On 23 June 2021 A.SPIRE and the European Commission signed a Memorandum of Understanding of the Processes4Planet Co-programmed partnership to be implemented as part of the Horizon Europe programme for research and innovation.

Eleven partnerships were launched on the same day during a ceremony at the Research&Innovation Days. Processes4Planet,
one of the biggest partnerships in the package, aims at developing disruptive solutions for circularity and climate neutrality, with a strong focus on the global competitiveness of the EU process industry.

At the MoU ceremony, Frans Timmermans, the Executive Vice-President of the European Green Deal of the EC has highlighted that “we have the tools, the commitments and the funds to succeed”. The 1.3 billion EUR that has been allocated for the Processes4Planet partnership by the European Commission is sizeable support that will for sure trigger the companies in moving faster and taking more risk. Jean-Eric Paquet, Director General of DG R&I of the EC, portrayed that “we are bringing together amazing capacities from industry and research organizations to provide impact solutions connected to effective deployment in society or the economy”.

In the afternoon of 23 June, A.SPIRE hosted a Processes4Planet Launch Event for its members and stakeholders (here the video trailer of the celebration). Featuring an exclusive line-up of speakers, the event showcased the pledges of A.SPIRE companies to achieve climate-neutrality and their engagement to the climate neutrality goals of the European Green Deal.

In the opening, Ángels Orduña, A.SPIRE’s Executive Director emphasized that we are all living a crucial moment for humanity. Pierre Joris, A.SPIRE’s President (DOMO Chemicals) praised the constructive collaboration that A.SPIRE have enjoyed all along the way with the European Commission, but also with Member States representatives and MEP’s, while developing the Processes4Planet Strategic Research and Innovation Agenda, and making #Processes4Planet a reality. This collective work represents about 78 thousand hours of work”.

Trillions of EUR will need to be invested in the coming decades and the financial return may not be obvious and could be considered extremely risky in a world where conventional technologies will still co-exist. All 10 A.SPIRE industrial sectors will work in a cross-sectorial manner to develop the solutions needed with the best use of time
and resources. The partnership will contribute to build the right ecosystems and hence pull all the best competencies together for success, whether from RTO’s, SMEs, large companies, academy and all the innovations actors involved in the process industry.

Peter Droell, Director of Prosperity at DG R&I pointed that he expects proof that climate-neutral, circular production in the process industry is possible and fundable, that it is possible to de-risk the investments and that all these above are possible in Europe at competitive prices. That explains strong commitment from the European Commission: 1 300 million Euro, each day half a million into R&I for this transition.

Joaquim Nunes de Almeida, Director in charge of “Mobility and energy-intensive industries” in the DG for Internal Market, Industry, Entrepreneurship and SMEs (DG GROW) mentioned that the EU is highly dependent on third countries for no less than 99 products and there is a need to rebuild EU’s industrial capacity and retain our global competitiveness. Therefore, the EC counts on the #Processes4Planet partnership to develop and help deploy innovative solutions and sustainable circular business models.

Four representatives of A.SPIRE member companies: Martin Brudermueller, President of Cefic and CEO of BASF, Luis Cabra, Repsol’s Deputy-CEO, Marco Eikelenboom, Cepi Board Member and CEO of Sappi, and Michael Koenig, CEO of Elkem, presented the company climate-neutrality pledges.

Martin Brudermueller started the session underlining that the chemical industry is crucial in making the Green deal become a reality: “We can be successful if we strive for the best solutions rather than ideologies. Chemistry can lead the way. Innovation has been always in our DNA”.

Luis Cabra suggested that it would be essential to create a new value chain of new raw materials. Whatever is left to reach climate-neutrality must be done in terms of CO2 capture, recycling and
storage. “We need a stable and supportive regulation that allow this research to happen”.

Marco Eikelenboom explained that as far as 10 years ago was the pulp and paper industry was the first to set a 2050 roadmap to a low carbon economy. Affordability for the clients is the key element in their reflections. Mr Eikelenboom assured that the pulp and paper industry is putting a lot of efforts to substitute the fossil base products, reinforce sustainable force management, advancing circularity and decarbonize processes (since 2005 the reduction of carbon emissions was by 29%).

Michael Koenig said that Elkem received an A rating from CDP, ranking it among the world’s leading companies on climate transparency. At Elkem, 83 % of the electricity is from renewable hydropower. Several of their processes generate excess heat and these days they are starting up their Energy Recovery Unit in one of their plants in Norway with the aim to produce electricity from the excess heat.

Furthermore, pledges and commitments recorded through the VideoAsk platform poured in from A. SPIRE member companies and organizations, such as Vito, Domo Chemicals, Tecnalia, Cepi, Cicenergigune, CTCV, Clariant, IRT-M2P, Iris technology solutions, JohnCockerill, Tekniker, Scuola Superiore Santanna, CEA, SUEZ, CPI UK, Molkat, just to name a few.

To celebrate these commitments of its community, A. SPIRE collaborated with the Jane Goodall Insitute Belgium and engaged to sponsor 100 trees to be planted in Belgium (and thus, another 1000 trees in Burundi).

This session was followed by a virtual panel - The Future of Process Innovation for Climate opened by Pierre Joris, A. SPIRE’s President who said that the most important is the trust between the partners and there is a need for strong collaboration, shared ambitions and visions with very good and transparent dialogue. “We should discuss openly all the gaps,” said Joris.

Peter Droell added that there is a new level of
commitment and awareness and the wish to go ahead together. Thus, it cannot be one partnership or one sector alone: it is a cross-sector, a systemic approach across ecosystems. Openness to changes and criticism.

Prof Chrysi Laspidou, Water Europe Vice-President Technology, emphasized a need to think outside of the box. She also highlighted that the academic environment needs to start educating students to be ready to introduce the circularities in the industries. The academic environment is quite conservative, and this is the opportunity to awaken the system.

Marco Eikelenboom, Cepi Board Member, CEO of Sappi, shared with us the fact that they already foresee the change when they recruit new employees at Sappi with a different mentality and mindset. In his opinion, the industry further needs the 3 pivotal things: force management, product substitution, reduction of emissions.

Alexandra Bech Gjørv, CEO of Sintef, said that Sintef has been working on zero-net solutions for the last 20 years and all their customers are interested in how to cut the emissions. Cross-sector innovation requires cross-disciplinary solutions.

Vicky Mosteyrin, Greenovate Europe explained that the role of clusters is to identify the missing skills or to valorize the skills they have. Thus, their role is to help to identify the right partners for projects and to explain the access to the right information.

In the wrapping-up remarks, Aurela Shtiza, IMA Europe, A.SPIRE’s Vice-President, mentioned that there are so many companies that are providing key commitments and we have massive challenges ahead. As Elkem’s CEO said, there is no Silicon Valley without silicon, there is no future without the process industries. We are willing to work to bring sustainable solutions. Single companies can be part of different value chains as an important element to move forward.

At the closing, Klaus Sommer, the first A.SPIRE President shared the main challenges at the
beginning of SPIRE PPP (Sustainable Process Industry through Resource and Energy Efficiency Public-Private Partnership) was to put together 8 sectors and to get the projects moving on quickly. Since then, the level of mutual understanding and trust has grown, and it brought significant benefits. Daniel Gauthier, the Second A.SPIRE President, highlighted how a new vision of A.SPIRE was defined in collaboration with A.SPIRE members and that #Processes4Planet will be the bricks that build the right innovation to transform our industry.

Find the event recording here:
https://www.spire2030.eu/processes4planet-partnership-launch-event

A.SPIRE is an international association that represents innovative process industries, 20% of the total European manufacturing sector in employment and turnover, and more than 170 industrial and research process stakeholders from over a dozen countries spread throughout Europe. A.SPIRE brings together cement, ceramics, chemicals, engineering, minerals and ores, non-ferrous metals, pulp and paper, refining, steel and water sectors, several being world-leading sectors operating from Europe.