

**EDF** focus We speak to EDF Chairman and CEO, Luc Rémont SEE P3



judges The build-up to the WNE Awards SEE P4



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NOVEMBER 28 2023 // PARIS NORD VILLEPINTE





# DINING OUT ON NUCLEAR DREAMS

NE 2023 got off to a strong start last night with the WNE Gala Dinner taking place in the historical Parisian venue of Pavilion d'Armenonville. Sponsored by Equans, the event brought together more than 440 international representatives from the global nuclear community for an eventful evening and unique networking opportunity. Opening remarks were given by WNE President Sylvie Bermann, alongside GIFEN President Xavier Ursat, as they extended a warm welcome to their guests from all over the world for this kick-off on the eve of WNE. The 2023 edition of WNE, its fifth, has attracted a record number of exhibitors, including 17 national pavilions, and filled the hall at Paris Nord Villepinte to capacity. Organisers expect more than 20,000 attendees over the event's three days.

Talking Nuclear - the evening of networking over dinner was a grand affair - and now it's time to get down to business

**EDITORIAL** Sylvie Bermann, Ambassador of France and President of WNE

## NEW DAWN FOR NUCLEAR AS THE GLOBAL MINDSET EVOLVES

elcome one and all to WNE 2023. We are delighted once again to play host to the world's civil nuclear industry for three days of discussions, presentations, learning and networking.

I would like to extend a personal thanks to all our exhibitors and sponsors, without whom there would be no WNE. It is gratifying to see so many familiar faces among this year's record participation: thank you for your confidence and loyalty. To those exhibiting for the first time, welcome.

Our exhibition hall is full to capacity, testament to the fact that people value the face-to-face interaction of a live show, and the business opportunities that come with it.

It is clear that nuclear energy is gaining traction around the world in a context of climate change urgency and geopolitical evolution. This context has prompted many governments and authorities to consider, or reconsider, the place of nuclear in their energy strategy and low-carbon energy mix. It truly is 'rising to the energy and

environmental challenges' – this year's theme. This is our fifth WNE and it marks an important change in tone for the exhibition. We look back on WNE 2021 as a transition from what started as an industry-based event to an event with a broader vision reflecting changes we see in society's attitude to nuclear.

Around the world, we hear talk of nuclear in a positive light. What this reveals is a willingness to discuss openly why we should develop more nuclear energy projects. It inspires us to encourage high-level speakers to outline their vision of nuclear's part in reaching climate and sustainability targets.

As WNE completes its first decade, we find our event growing in stature and holding its place in an increasingly crowded

Our fifth WNE marks an important change in tone. We look back on WNE 2021 as a transition from what started as an industry-based event to an event with a broader vision reflecting changes we see in society's attitude to nuclear...

calendar of important global events. In September, leaders met in Paris to

create Roadmaps to New Nuclear, and overlapping on our final day is the start of COP 28 in Dubai.

It is significant that we sit between these two policy-focused events. It reinforces that our industry is ready and able to do its part, to

accept its responsibility to deliver the solutions envisaged by our leaders, demanded by our customers, and essential for the future of the planet.

WNE is part of the world-wide continuum of efforts to address energy and climate challenges – definitely the place to be.

Our programme this year focuses on key attributes for success: innovation, entrepreneurship and attractiveness. We are especially pleased to be welcoming more than 700 students: they are our industry's future.

I look forward to a stimulating and thought-provoking exhibition, and wish you success in achieving your WNE goals.

#### **NUCLEAR POWER**

A key energy to a worldwide low-carbon future



10:30-11:15 **HIGH-LEVEL SESSION** Main Stage

**Moderator** Agnès Pannier-Runacher, Minister of Energy Transition Panelists Rafael Mariano Grossi, Director General, International Atomic Energy Agency (IAEA); Thierry Breton, European Commissioner for Internal Market, The European Commission; Mary Ng, Minister for Export Promotion, Canada; Josef Sikela, Minister of Industry and Trade, Czech Republic; Dan Dragoș Drăgan, Secretary of State for Energy, Romania

**General remarks on COP28 and** financing net-zero technologies Agnès Pannier-Runacher

**Nuclear supply chain** security and innovation Thierry Breton; Mary Ng; Dan Dragoş Drăgan

**Skills** 

Rafael Mariano Grossi; Josef Sikela













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**SULZER ○** VEOLIA







#### **WNE DAILY**

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## **CHALLENGES REINFORCE THE IMPORTANCE OF NUCLEAR ENERGY**



Hear Xavier Ursat's keynote

address at 9.30am tomorrow

in a dynamic context for our industry. Climate and energy challenges have reinforced the importance of nuclear power in France and in an ever-growing number of countries, as you will note over these three days. In France, our industry is benefiting

from a national nuclear programme, the like of which has not been seen for several decades, encouraging personal involvement, investment and innovation. In the coming years, France will operate a large nuclear fleet, extending the lifetime the construction of new reactors both large and SMR, in fuel facilities and innovative reactors, ensuring safety first.

WNE is leading the future for our industry, from operators to suppliers, and it is also an opportunity to develop partnerships in countries considering nuclear energy. Our industry is clearly looking ahead and fully committed to meeting its ambitions. Welcome to Paris and have a very

exciting WNE! **Xavier Ursat** President of GIFEN

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## Hands across the Atlantic

anada returns to WNE to promote its world-class nuclear industry known for it extensive experience in the design, construction and servicing of reactors at home and around the globe. It is represented jointly by the **Canadian Nuclear Association (CNA)** and Organization of Canadian Nuclear Industries (OCNI).

Canada's pavilion (C/D004) groups 20 companies from across the country's nuclear sector hoping to "build on industry momentum and connect with the global industry at WNE". The pavilion hosts an opening reception today from 11am-noon.

Mary Ng (right), the federal minister of Small Business, **Export Promotion and** International Trade, is expected at the show, along with ministers from Ontario, Brunswick and Saskatchewan - three of the four provinces currently working to

develop SMRs Over at the US pavilion (D011), 12 companies are represented, all aiming to "showcase the innovative products and services offered by US civil nuclear energy companies". A representative explained that WNE is one of the best forums for the US to "partner with countries and help them achieve collective goals".

A reception is planned at

the US pavilion today from 4:30-6:30pm. Dr Kathryn Huff (pictured below), US **Department of Energy Assistant Secretary** for Nuclear Energy, is expected to attend and give brief remarks to welcome participants.

Finland (L085) has been a presence since the first WNE. A FinNuclear spokesperson says Finland "intends to strengthen existing relationships and acquire new connections". This year has been a milestone for Finland's nuclear industry with the completion of Olkiluoto 3 NPP and public buy-in for nuclear energy reaching 68% - the highest since surveys

began in 1983. "Nuclear business

opportunities are opening up not only in Finland, but also in Sweden, Norway, Estonia and the entire Baltic Sea region," the spokesperson

All of this will be showcased at the next Nordic Nuclear Forum in Helsinki in May 2024. Newcomers this year include the Czech Republic, whose national pavilion (B137/8) is organised

by the Ministry of Industry and Trade. Its 17 exhibiting companies make it the third-largest of the global pavilions at the show. An array of expertise is on show, from R&D to energy start-up consultants, and from new software programs to innovative ways to process liquid radioactive waste.

Canadian companies aim to build on industry momentum and connect with the global industry at WNE...

#### inbrief

#### **SMALL IS DUTIFUL** WITH 3D PLUS'S SPID-X

3D Plus (M005) is showcasing its Spid-X gamma ray spectro imaging device. Designed in collaboration with the French Atomic Energy Commission (CEA), the Spectro Imager offers fine spectroscopic capabilities thanks to 3D Plus miniaturisation tech integrating a cadmium telluride (CdTe) crystal and very low noise application-specific integrated circuit (ASIC). The device can locate, identify and measure the energy level and dose of different sources of radioactivity in a nuclear environment. Small and lightweight, it is designed to deliver a fast and effective on-site diagnosis that can assist with decontamination.

#### TESTING STRAIGHT FROM ALABAMA

**Element Materials Technology** Huntsville Nuclear [E008] is making its WNE debut, sharing its experience in supporting nuclear qualification testing. A division of Element Materials Technology, it's part of the biggest testing company in the world with more than 270 labs across 32 countries. This division is based in Alabama, USA, and is a leading supplier of safety related parts and equipment - the sole global distributor of Yokogawa equipment.

#### **EIGHT DECADES OF TECHNICAL EXPERTISE**

ADES Technologies [M029] has been designing technical solutions for the energy sector for 80 years. For the first time, the French company is showing its products and solutions for the nuclear sector with brands including Auxim, Hydrauxim, Delta Delage, Term and Raflex.

## Everything you need to know about the global nuclear revival

ifteen European countries committed to nuclear power, mass construction in China, the reign of SMR/AMR in the US, Russia's export champion...

Nuclear power is everywhere on the planet. Everything is lining up to ensure that the atom responds to the energy crisis and meets the climate emergency. Find out more about the global nuclear revival in the report published by the French Nuclear Energy Society (Sfen), available from Stand H150.



Rémont says: "We will explore how

nuclear energy, with its ability to provide

reliable, low-carbon energy, is essential not

only for meeting environmental goals but

"By advocating for a robust nuclear

also for bolstering economic stability across

energy agenda, we're not just talking about

the future of EDF group; we're talking about

inspiring and involving the next generation

in shaping a resilient, autonomous Europe

that can lead by example in the fight

The theme of this year's exhibition

resonates strongly with Rémont. "This is a

stakeholders to demonstrate how nuclear

solving equation – it's central to it," he says.

Main Stage today at 15:45

energy is not just a part of the problem-

call to action for the nuclear industry and its

against climate change."

to site. Contact Ludovic Dupin, le directeur de ludovic.dupin@sfen.org

#### **MORE INFO** can QR code to go 'information de la SFEN,

#### editorial group, on the stand.

THAT DOES IT ALL

and talk to representatives of the

SAFETY CODES REACH

AROUND THE WORLD

Since 1978, AFCEN (D121) has been

technical rules to guarantee the level

driven by its mission to establish

of safety necessary for operating

nuclear reactors around the world.

Using industry feedback and cutting-

edge innovative tech, the company's

scope. Of the current fleet, 130 nuclear

reactors and research reactors were

designed or built using AFCEN codes.

WNE visitors can consult these codes,

PROTECTION PLATFORM

editorial groups (comprising 650

experts) continues to broaden its

inbrief

ABGX SAS (A037) offers a chance to experience its suite of slick, centralised radiation protection management software - ABGX. The platform pulls together all necessary data into an easy access UX that can respond to all risk management issues. Designed and developed with industry and nuclear professionals, ABGX simplifies radiation management in full compliance with regulations. Fully automated, the secure ABGX online solution is accessible anywhere in the world.

#### **AWARD-WINNERS ARE BACK WITH MORE**

Anvir Energy, a 2021 WNE Award winner in the Innovative Products and Services – SME category, is back at stand A057A. Two years ago, its SK-DIZI system scooped the show award; this year the company showcases Syscom instruments and Azur drones as part of its commitment to be the future of energy.

#### **UNIQUE RADIATION RESISTANT CAMERAS**

Ermes [M045], along with CEA has developed a unique radiation resistant electronic system in the form of resistant digital colour cameras for use in high gamma and neutron-exposed areas. The cameras - Fix Viza radiation resistant cameras, Viza PTZ cameras and Mato cameras – can be used in high-heat waste reprocessing plants, robotics, surveillance and more.

## **EDF AT FOREFRONT OF EUROPE'S NUCLEAR RENAISSANCE**

s the largest utility and nuclear operator in Europe, WNE sponsor EDF is committed to leading the charge for the nuclear sector. By driving innovative reactor projects, extending the life of existing nuclear plants, and nurturing a new generation of talent, the business aims to steer Europe towards a sustainable and independent energy future.

The business, a partner of WNE from the outset, considers the exhibition a critical platform for collectively shaping the future of nuclear energy.

"Our presence and sponsorship at WNE 2023 are testimonies to our belief in nuclear energy's vital role in a sustainable future and our commitment to being at the forefront of this dynamic and crucial industry," says Chairman and CEO Luc Rémont.

"By sponsoring this worldwide event, we not only create opportunities for collaboration and networking with industry leaders, policymakers and emerging talents worldwide, but also underline our dedication to nurturing a robust nuclear sector." EDF continues to set new benchmarks for

the industry and Rémont is excited to showcase its nuclear technology portfolio, which includes state-ofthe-art European Pressurized Reactors (EPRs) and its latest Nuward small modular reactor (SMR) solution. Rémont says: "These reactors represent a major technological advancement, offering

enhanced safety features, greater efficiency, and reduced waste." EDF is spearheading other critical activities for the industry. The business

is extending the life of existing nuclear plants, which will contribute significantly to Europe's energy supply It is paving the way in decommissioning

and waste management with cutting-edge techniques to handle nuclear waste more effectively and safely. And it is working to attract, train, and nurture future industry talent. "This focus on human capital is crucial, as these skilled professionals are the ones who will drive the industry forward," says Rémont.

Visitors to WNE 2023 can hear more this afternoon in the EDF-sponsored panel discussion, 'Enhancing Energy Independence by Leading the European Nuclear Renaissance'.

**Luc Rémont** EDF Chairman and CEO

the continent.

EDF sponsored panel discussion,

By advocating for a robust nuclear energy agenda, we're not just talking about the future of EDF group; we're talking about inspiring and involving the next generation in shaping a resilient, autonomous Europe that can lead by example in the fight against climate change...





2 WNE DAILY WNE DAILY 3



SAMA BILBAO Y LEÓN

#### RIGHT TIME FOR **NEW CATEGORY**

The new Societal and Sustainable Responsibility category comes at an important juncture, said panel chair Sama Bilbao y León, WNA directorgeneral.

"For a long time, we in the global North have been exclusively focused on CO<sub>2</sub> emissions, disregarding other important impacts.

"From the outset, our sector has been very aware of how we manage our waste, how we interact with the communities in which we operate or how we minimise environmental impacts."

She said selecting winners was not easy: "All entries had inherent accomplishments in the areas of societal and sustainable responsibility."

In the end, the jury focused on "applications that truly went the extra mile" and made an effort to consider the UN Sustainable Development Goals beyond the normal course of business.



**Innovation in Social and Environmental Responsibility** Sama Bilbao y León, directorgeneral, World Nuclear





**Operational Excellence** 

Aline Des Cloizeaux,

**Service Innovation** 

general manager, Myrrha INPO

Dr Hamid Aït Abderrahim,

director, IAEA

Product and

**Nuclear Power Division** 

**WNE INNOVATION AWARDS 2023** 

## **UNVEILED: WINNERS** REVEALED TONIGHT

afternoon at the show.

Since their inception in 2016, the awards have become one of the highlights of the exhibition, with the winners enjoying widespread recognition impact of a project, process or product.

he winners of the prestigious in the industry and beyond.

WNE Innovation Awards 2023 will This year a fifth category has been be announced in a ceremony this | added: Innovation in Social and Environmental Responsibility. Its judging panel, led by Sama Bilbao y León, directorgeneral of the World Nuclear Association, was charged with evaluating the positive

We asked the chairs of the judging panels for their thoughts on the award and this year's entrants...



winners in tomorrow's WNE Daily.



2023

#### **ALINE DES CLOIZEAUX** 'BACK ON THE WORLD STAGE'

Nuclear energy is back on the world stage, says Aline des Cloizeaux, chair of the judging panel for the Operational Excellence category: "As we work on stakeholder engagement, we're moving forward in multiple ways to find the key balance between long term low carbon and stable energy security of supply and affordability."

Des Cloizeaux, director of Nuclear Power for the Department of Nuclear Energy at the International Atomic Energy Agency (IAEA), says: "Our role as judges is always difficult, given the breadth and sophistication of the applicants. We're looking for something that's both transferable and that clearly improves performance or functionality." Her category had 29 entrants, with eight from SMEs and start-ups.

"Two previous winners are on judging panels this year, which illustrates the positive links the awards build," she said. "This then helps the industry demonstrate the kind of cohesion and alignment that helps to not only secure investment for next steps, but also to communicate more effectively with

"We are seeing more young and diverse talents moving into the sector. In fact, I'm hearing that working in nuclear is now definitely 'cool'!"

#### DR HAMID AÏT ABDERRAHIM

#### 'DARING' TO ENTER COMPETITION

Judging a category in the WNE Awards for the first time, Dr Hamid Aït Abderrahim was impressed with the number of entrants who "dared" to enter the

were the work of senior people who you would think had nothing to prove," he said. "It was nice to see them daring to go into a competition."

Dr Aït Abderrahim, general manager of Myrrha INPO in Belgium, chaired the judging panel for Product and Service Innovation. He admitted his background in research might have made him a tough judge. "In that environment, you need to be creative. Innovation means taking a non-existent

idea forward." In industry, incremental improvements in processes, products etc demanded creativity of a different nature. "We saw some creative approaches to problems that involved using innovative "Some entries were the work of one person, others | technology, integrating them to make products and services more effective and efficient. For me, this is fascinating."

> He and his fellow judges were impressed by the diversity of the profile of entrants, ranging from single individuals to company teams. "It really surprised me – something that's very positive.

"For me what is interesting is that people are not content with 'business as usual'. They are motivated – even just being nominated is a trigger to 'dare''





**Innovation in Knowledge** and Skills Management Melina Belinco. vice-president, Women in Nuclear (WiN)

**Nuclear Safety** Yves Desbazeille, directorgeneral, Nucleareurope

**MELINA BELINCO** 

#### QUALITY, **DIVERSITY** AND COMMUNICATION

The high quality and the wide diversity of the applications "need to be highlighted", said Melina Belinco, chair of the jury for the Innovation in Skills and Knowledge Management awards. Entrants made "huge efforts" to comply with judging criteria, express commitment and their unique, innovative contributions to skills and knowledge management.

"I was particularly surprised by the relevance given to the communication strategy: compelling tools, which considered an inclusive approach and a gender perspective, were utilized to convey a clear message on the importance of the initiative for diverse audiences," she said.

The awards are a "unique opportunity" to gain broad brand visibility but also an invaluable learning experience as companies have to meet high quality standards and present a solid application. She said "bright, unexpected paths are just around the corner" for companies which apply these qualities.

The nuclear sector requires a knowledgeable and experienced multigenerational workforce if it is to play a part in the solution to the climate crisis. "The preservation and transfer of knowledge from experienced professionals to the subsequent generations is crucial."

The award entrants, she said, make "key contributions" by integrating in their projects the systematic approach inherent to knowledge management.

**YVES DESBAZEILLE** 

#### INNOVATION **UNDERPINS** THE FUTURE OF **NUCLEAR ENERGY**

Every entrant in the Nuclear Safety category should be considered a winner, says Yves Desbazeille, director general of the European Atomic Forum (Nucleareurope) and chair of the category judging panel.

"The nuclear industry is safe, as this is embedded in everything that we do, all of the time," says Desbazeille. "These awards are a great platform for the newest ideas, the next generation of innovative initiatives, products, processes and ideas in the safety

"There are so many interesting proposals, with some demonstrating real breakthroughs.We are seeing a sea-change in public understanding and acceptance of nuclear energy - when we look to the younger generations, they fully grasp the existential threat of climate change and are receptive to the potentially transformative potential of nuclear energy."

In some people's minds, he believes, nuclear is considered an industry of the past but in reality it's awash with innovation, initiatives, new patents and transformative solutions that can solve global energy

"Innovation across the board helps make this happen.

"There are many impressive ideas in this category this year, some of which are now proof positive that truly innovative solutions can work not just in concept, but in the real world."

## **ORANO SEES RESULTS** OF RELENTLESS DRIVE **FOR INNOVATION**

The world is in a period of unprecedented energy and natural resource transition. Now more than ever it needs know-how in the transformation and control of nuclear materials for the climate and for efficient use of resources. Orano, a platinum sponsor of WNE from its inception, sees developing such know-how as its purpose, and brings that message to WNE 2023.

Jacques Peythieu, Orano's senior executive vice-president, Customer and Strategy, praised WNE for growing into "a unique focal point" for networking, meeting customers and partners.

"WNE provides a venue to capture new industry and market trends, to share and promote ideas with peers through the different panel discussions both within the nuclear industry and across sectors, and to demonstrate new developments and innovations in both our existing and new business lines," he said.

One of the fundamental drivers of the Orano group since its creation in 2018 has been innovation, said Peythieu, and the results are now apparent.

"To mention but a few: Orano Med subsidiary is now recruiting for Phase 2 clinical trials of targeted therapies against cancer based on high-purity Lead-212; the more recent battery recycling developments; the advanced recycling of used LWR nuclear fuels; the extractive metallurgy centre developing tailor-made solutions for the

recovery of

exchange."

**Jacques Peythieu** Senior executive VP, Customer & Strategy



Orano 'Tribune' - today at 16.45, Main Stage

radioactive and non-radioactive materials;

Orano and its partners have developed

and the development of stable isotopes."

a process to purify and recover metals

for recycling, and with the radioactive

used in the batteries of electric vehicles

standards laboratory (LEA), the company

provides a range of radioactive sources

environment, radiation protection, research

"However, nuclear fuel cycle activities

are still the foundations of the group," said

Peythieu. "With the growing demand, the

focus is on both the security of supply for

the existing fleet of reactors and the fuel

management challenges for new nuclear

on the critical aspects of the fuel cycle,

including the security of supply, but

emerging customer needs.

also on innovation covering both new

businesses and solutions for existing and

"For instance," he added, "Orano plans

to increase the capacity of the Georges

Besse II plant to the maximum capacity

planned in the initial project. Our 'Tribune'

confronts the growing market needs with

our cumulative expertise and industrial know-how. It is the right time to have this

"The focus of Orano at the WNE will be

for applications in medical, industrial,

Our focus at WNE will be on critical aspects of the fuel cycle, including the security of supply, but also on innovation covering both new businesses and solutions for existing and emerging customer needs...



#### **ACCELERATING ENERGY TRANSITION** BY INITIATING TODAY SEVERAL STRATEGIC PARTNERSHIPS WITH





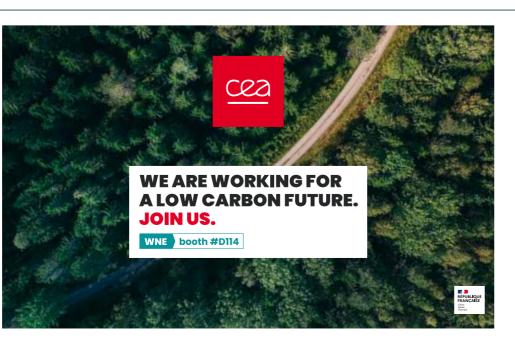
















**4** WNE DAILY WNE DAILY 5





students, drawn from specialist nuclear science schools and non-specialised schools, are expected under the auspices of the programme over WNE's three days

# THE FUTURE OF NUCLEAR STARTS HERE

NE tackles the challenge of bringing people into the nuclear industry with a new programme this year called Connect to Nuclear.

The goal of the programme is to attract the young generation and people in professional retraining and offer them the opportunity to meet and interact with the global civil nuclear community.

Through sponsorships and collaborations with a range of industry players, Connect with Nuclear tackles three themes that mirror the concerns of young people at the start of their career journey: how attractive is the industry, what are my

employment prospects, and what can I expect in further training and development?

More than 1,000 students, drawn from specialist nuclear science schools and non-specialised schools, are expected under the auspices of the programme over WNE's three days Day 1's cohort is made up of graduate students (Master and doctorate / L3, M1, and M2) in 16 groups of 20 people each.

The nuclear ecosystem represented at WNE is diverse, and includes activities through the entire lifecycle of a nuclear installation, from mining and newbuild to dismantling and waste management. It's a high-tech industry which offers a

wide range of job opportunities and progression.

The three-hour Connect to Nuclear programme is designed to allow participants to meet and question people who work in the sector, to hear what they do, how they came to the nuclear field and why they are passionate about what they do.

The programme is broken down into talks and workshops with HR and industry executives, discussions, a tour of the trade show floor, games and interactive sessions.

The programme is centred on the dedicated Connect to Nuclear Village designed for informal networking.

#### ASSYSTEM 'DETERMINED TO INSPIRE' YOUNG NUCLEAR TALENT

s the global nuclear industry faces the huge challenge of sourcing enough skilled workers to build a low-carbon society, Assystem has found an interesting method to attract new talent.

"Assystem has chosen to be a sponsor of the WNE programme 'Connect to Nuclear' because we are determined to inspire the



assystem

**Discover Assystem &** 

meet our Switchers on the booth **J**054



Nurturing a future workforce: More than 100 employees have joined Assystem teams since the launch of its training

**ENGINEERING** 

& DIGITAL

FOR ENERGY

TRANSITION

young generation to embrace this vital sector and ensure an efficient energy transition," says Stéphane Aubarbier, Assystem Deputy CEO. "Our aim is to highlight the diverse career opportunities and exciting career paths that the nuclear sector offers."

Assystem seizes this opportunity to interact with students from different schools and backgrounds as well as job-seekers. Job Passion workshops led by its nuclear experts aim at nurturing vocations and recruiting new talent, particularly for internships or work-study programmes. Every year, more than 300 interns and work-study students join the Switchers community.

The group plans to recruit more than 1,500 people yearly in its nuclear segment, of whom 60% will be from non-nuclear sectors, to train future engineers and technicians. Although the recruitment challenge is significant, Assystem is committed to its success.

Engineering is at the heart of this expansion. "It is imperative to work on two levels," says Aubarbier. "First, by making the field of engineering more attractive particularly

for younger generations, and secondly by attracting current and future engineers to the nuclear sector."

The group opens its doors daily to students and organises various events. Its experts also participate in educational institutions. They've shared their expertise with nearly 900 students since the beginning of 2023.

In parallel, Assystem and job centres run a preparation for employment (POEI) programme allowing job-seekers with diverse profiles, even those from non-nuclear, to develop the skills needed to evolve within the industry. More than 100 employees have joined Assystem teams since the launch of the training programme which includes theoretical courses, immersion and tutoring.

With training becoming a critical issue, the group launched the Assystem Institute to provide training and retraining. It offers tailor-made courses to strengthen and develop skills. In 2022, nearly 700 young employees got acquainted with solutions to meet the new technological challenges and the digital revolution

It is imperative to work on two levels. First, by making the field of engineering more attractive particularly for younger generations, and secondly by attracting current and future engineers to the nuclear sector – Stéphane Aubarbier

#### BOCCARD PUTS PEOPLE FIRST IN 'CHALLENGING' RECRUITMENT SCENARIO

B occard is actively supporting the new Connect to Nuclear programme to showcase its commitment to the development of the nuclear sector as the market gains momentum.

"Global market trends show that nuclear will be a major pillar of energy transition on the decarbonation roadmap to meet growing energy needs and environmental challenges," says Frédéric Ganet, director Human Resources, Communications and CSR.

From an HR perspective, Connect to Nuclear represents an opportunity for Boccard to enhance its visibility, create awareness and attract new talent as it has significant recruitment needs – 100 new staff immediately.

Annabelle Grinfeder, head of People Development, says: "We are facing a very challenging recruitment context as we have a strong need in all the positions. First, we must promote the large spectrum of opportunities of the nuclear markets."

At Boccard, key to success, alongside other tools, is caring for people. The Boccard Academy reflects this human-centric approach, blending excellence in business and building a proficient workforce for a sustained growth.



The academy was set up to provide career paths and tailor-made training. Its 50 instructors bring different competencies, and guarantee support to customers.

A welding school launched two years ago feeds the company and the sector with high-level skills. Significant growth is expected in 2024.

Ganet explains: "What makes the difference with our counterparts is that we are a family-owned business. We have a smaller structure which enables flexibility and enables us to carve a customised path with people we recruit.

"Also, members of our team can work either in France or gain experience on

our foreign sites. One of our core values is entrepreneurship."

Boccard Academy has established fruitful bridges with high schools and engineering schools in France, and runs communication campaigns for students while strenthening its visibility, attractiveness and connectivity through social networks.

The message of Annabelle Grinfeder to anyone contempating the nuclear sector is crystal clear: "You won't work only with reactors. You can build a long-term career that you will enjoy, be proactive, evolve to adapt to new market needs, be an international player and bring an added value to the industry."



What makes the difference with our counterparts is that we are a family-owned business. We have a smaller structure which enables flexibility and enables us to carve a customised path with people

Annabelle Grinfeder
Head of People Development, Boccard



Global market trends show that nuclear will be a major pillar of energy transition on the decarbonation roadmap to meet growing energy needs and environmental challenges...

**Frédéric Ganet,** Director Human Resources, Communications and CSR

#### ONET TECHNOLOGIES FOCUSES ON FINDING TOP TALENT

net Technologies is in tune with the nuclear sector's demand for a skillful workforce capable of adapting to changing environments and global challenges.

The French nuclear engineering and services company plans 'massive' investment in training, in part to meet the demand for 500 recruits for the French EPR2 programme.

WNE's Connect to Nuclear programme dovetails with Onet's own philosophy: "We believe it is important to promote our businesses and attract the best talent to build the decarbonised world of tomorrow," said a spokesperson.

For several years, Onet Technologies has been following a human resources policy to cater for skills development of its employees, in line with the needs of its customers and the quality considerations of its operations in France and internationally. A significant part of these recruitment and training needs cover a spectrum of expertise: engineering,

piping, welding, assembly and testing, logistics, safety etc. Of the anticipated 500 jobs to implement six French EPR2 programmes by 2035, 97% will be permanent roles.

"We also want to increase the number of women in our profession, and strengthen the attractiveness of the sector and scientific professions for women because the nuclear industry is full of career opportunities. We are therefore committed to diversity, particularly through the network of Onet Technologies Ambassadors."

These employees visit schools and take part in forums to raise awareness on their profession, share their career experience and unlock career ambitions among girls.

Onet's HR policy has three major components: training of managers for a harmonised managerial footprint based on listening and empathy for enhanced efficiency; career progression based on skills matrices; and continuous training

to guarantee skill development opportunities to employees and ensure an excellent quality of services. During the past 15 years, its certified training arm, Onet Technologies Formation, has been supporting skill development through its 15 centres located near French nuclear plants, alongside its 27 nuclear training sites.

"We train more than 30,000 internal and external professionals from the nuclear industry each year to provide employees with the best skills," said the spokesperson. New construction projects, extension of the life of reactors, new SMR reactors and laser dismantling bearing its signature will require new skills. "Skills availability will be key to building a low-carbon world," the spokesperson said. "That's why our priority is to recruit, train and provide career advancement guidance. We accompany our customers throughout future nuclear projects."





Supporting our customers over the entire lifecycle of their plants



6 WNE DAILY 7







09:30 - 11:45 **Opening Ceremony** 



14:00 - 14:15 Keynote with Sama Bilbao y León, Director General WNA



14:15 - 15:30 New Nuclear Projects: Getting Ready for Serial Production



15:45 - 16:30 Enhancing Energy Independence by leading the European Núclear Renaissance Organised by EDF



16:45 - 17:30 Nuclear fuel cycle and security of supply to sustain nuclear development for small, advanced and large reactors Organised by Orano



17:45 - 18:30 **WNE Innovation Awards Ceremony** 

#### inbrief

#### **ORANO PLATFORM** TAKES ON WASTE...

Building on recent advances in

digital technology, Orano (J102) has developed a feature-rich web platform and content structure called OranoBox. The new platform is designed for ease of use, flexibility and scalability in tackling the challenges of managing nuclear and non-nuclear materials and waste over the short and long term, and proposes solutions based on the company's products and services. A workshop at WNE at 13:30 today

offers the chance to learn about the OranoBox platform and its features.

#### **CAEN SYS SHOWS ITS RANGE**

Italian company Caen SyS [E003], official supplier to the IAEA, NATO, the military and JRC, is the spectroscopy division of Caen SpA. With globally recognised expertise, the company is showing a range of innovative and reliable measurement instruments for nuclear use. Visitors can meet the team behind the Gamon and Digiwaste platforms, Sniper-GN and DiscoveRAD brands.

#### **EUR ASSOCIATION MAKES WNE DEBUT**

The EUR Association [F150] presents itself as the voice of nuclear energy companies across Europe in influencing the design of new NPPs, including small modular reactors (SMRs). The association is at WNE for the first time and offers visitors the opportunity to meet with its members to discuss its products, achievements and objectives for the coming years.

## **NUCLEAR COMMUNITY TAKES** AIM AT CARBON NEUTRALITY

NE keynote speaker Sama Bilbao y León, director-general of the World Nuclear Association (WNA), is taking an important message to COP28 in Dubai.

While governments will set net-zero targets and put in place policies to incentivise action, "in reality much of the hard work and investment needs to be done by the various industries themselves", she told WNE Daily on the eve of the show.

For COP28, she said WNA has made a "significant effort" to increase the visibility of nuclear energy by bringing together governments, industry and civil society. 'Together with Emirates Nuclear Energy Corporation (ENEC), the home team, and with the support of the IAEA Atoms4NetZero initiative, we have launched the Net Zero Nuclear (NZN) platform as a vehicle to unite all efforts to highlight the essential role of nuclear energy in the context of climate change.

Through Net Zero Nuclear, we hope to facilitate the action our industry needs to grow Sama Bilbao y León

"Very importantly, NZN sets a specific and ambitious target of at least tripling global nuclear capacity by 2050. At COP28, we have organised coordinated and cohesive declarations from both governments and industry in pragmatic support for nuclear

She is optimistic about the participation of nuclear energy at COP28. Equally important, she says, is her optimism about the "enormous amount of work that the global nuclear industry is doing to ramp up and deliver on the promise of nuclear energy with the speed and scale needed to meet Paris Agreement goals".

"At the same time, much work is still needed... putting in place technologyagnostic policies and markets, securing affordable financing, optimising our licensing and regulatory processes, growing a robust global supply chain, demonstrating that we can indeed deliver on-time and on-budget, inspiring and developing the next generation of nuclear professionals...

"I think COP28 in Dubai will be a much more pragmatic and realistic COP. While very much needs to be done, I have perceived a greater sense of urgency in many policymakers.

"I think it is essential that we continue to work together as an industry and continue to support one another. Ultimately, I think that we will succeed together, or fail separately."

## Belgians accelerate with Myrrha project

elgium has had a presence at WNE since the first show, and for 2023, the country's pavilion [K063] is highlighting Myrrha, the world's first large-scale accelerator-driven system project. Myrrha (multi-purpose hybrid research reactor for high tech applications) is designed for research into spent nuclear fuel, fundamental and applied physics, and nuclear medicine (pictured right).

As Belgium pavilion coordinator Christian Dierick explains: "This is unique technology the world's first research reactor driven by a particle accelerator. It consists of a subcritical nuclear reactor driven by a high-power linear accelerator. The nuclear reaction is sustained by just the particle accelerator, and as soon as the proton beam is turned off, the nuclear reactions immediately stop in a safe way."

The Myrrha project is co-located with SCK CEN, the Belgian nuclear research centre, which is also developing new therapeutic radio-isotopes to target cancer cells more efficiently and with fewer patient side effects. The accelerator will be producing radioisotopes for medical use from 2027.

Adds Dierick: "The infrastructure behind Myrrah paves the way for many applications and technologies. It's great to show this world premier technology at WNE."

Myrrha is one of 10 companies in the Belgian pavilion. Dierick says WNE offers unique opportunities to connect with peers and interested parties: "WNE allows us to represent all the new technologies, research and, for example, SMR development. Being able to see all of the different initiatives and projects from around the world is invaluable.

"The companies we are showcasing this year

have two main objectives – to meet potential suppliers and clients. It's a great opportunity for Belgian companies." Also highlighted at the Belgium Pavilion is SCK CEN's recent decision to develop a lead-cooled SMR along with Westinghouse and Romania.



#### A PUMPING SOLUTION THAT NEEDS NO EXTERNAL COOLING

Celeros Flow Technology (C097) is showcasing its unique TWL pumping solution that promises to improve safety and reliability at existing power plants. Having started with the first industrial-scale nuclear power plant (NPP) valve installation, the company followed suit in more than 65% of operational NPPs worldwide. The TWL combines a centrifugal pump and drive turbine on a single shaft in one casing. Specifically designed for nuclear safety applications, it needs no external functions, such as cooling water or lubricating oil.

