The environment is an important priority for Eurotech and again addresses this principle
  of the Global Compact in its Code of Ethics. It states, "None of our facilities, including
  both production and design facilities, are located in protected areas." In fact, our
  facilities worldwide are designed "to minimize environmental impact due to our
  activities."
- High efficiency is at the core of all systems in our establishments including, air conditioning, lighting and thermal insulation.
- Eurotech employs renewable energy sources at some of its facilities and is working to expand its use.



• Eurotech encourages recycling at all levels from respecting electronic and electric waste to recycling bins in all of its break rooms worldwide.

#### Company Example

Eurotech's new web-based formation program offers its employees a vast library of topics that includes specific technical courses aimed at our R&D staff to more broad topics like public speaking or writing skills that could be of interest to everyone across all departments. A web-based approach to formation that includes tutorials, live training and text materials allows every employee the opportunity to participate while eliminating the need for travel and time away from home and the office. This not only serves the environment it serves our employees as well. They are able to fulfill their professional and personal ambitions without having to spend days away from home and their families.

#### Company Example

Eurotech's new virtual printing system is not only convenient for its employees, as it allows them to access materials sent to print from any printer, rather than a specific printer, it is cost efficient and environmentally friendly. It's default settings include printing on both sides of the page and in black and white, it also goes into stand-by mode automatically after ten minutes of inactivity. Moreover, it is equipped with software that eliminates documents that have not been printed after two days. This means that documents are not printed until the employee actually goes to the printer and, with their company badge, recalls the document and enables its printing. Studies reveal that this software can reduce paper consumption by 25%.

### PRODUCTS AND SERVICES: OUR BIGGEST CONTRIBUTION TO PRESERVING THE ENVIRONMENT

It is not only through our facilities and production processes that Eurotech considers the environment. Eurotech technology and Eurotech products are at the heart of our commitment to sustainability and represent the area where we can have the biggest impact.

Machine to Machine (M2M) and Internet of Things (IoT) projects follow a common technological paradigm: intelligent devices, seamlessly connected to the Internet, enable remote services and provide actionable data. Eurotech develops and offers the technical building blocks required to assemble distributed systems of devices and sensors which are effectively connected to IT infrastructures. One of the most important aspects of the "Internet of Things" (IoT) vision is that smart objects communicate effectively with each other and with applications residing in data centers or the cloud. Eurotech develops and offers the technical building blocks required to build distributed systems of devices and sensors to be effectively interconnected with IT



infrastructures. Eurotech solutions are a combination of hardware, firmware, operating systems, programming frameworks and external infrastructure that enable customers focus on their core activities.

Here are just a few products from our catalog that will improve operations bringing efficiency and reliability and whose technologies are also at the heart of Industry 4.0.

#### **IoT Gateways**

M2M / IoT Gateways close the gap between devices in the field and the Cloud, where data is collected, stored and manipulated by business applications. The M2M / IoT Gateways, instantiate a bidirectional communication between the field and the Cloud; moreover, high-end IoT Gateway offer local processing and storage capabilities to provide offline services and almost real time control over the devices in the field. Multi-Service IoT Gateways are ideally suited for M2M applications to connect sensors, actuators, and devices to the business enterprise. Key functionalities include a wide array of secure connectivity solutions through cellular, Wi-Fi, Bluetooth and Zigbee networks.

**DynaGATE 10-12 -** The DynaGATE 10-12 is a Multi-service IoT Gateway that has been designed to deliver LTE connectivity with 2/3G fallback to automotive and lightly rugged applications. Distributed and supported by Eurotech, ESF adds advanced security, diagnostics, provisioning, remote access and full integration with Everyware Cloud (EC), Eurotech's IoT integration platform (separately available). Used stand-alone, or in conjunction with EC, the DynaGATE 10-12 provides a fast go-to-market solution for IoT projects of any size.

**BoltGATE 20-25** - The BoltGATE 20-25 is EN50155 certified and is designed to exceed the requirements of rolling stock in the Tx temperature class. It is extremely rugged and suitable for any application where consistent performance and reliability are a must. At 30W max, the BoltGATE 20-25 is a fanless, compact unit that provides a large number of communication and I/O interfaces, protected USB, and video and optional audio line in/out. It also features a wide range of connectivity capabilities including optional internal cellular modems (2G/3G/LTE), Wi-Fi, Bluetooth Low Energy, and a dedicated internal GPS with Dead Reckoning.

#### **Mobile Systems**

Eurotech's strategy is to define and penetrate new and emerging markets through innovation and cutting-edge research to transform scalable mobile and wearable computer solutions.



Eurotech offers a wide range of embedded products for mobile applications in the Transportation, Industrial, Healthcare, Defense, and Energy markets.

They include: Mobile Computers, Mobile Routers, Mobile Networking Systems, and High performance Embedded Systems.

BoltCOR 30-17 - The BoltCOR 30-17 is a fanless EN50155 certified server that is designed to exceed the requirements of rolling stock applications; it is extremely rugged and suitable for any project where consistent performance and reliability are a must. The BoltCOR 30-17 features powerful data processing capabilities and is extremely reliable; conformal coating, a vent-free design and a sturdy build add extra protection to a compact, rack-mount chassis. The BoltCOR 30-17 features a wide range of radio and wireless capabilities, including cellular carrier precertified system configurations. Customization options include internal and external global cellular modems, dual modem/dual SIM configurations, MIMO Wi-Fi, Bluetooth Low Energy, and a GPS with Dead Reckoning. The BoltCOR 30-17 affords unprecedented system configurability: off-the-shelf configurations and build-to-order variants out of a palette of CPU, power supply, memory, storage and I/O subsystems options. The BoltCOR 30-17 offers long term availability and support programs that ensure continuity of supply and customer service.

#### **Mobile Networking**

Eurotech's networking solutions deliver secure data, voice, and video communications to stationary and mobile network nodes across wireless networks. These rugged devices enable a variety of situational awareness and net-centric applications, including in-vehicle wireless Internet access, Voice Over IP (VoIP), streaming video surveillance, and smart vehicle diagnostics/maintenance.

**BoltMAR 20-28 -** The BoltMAR 20-28 delivers a Cisco 5921 Embedded Software Router in a rugged EN50155 device, enabling resilient radio connectivity on vehicles. It is the building block for on-demand networking in a wide range of applications, including commercial, industrial, homeland security, emergency response and mobile IoT. Installed on a vehicle, the BoltMAR 20-28 enables self-forming and self-healing networks that support a wide range of traditional and IoT services, such as remote sensor management, vehicle to vehicle communications, passenger high speed networks, on-board and track-side crew communications and much more. Designed for harsh environments, it ensures the highest level of physical resilience, by employing rugged circular connectors and a fanless IP66 design that allows



operation in a wide temperature range ( $-40^{\circ}$  to  $+70^{\circ}$ C). The Class S2 power supply is very reliable and isolation of serial and digital I/O ports adds extra protection to the system.

Professional Services are available for the BoltMAR 20-28, such as design personalization and inclusion of new features and technologies, additional certifications, system development and production.

For edge and fog computing scenarios, the BoltMAR 20-28 includes Everyware Software Framework (ESF), for IoT gateways. Distributed and supported by Eurotech, ESF adds advanced security, diagnostics, provisioning, remote access and full integration with Everyware Cloud (EC), Eurotech's IoT Integration Platform.

Features include WAN optimization for improved performance and radio-aware routing (RAR), to manage critical traffic under degraded conditions, such as when radio link quality is compromised.

#### **Embedded: Single Boards Computers and Small Form Factors Boards**

Eurotech Embedded Boards are designed to match the needs of extremely demanding customers. We have a complete portfolio of boards and embedded modules with cpu processor based on the state of the art architectures. The boards are either cpu boards or single board computer, available in many form factors and very low power modules. Our expertise in this area extends over 20 years, enabling us to offer processor boards in industry standard and customer-specific form-factors as well as processor boards pre-installed with industry leading operating systems. We guarantee supply for the long term which means our customers can count on the reliability and quality of our solutions without fear that our trusted solutions will longer be available as their operations grow. Not only do our boards feature easy-to-use hardware and operating system Development Kits, we offer technical expertise and product guidance in multiple languages.

Our complete portfolio of embedded processor, communication and I/O modules, is suitable for a range of applications including Industrial, Transportation, Defense, Infotainment and many others.

We also offer a wide range of ready-to-run low-power Development Kits which pair your chosen embedded processor board platforms with the most popular embedded operating systems. Our engineering teams can develop tailor-made boards using the same professional design approach that is used to create our standard portfolio.



COM Express CPU-162-23 - The CPU-162-23 brings the computational performance and RAM capacity of a server to the field. It supports extended temperature range (-40 to +85°C) and ECC memory to operate reliably in industrial and rugged applications. Combines up to 16 cores with a rugged design to enable High Performance applications even in the field. Provides the foundation for Eurotech Professional Services that span from carrier board development to complete system design, certification and manufacturing.



#### **SECTION: ANTI-CORRUPTION**

The final principle tackles corruption in business. Eurotech believes strongly in transparency and operating ethically and honestly. Not only are production processes subject to regular audits and inspections but, also financial reporting is subject to periodic examination and represents one more way Eurotech demonstrates its unfeigned efforts to combat corruption and guarantee transparency to all its stakeholders. In addition, it subscribes to a wide variety of certification standards to confirm their commitment to anticorruption and their dedication to moral and fair practices.

**Principle 10** Businesses should work against corruption in all its forms, including extortion and bribery

#### Company commitments:

- Eurotech is firm in its stand against corruption of all forms. Again referring to its Code it is position is clear, "The Company prohibits fraudulent practices and conduct, corruption or attempts to corrupt, favoritism and, more in general conduct against the law and the rules established in this Code." Its business ethics section of the Code specifically outlines behaviors which are prohibited and compromise the integrity and stated goals of the Company.
- Each Eurotech entity is required to follow the code and must provide training to employees to elaborate and clarify its policy.
- The code expands its policy on business ethics by including a section dedicated to Public Administration. It states, "relations with Public Administration are based on the principles of correctness, transparency and co-operation as well as on rigorous observance of applicable legal requirements and regulations. They are such as not to jeopardize the Company's integrity or reputation".

#### Company Example

In addition to its environmental certifications, Eurotech is also ISO/IEC27001 certified. Not only does this certification guarantee data security through the various management systems it mandates such as, Access Control, Operating System and Application Control and Network Security it also goes a step further to discourage fraudulent and criminal behaviors by including Asset Management policies. These policies require an Asset Register that clearly identifies and documents all company assets; it also includes designated owners and custodians and must be regularly updated.



#### Company Example

Another initiative promoting anti-corruption and Information security was enacted recently at Eurotech headquarters in Italy when, they became the latest company in the Group to introduce new IT security measures by requiring the use of a company badge in order to access Eurotech printers. The system requires employees to recall the document sent to print, by use of their badge, and then enable its actual printing. This avoids printed documents from being left in the printer for anyone to access. When printing sensitive material only those meant to be in possession of such information will be able to access it. It may seem like a small step but IT security is constantly evolving as new technologies are developed and vulnerabilities are continually identified.

#### Company Example

Eurotech is in compliance with D.Lgsn. 231/2001 which relates to corporate liability and establishes company culpability when crimes are committed for its benefit or interests. It is constantly updated in response to societal and regulatory evolutions. Eurotech takes corporate liability seriously and maintains its transparency by following these updates and making sure that its policies are always in-line.



## RESEARCH, COMMUNITY INVOLVEMENT AND RECOGNITIONS

Eurotech has always been committed to supporting research. It does so by investing in its own R&D department so that its product catalog boasts the highest technologies and newest innovations. In addition, it also supports and helps fund research and lends its expertise in collaboration with other companies, universities and European projects. In fact, 33% of the Group staff is dedicated to research activities. Eurotech works in close collaboration with the Universities of Milan, Trento, Trieste and Udine as well as IRST (Institute for Scientific and Technological Research and Sissa (International School of Advanced Studies) The fruits of our labor lie first in our cutting edge products and services but numerous prizes and our partnerships prove and augment their value.

#### **RESEARCH ACTIVITIES**

2017 saw the conclusion of the multi-partner, European Union backed DEEP-ER project after three and a half years of intense research and development. DEEP-ER, and its predecessor DEEP, are among Eurotech's most ambitious projects and demonstrate that not only are we on par with the biggest players in the industry, our technologies and our cutting-edge custom solutions used in the project represent some of the greatest advances in HPC, including direct hot water cooling.

The DEEP project began in 2011 and represented a European response to the Exascale challenge. Exascale computing refers to the increase in speed of the fastest supercomputers in use today. Supercomputers require not only maximum speed in order to run various applications that can require a billion billion operations per second, they require substantial memory with the ability to store and read vast quantities of data.

The project developed an innovative architecture for heterogeneous HPC systems based on the combination of a standard HPC cluster and a tightly connected HPC Booster built of many core processors. DEEP-ER went on to evolve this architecture to address two significant Exascale computing challenges: highly scalable and efficient parallel I/O and system resiliency.

Eurotech's main contribution to the project focused on the hardware aspect, which required our engineers and hardware experts to help develop a prototype that would capitalize on advances in



hardware components, exercise a unified network, and incorporate new storage technologies. Creating a hardware architecture that would be completely flexible and thus allow easy upgrading or implementing entirely new technologies was the ultimate goal of this part of the project.

To evaluate the DEEP-ER concept and to prove its programmability, 7 real-world HPC applications were ported to the DEEP-ER system. They served to test the system, to compare its performance with respect to standard architectures, but obviously also to propose improvements to the system's hardware and software. They formed an integral part in the DEEP and DEEP-ER Co-Design efforts.

Having concluded its role in the project, Eurotech now looks to apply the knowledge acquired from the partnership to develop new products and services that will take advantage of the exclusive hardware developed with advanced design and cooling as well as exploit the power of exascale computing.

Arrowhead Project: Began in 2013 and addresses efficiency and flexibility at the global scale by means of collaborative automation for five application verticals. That means production (manufacturing, process, energy), smart buildings and infrastructures, electro-mobility and virtual market of energy. The Arrowhead Framework provides an architecture for building IoT based Automation systems. The architecture features a local cloud approach where real time automation, IT security, system scalability and engineering simplicity are critical requirements. A local Arrowhead Framework can provide improvements and guarantees in the areas of real time data handling, data and system security, automation system engineering, and scalability of automation systems when compared to a global cloud. Eurotech is currently involved in the presentation of Arrowhead project follow-up oriented to more higher TRL levels in the context of ECSEL Innovation Action call.

Contrex It has been the rule that mission and safety critical services of Systems of Systems have been running on dedicated and often custom designs HW/SW platforms. In the near future such systems will be accessible, connected with or executed on devices comprising off-the-shelf HW/SW components. Contrex enables energy efficient and cost ware design through analysis and optimization of real-time, power, temperature and reliability with regard to application demands at different criticality levels. To reinforce European leadership and industrial competiveness the CONTREX approach is integrated into existing model based design methods that can be customized for different application domains and target platforms. Contrex focuses



on the requirements derived from the automotive, aeronautics and telecommunications domain and evaluate its effectiveness and drive integration into existing standards for the design and certification based on three industrial demonstrators. The economic goal is to improve energy efficiency by 20% and to reduce cost per system by 30% due to a more efficient use of the computing platform.

Agile will deliver a modular IoT gateway for enabling various types of devices (wearables, home appliances, sensors and actuators, etc.) to be connected with each other and to the internet. The modularity will enable the support of various networking interfaces and technologies for communication with a wide range of devices and the support of different connection mechanisms to the internet based on user needs and the different use cases. AGILE will create an ecosystem of IoT applications that can be shared between users and developers leveraging existing initiatives by key stakeholders in this domain. AGILE users will be able to install IoT applications that run on the gateway and allow the management of connected devices the processing of data, as well as the communication with external services.

#### PARTNERSHIP AND STRATEGIC COLLABORATIONS

- Legambiente FVG and A.L.P.I. chose Eurotech's environment-monitoring systems for air analysis Project Genki aims to monitor the air quality in selected sensitive locations in order to promote knowledge and awareness among citizens regarding the environment in urban contexts. Eurotech, as technology partner, provided two ReliaSens monitoring systems for free in the initial phase of the project.
- Eurotech and Vintech partner to provide Industrial IoT and Smart City solutions in India for air analysis Chintamani Lele, Director at Vintech, commented "Team Vintech had first interaction with Team Eurotech a year ago, and immediately realised, that looking at the future trends and prospects of IoT, they must have a technology partner like Eurotech for the Indian markets. With Eurotech's technology products like Multi-service IoT Gateways, Passenger Counters, Environmental Sensors and the Everyware Cloud IoT integration platform, Vintech aims to address the fast growing market of Industrial IoT and Smart City Projects in the first phase. It aims to take the Eurotech technology across the length and breadth of its customer base in India, and also in newer markets." Moreover, Eurotech CP&MO Giuseppe Surace stated, "Vintech, thanks to their role as leading IT service provider, is the ideal partner to



establish Eurotech's presence in the Indian market. This partnership is further confirmation of Eurotech leadership in the IoT industry on a global scale and its willingness to continue to provide innovative end-to-end horizontal solutions for different verticals".

- Eurotech and Data Market partner to provide Industrial IoT Solutions in Turkey "Eurotech IoT Gateways and Everyware Cloud solution perfectly fit into and contribute to our "Compass Connected and Smart" platform, which enables machine manufacturers to monitor, analyze and manage their products over the cloud. Eurotech, being a reputable global IoT gateway and platform vendor, has well suited solutions to our Industry 4.0 strategy and offerings." said Önder Özturan, Data Market Business Development Director. "Data Market aims to widen its footprint to broader geographies with vertical solutions and we believe that partnering with Eurotech will accelerate our business growth and success".
- Eurotech Joins IoT Evolution Expo as Platinum Sponsor Columbia, Maryland January 26, 2017 Eurotech, a long-time leading provider of embedded systems, M2M end-to-end solutions and one of the few global leaders in Internet of Things (IoT) enablement, announces it is a Platinum sponsor of the IoT Evolution Expo, to be held February 7-10, 2017, at the Greater Ft. Lauderdale/Broward County Convention Center. IoT Evolution is the leading educational and networking forum for the IoT ecosystem and for any company looking to understand how to develop and implement IoT solutions that drive measurable results and business transformation. Our participation in IoT Evolution is key to our position as a leading provider of IoT solutions ranging from smart edge devices to IoT gateways to our Everyware Cloud infrastructure. Our goal is to enable companies to deploy IoT solutions that gather and act on valuable data to make key business decisions and increase their competitive advantage.

#### **AWARDS**

- **2016 IoT Excellence Award -** IoT Multi-service Gateway ReliaGATE 20-26 has received the 2016 IoT Excellence Award presented by TMC and Crossfire Media. The 2016 IoT Evolution IoT Excellence Award honors innovative products that support the availability of information being deduced, inferred and directly gathered from sensors, systems and anything else that is supporting better business and personal decisions.
- IoT Infrastructure of the Year "Award along with The Technology Partner Red Hat Along with Red Hat, the world's leading provider of open source solutions, the "IoT





Infrastructure of the Year" Award for the Everyware Cloud software platform. The Awards are designed by Computing from Incisive Media, to celebrate the achievements of the IT industry's best Big Data and IoT companies, solutions, products and personalities.



#### **FUTURE GOALS**

We recognize that although much is being done to support the 10 basic principles of the Global Compact we must not become complacent in the idea that we are doing our part and that is enough. As a technology company we are a locus of innovation and it is our duty and passion to provide solutions to the problems facing our world. Moreover, we take pride in our ability to foresee future challenges and we aspire to resolve them.

It is no surprise then that Eurotech has already begun thinking about the future and what we can do to promote sustainability in our own practices and what we can do to support other businesses and organizations as they look to adopt more sustainable processes in their operations.

We have great plans for the upcoming year as well as the long term. Here are a few initiatives that Eurotech pledges to support and actions we plan to take during the current year and beyond.

#### **Internal Operations:**

- Continue working to balance gender representation throughout all Eurotech facilities and at all levels of employment
- Continue commitment to education by expanding intern possibilities for students at all levels
- Expand formation possibilities by exploring new digital opportunities and increasing the library of materials available to employees
- Expand use of renewable energy at our facilities
- Offer seminars and workshops for members of upper and middle management regarding sexual harassment and other relevant topics
- Evaluate measures designed to further protect whistleblowers and encourage reporting of any incidents/accidents at all of our locations worldwide
- Seek out measures that guarantee our suppliers are operating sustainably and that their processes are verifiable

#### **External Relations:**

- Continue commitment to research and renew ongoing projects and look for new projects to lend our support through funding and expertise
  - o Ongoing projects have been confirmed for 2018
  - Project Genki brings together local schools and the Regional environmental organization to record environmental data
  - Students from the ELIS school in Rome will be collaborating with Eurotech R&D to study Radar Passive Audio technologies and their application with Wind turbines



- Continue to seek out partnerships with communities, local governments and organizations in order to spread sustainable technologies
  - Develop new test using sensors to help diagnose tuberculosis faster in those areas where it continues to be a deadly disease
  - Eurotech, in collaboration with the Italian highways, is exploring the use of IoT technology to improve highway safety
- Expand community involvement by finding programs and initiatives that unite business and the local community
  - Eurotech is currently working with emergency service teams and uniform producers to help develop a new fabric with increased and improved performance to help guarantee the safety of emergency operators, like fire fighters and chemical spill clean-up
- Continue to develop products that contribute not only to collective wellness but also personal wellness and safety
  - Development of "Smart bracelet" designed to track movements and activate SOS call in case of emergency
  - o Eurotech is exploring the use of IoT devices to measure glucose levels in the blood thus eliminating the use of needles and drawing blood samples.

There is much work to be done and fortunately Eurotech has the technology, the tools, and above all the determination to contribute to a world that is sustainable and equitable.



#### CONCLUSION

The future looks bright. The technologies invented and employed during the previous industrial revolutions brought about immense change and well-being. Industry 4.0 has the power to do this and its greatest feature is that these changes can be for everyone. Forecasts by Price Waterhouse Cooper confirm that the future is digital and companies who continue operating under the old paradigm will not be competitive and survive the Industry 4.0 revolution. In fact, their research shows that currently just 33% of companies view their level of digitalization as high while, looking to the near future just 2020, that number more than doubles to over 70%. That means companies will increasingly improve and adopt digital strategies. This translates to US\$421 bn in cost reduction and US\$493 bn in increased annual revenues over the next five years according to PWC.

Eurotech technologies can provide a framework for companies to begin more sustainable practices. We look forward to being not only a notable example and leader, we will serve as a reference point and solutions provider for companies, agencies and governments committed to improving their operations and supporting sustainable development.



[this page intentionally left blank]

