Speech by Vice-President Šefčovič at the CEPS 2019 Low-Carbon Economy Forum on Industrial Implications of EU and Global Climate change policy

I am delighted to open the CEPS Low Carbon Economy Forum for 2019.

I recall that I was very proud to open the CEPS Energy Climate House at the start of the mandate, back in 2015.

It seems that time has been flying and that a lot has been achieved in the meantime.

The CEPS Energy Climate House has become a reference point for lateral and interdisciplinary thinking on: the energy transition, climate, mobility, finance and the circular economy

Well done!

It would be tempting at this juncture, before a new institutional cycle, to start listing the progress made in five years on the Energy Union.

We were the first major economy to put in place a legal framework to deliver on our pledges under the Paris Agreement.

We have set ambitious targets for attainment in 2030 for greenhouse gas emissions reduction, renewable energy and energy efficiency as well as emissions standards for cars, vans and heavy-duty vehicles, to name but a few.

This — and other Energy Union achievements — is well captured in CEPS end-of-term assessment ("What comes after the last chance Commission?"). So thank you for your positive analysis.

Moreover, I understand today is about the future. The future of our industry and the future of our planet. The two go hand in hand.

And we have only **started to really integrate climate, energy, industrial and social policy** (let's not forget this last dimension)

This to me is the biggest challenge lying ahead of us.

Recently I have been discussing these strategic issues bilaterally, with Chinese and American Presidents.

It will not come as a surprise if I tell you that they do not see us only as partners but also - and clearly - as competitors.

With this in mind, pressure is mounting for Europe to equip itself with all the attributes of strategic leadership.

The key question that we ought to ask ourselves is **how do we make sure that the 21**st **century is European**? Not Chinese. Not American. But European!

I am convinced this is within our reach.

We are living in times of profound changes: huge geopolitical strains and an unfolding industrial revolution that embraces the energy-digital-transport nexus, with a very deep environmental and social transformation that needs mitigation.

So, how do we make the most of this profound shift?

I would like to cover four challenges:

- Raw materials and circularity
- Building **strategic value chains in Europe** with the example of the European Battery Alliance
- Our long-term vision and ambition 2050
- The Governance with the national energy and climate plans

The governance / National Energy and Climate Plans

Today we have adopted our recommendations on the draft integrated national energy and climate plans.

All Member States have submitted their draft plans, covering all dimensions of the Energy Union. This by itself is a **first success**.

Another success is that we are heading in the right direction. Significant efforts have been made by the Member States.

The plans are key to **ensure we collectively fulfil our 2030 Climate and Energy objectives**.

But these plans — once finalised — will also **provide our businesses and financial sector with the necessary clarity and predictably** to **spur investment** across Europe.

Finally, these national plans will help Member States give direction to the funding under the next MFF 2021-2027.

Our **25% climate mainstreaming** in the next MFF will further support this effort.

More work is needed, however, by and with the Member States, notably on: individual ambitions, cross-border cooperation, link between climate policy and with air quality, greater focus on investment, competitiveness and social fairness.

Member States will now spend the next six months finalising the plans.

This process will involve all segments of society. It is a **co-creation exercise** which should allow stakeholders to **take real ownership**, from the ground.

I invite you to participate fully.

The 2050 strategy and investment needs

There is a **strong link between the 2030 plans and our mid-century strategy** (more than half of the draft plans include 2050 objectives or visions, including climate neutrality and legally binding targets).

As you know, at the end of last year proposed this strategic long-term vision for an EU competitive and **climate neutral economy by 2050**.

I am confident that the leaders will go for a net-zero greenhouse gas emission by half of this century.

This should allow the EU to adopt an ambitious strategy by early 2020, in line with the Paris agreement.

And hence, continue to be a frontrunner in the fight against climate change.

That means **investing massively** in future mobility, buildings, energy system and key storage technologies such as batteries and hydrogen (indispensable for sector coupling).

The scale and speed of investment needed mean "business-as-usual" is no longer an option.

The IPCC had estimated that **to limit global warming to 1.5°C** (above preindustrial), we would **need around 2.4 trillion dollars annual investment** in the energy system (between 2016 and 2035, representing about 2.5% of the world GDP).

We estimated that EU would need more than **500 billion euros investment** annually to achieve climate neutrality by **2050**.

As has been confirmed in our discussion with investors, **the main barrier** to investment is however not the availability of funding. Ratherit is the **marketability and scalability of innovations**.

European Battery Alliance or building up strategic value chains

This is the reason why we have created the **EU Battery Alliance**.

A lot of money is being spent into research but until now, we had no active market uptake policy. And we have seen where that has led us with PVs.

So we decided to work with **the entire value chain** to convert our research into **bankable solutions** and **ramp up production**.

With all actors (260) and value chain segments on board: from raw material extraction and mining, to chemicals, battery cells production, packs,

software engineering, car manufacturing, utilities, and re-use/recycling.

The battery and software represent between 6 and 80% of the value of the car. This has **a knock-on effect** on the whole value chain.

As a result of the EU Battery Alliance: The industry has announced **significant investment** throughout the supply chain (InnoEnergy estimates 100 billion euros) and **innovation-driven consortia are taking off**.

We are financially **supporting them with the EIB** (Northvolt) and **Member States money** (IPCEI: we can expect the first notification by summer).

We are **blending our instruments** to that effect, working with **regions** to deploy world-class ecosystem (through smart specialisation partnership) and **with private investors** through newly established platforms (InnoEnergy).

We have embarked on **innovative financing** to help de-risk private investment. We launched a joint public-private fund — **the Breakthrough Energy Venture Europe** — with Bill Gates and his coalition of investors. To accelerate cutting-edge innovation in the clean energy transition.

In the **next MFF**, we will continue to support the entire innovation cycle through a combination of Innovation fund, EUInvest and Horizon Europe.

We are developing the **regulatory framework** and **standards** based on **"sustainability requirements"**. This underpins our competitive advantage in "green batteries", "made in Europe".

Our **EU market is a springboard** for our global export ambitions.

To summarise, it is not only about developing know-how and new technologies. It is about **innovating in the way we bring them to scale the market**.

In other words, it is about **boosting scalability in innovative solutions**, with sustainability at its core.

For all those reasons, we consider that the **European Battery Alliance can constitute a perfect test case** for our new **industrial policy** (under preparation).

We are now looking to expand this approach **to other strategic value chains** — ranging from: hydrogen and other storage technologies, AI, performance computing, IoT, cybersecurity, to 5G, space technologies, 3D (metal), smart health.

The circular economy and access to raw materials

Another lesson from the European Battery Alliance is that we must tackle at once the carbon and the material footprint.

Three drivers account for expected doubling of raw materials demand by 2050

Population increase

- Urbanisation
- Last but not least, decarbonisation.

Let's face it. there is a huge risk that we end up replacing our important dependency on fossil fuels by one on (non-energy) raw materials.

We currently produce a single-digit percentage (between 1-8%) of the world levels for cobalt, natural graphites, lithium and rare earths.

These are indispensable for e-mobility (rare earths), renewable energy technologies, batteries (lithium, cobalt, graphite), information technology (rare earths). And in many cases we have no refining capacity (e.g. for lithium). Unless we invest.

Meanwhile, we are witnessing China capturing third market sourcing, in addition to exploiting its own, moving up in the value chain and possibly resulting into new dependencies.

Should we sit idle?

We need to **invest strategically** into both primary (exploration, extraction and refining) and secondary raw materials (recycling).

We need to work with industrial and financing actors to help build the business case. I started discussing this last week with the EIB Board. The feedback was positive. Other international banks (the EBRD, the World Bank) are also moving.

I hope to take this into the next European Commission, as we are preparing the review of our critical raw materials list.

Raw materiala also need to be an integral part of our discussion with our commercial partners.

In conclusion

We are now preparing our **long-term vision on the future of industry** as asked by the European Council. It should be aligned with our 2050 carbon neutral vision.

Our regulatory framework, our strategic value chains, sustainable financing taxonomy (adopted today), our world-class regional innovation ecosystem (boosted through smart specialisation), our start ups accelerators (EIT KICs), our new investment instruments (Breakthrough Energy Venture — Europe), new "moon-shot missions" for Horizon Europe and our and partnerships (under Horizon Europe) will all contribute to this exercise.

We need our concerted action to cover not only energy, climate, mobility, agriculture, industry, innovation but also trade, competition, regional and social policy.

If the European Battery Alliance has told us one thing it is that top-down

approach does not work. We need to understand from the industry, the innovators, the financiers, the people on the ground what is needed to accelerate this transition and mitigate its impact.

This is also what we have **done in the coal regions in transition**, working in partnership with stakeholders and people on the ground to support well rounded strategies and develop pipelines of robust projects.

This outreach (or partnership approach) should be extended to all **the regions and communities which are currently struggling to harness the benefits of globalisation** and technological change, e.g. energy-intensive sectors, deindustrialised regions / rural areas.

I am convinced that we have all it takes to establish a **strong competitive position globally** in sustainable value chains.

And that we can lead this "just transition", i.e. leaving no one behind, to build a "new sustainable economy for all".

That should be a great part of our programme for the next Commission.