

- NOG EVEN GEDULD AUB -

*wij wachten nog enkele minuten tot iedereen zich heeft kunnen aanloggen
en gaan dan zo dadelijk van start*

- MERCI DE PATIENTER ENCORE UN PEU -

*nous attendons encore quelques minutes pour que tout le monde puisse se
connecter et nous commencerons sous peu*


Welcome to the Webinar European Green Deal

- The webinar will be recorded and available on the website SBE/KBVE after the event
- Please note that you can ask your questions via the Q&A , we will select 2-3 questions that will be at the end of the webinar answered

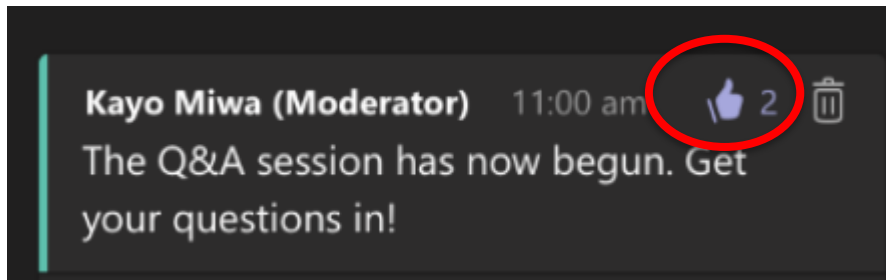
L'utilisation du Q&R



Poser une question:

1. Sur le côté droit de l'écran, sélectionner **Q&R** 
2. Tapez votre question dans la zone de rédaction, puis sélectionnez **Envoyer**. Si vous souhaitez poser une question de façon anonyme, sélectionnez **Demander de manière anonyme**.

3. Si vous êtes intéressées par une question qui a déjà été posée, donner alors un **like** à cette question:

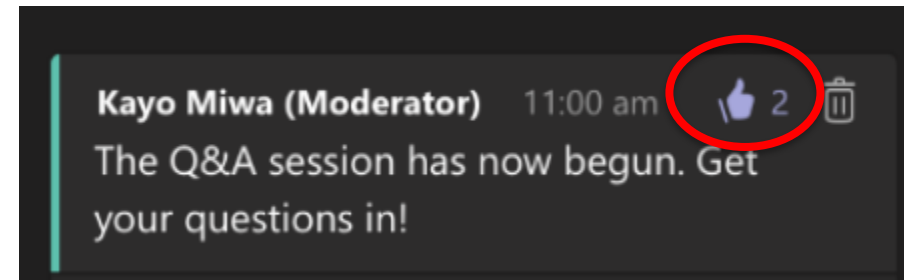


Het gebruik van de Q&A

Een vraag stellen:

1. Selecteer **Q&A**  rechts in het scherm.
2. Typ uw vraag in het opstelvak en selecteer **Verzenden**. Als u uw vraag anonym wilt stellen, selecteert u **Anoniem vragen**:

3. Heb je interesse in een vraag die al gesteld is geweest, geef dan een **like** aan deze vraag:



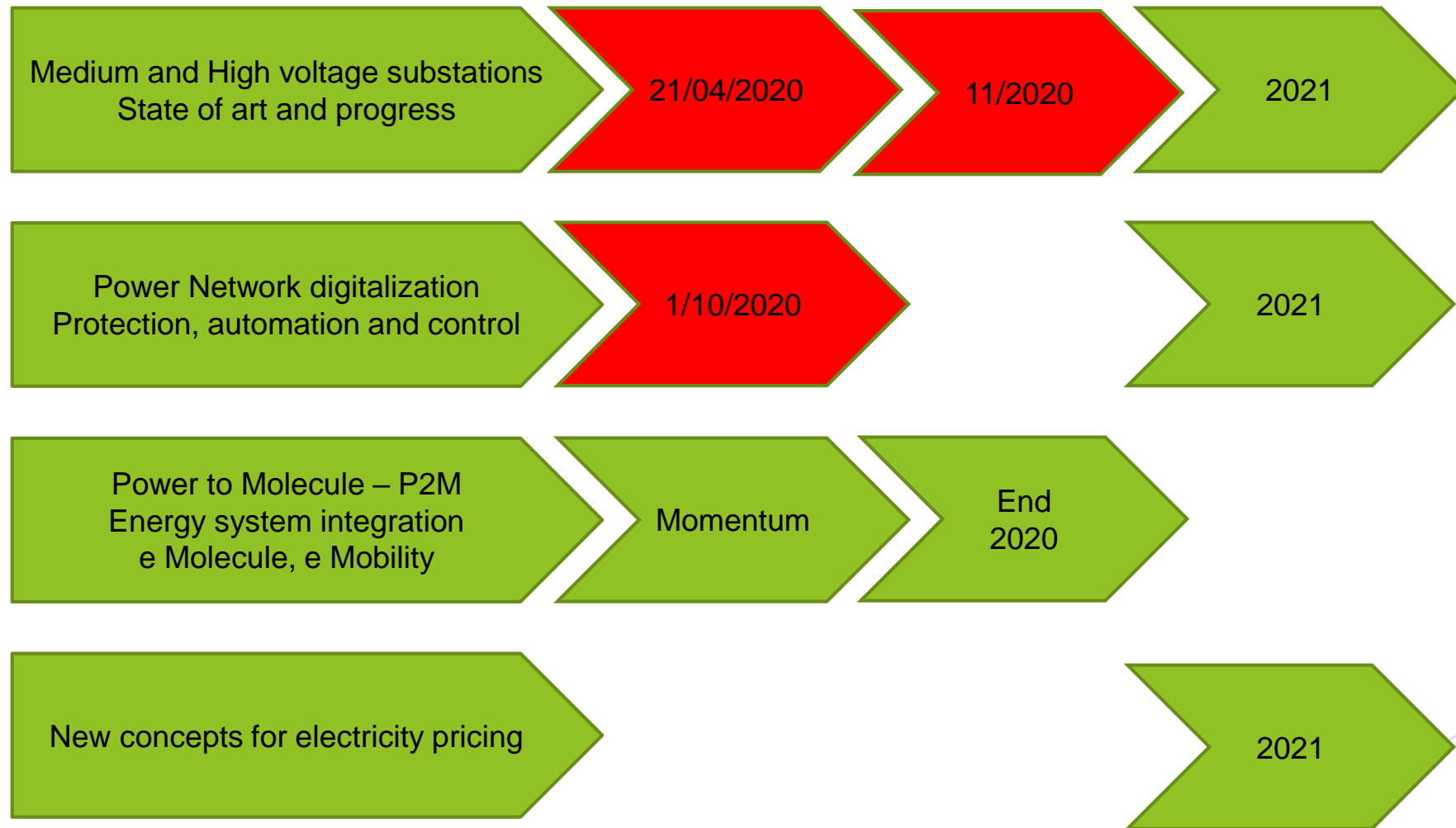
The background features abstract, overlapping green geometric shapes, primarily triangles and polygons, in various shades of green, creating a modern and dynamic visual effect.

KBVE - SRBE

Scientific and Technic Committee

Study days 2020 / 2021

Program 2020 - disturbed by COVID



Power TO Molecule

- ❑ Continuing the WEBINAR « green deal »
- ❑ Electricity and Hydrogen will be 2 fundamental components of the decarbonized world
- ❑ Power to H₂ to Molecule
 - ✓ Electrolysis
 - ✓ Conversion process
- ❑ Interaction between electricity and gas sectors
- ❑ H₂ as an energy carrier and storage
- ❑ Green H₂ will play a role along side renewable electrification (up to 50%)
 - ✓ e-mobility, fuel cells, heat pump
 - ✓ Replace fossil fuel in some carbon intensive process

Power TO Molecule

Continuing the “Green deal” WEBINAR....

Task force is ready to organize presentations by WEBINAR in 2020

- ❑ International and EU contexts
- ❑ Energy system integration: sector coupling
- ❑ Technologies and developments
- ❑ Applications: e Molecule, e Fuels, e Mobility

❑ *Speakers :*

- ✓ ULB
- ✓ UCL
- ✓ IEA
- ✓ EU
- ✓ SPF/FOD
- ✓ ELIA
- ✓ FLUXYS
- ✓ WATERSTOFNET
- ✓ SIEMENS
- ✓ Port of GHENT
- ✓ Port of Antwerps
- ✓ ALSTOM
- ✓ STIB



Medium and High Voltage Substations

Published → Cancelled 2020 → Delayed 2021

- ❑ General concepts: Standard and regulation evolutions
- ❑ Design - User's point of view
- ❑ Equipment manufacturing
- ❑ Novelties - special design
- ❑ Digital communication
- ❑ Tests and simulation

❑ *Speakers :*

- ✓ ELIA
- ✓ GENERAL ELECTRIC
- ✓ ENERGYVILLE
- ✓ DOBLE
- ✓ FLUVIUS
- ✓ Engie - LABORELEC
- ✓ U.Mons
- ✓ U. Liège
- ✓ ABB
- ✓ OMICROM
- ✓ SIEMENS



Power network digitalization

Program completed → Delayed 2020 → Expected 2021

- ❑ Specific developments
- ❑ Novelties: algorithm and equipment
- ❑ Usages
- ❑ Digitalization of control and automation

- ❑ *Speakers :*
 - ✓ Engie - TRACTEBEL
 - ✓ ELIA
 - ✓ FLUVIUS
 - ✓ Engie - LABORELEC
 - ✓ SOLVAY
 - ✓ INFRABEL
 - ✓ SIEMENS
 - ✓ INFRABEL
 - ✓ ICET
 - ✓ BENTLEY



New concepts for electricity pricing

Task force is ready to start → First meeting 11/2020 → Expected 2021

- ❑ Alignment of electricity prices to ensure new developments
- ❑ Pricing to balance of supply and demand
- ❑ Scarcity of energy
- ❑ Energy market including supply/demand of reserved power

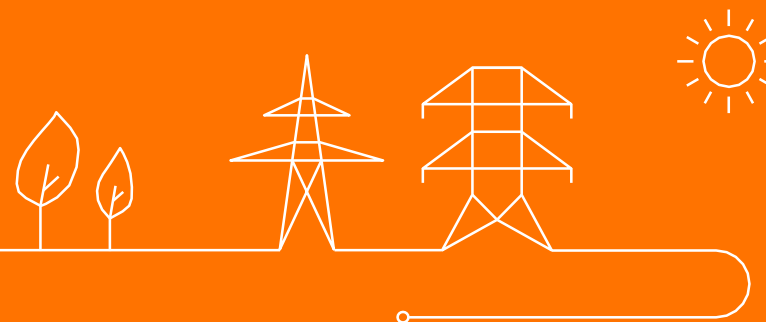
❑ *Candidate Speakers :*

- ✓ ENGIE
- ✓ ELIA
- ✓ CREG, VREG, CWAPE, BREUGEL
- ✓ ULB
- ✓ FEBIELEC
- ✓ SIA PARTNERS
- ✓ FEBEC
- ✓ Others,....




The European Green Deal

24/09/2020 | KBVE/SRBE webinar | Jelle Reynaert





Ursula von der Leyen  @vonderleyen · Dec 11, 2019

The [#EUGreenDeal](#) is more than just a vision. It is a roadmap for action. It has 50 actions for 2050 – for a climate and nature friendly Europe. Our goal is to reconcile our economy with our planet, and make it work for our people.

This is Europe's 'man on the moon' moment.

128

827

2.1K



Ursula von der Leyen  @vonderleyen · Dec 11, 2019

Read the [#EUGreenDeal](#)'s 50 actions for 2050 here [europa.eu/fh78](#) For a climate and nature friendly Europe.

European Commission  @EU_Commission · Dec 11, 2019

This is Europe's 'man on the moon' moment.

The European Green Deal is our new growth strategy – for a growth that gives back more than it takes away.

[#EUGreenDeal](#)

Visit [europa.eu](#)

EUROPEAN GREEN DEAL



56.6K views

0:04 / 1:23



THE EUROPEAN GREEN DEAL



"AT THE HEART OF IT IS OUR COMMITMENT TO BECOMING THE **WORLD'S FIRST CLIMATE-NEUTRAL CONTINENT**. IT IS ALSO A LONG-TERM ECONOMIC IMPERATIVE: THOSE WHO ACT FIRST AND FASTEST WILL BE THE ONES WHO GRASP THE OPPORTUNITIES FROM THE **ECOLOGICAL TRANSITION**."



[#EUGreendeal](#)

“
Our European Green Deal
is ambitious.
It is designed to be just,
and it is made in
Europe for Europe.”

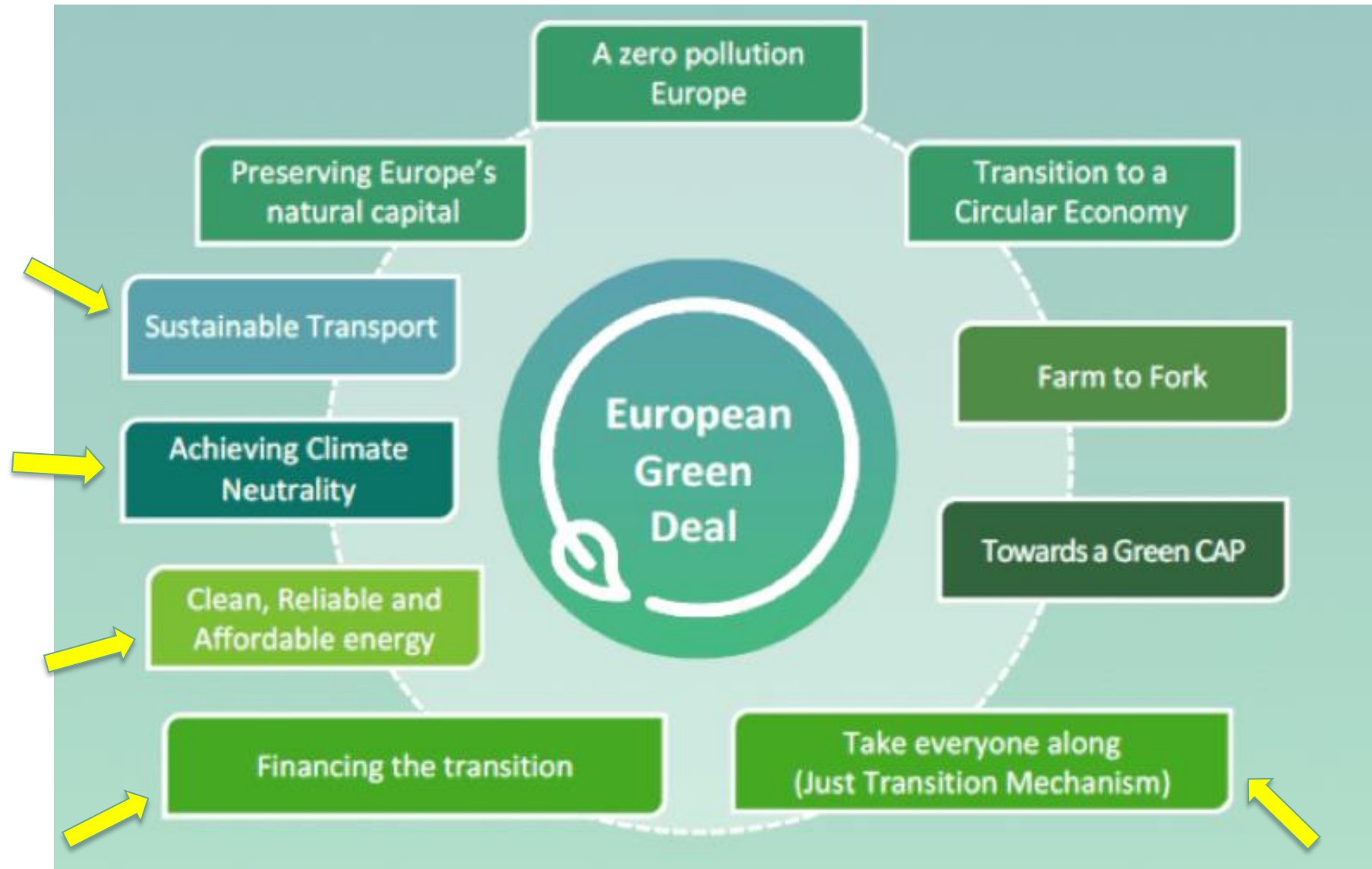
Ursula von der Leyen
President of the European Commission



European
Commission



The Green Deal is a broad set of policy initiatives brought forward by the European Commission, with the overarching goal of making Europe climate neutral in 2050



And then came... the COVID-19 pandemic

European Green Deal must be central to a resilient recovery after Covid-19

Published on 09/04/2020, 6:33pm

Comment: We must not lose sight of the persisting climate and ecological crisis when working out how to spur the economy after the coronavirus pandemic



Pascal Canfin ✓
@pcanfin



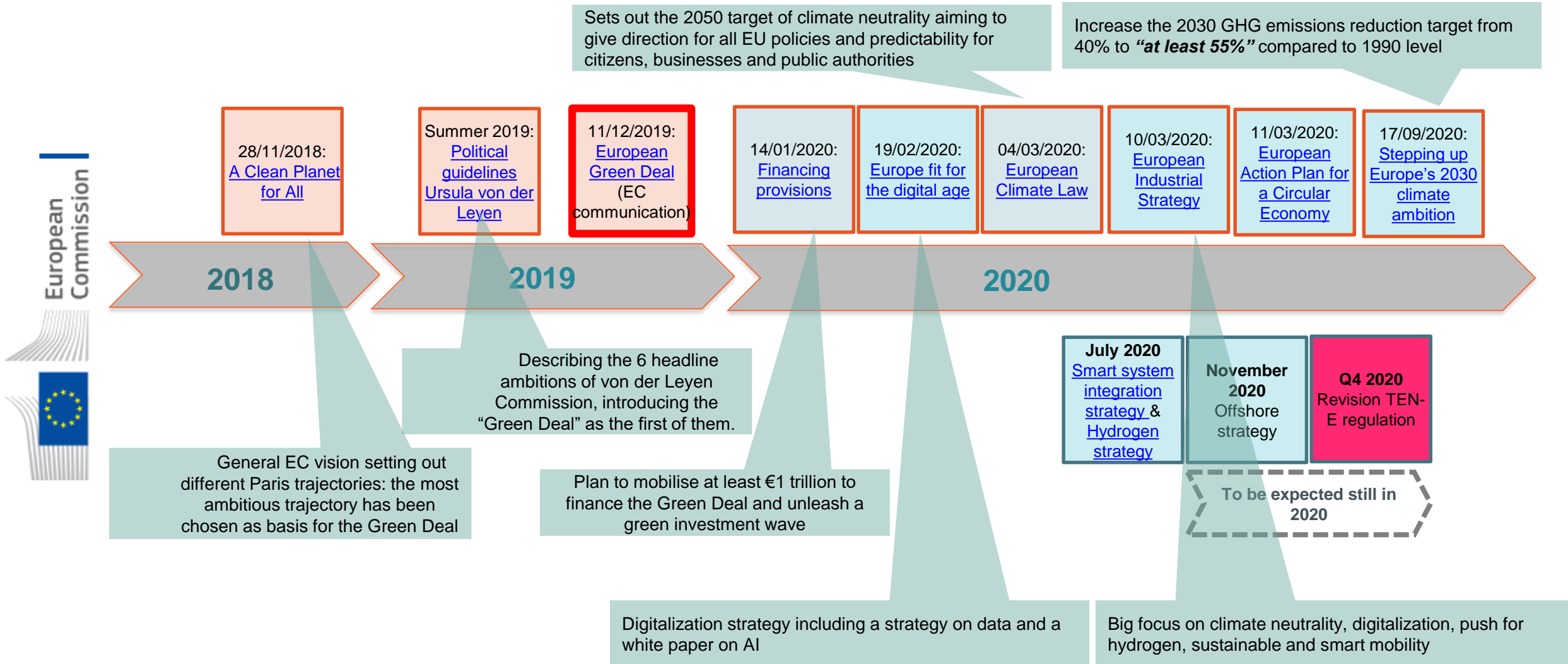
We are launching today at my initiative the European alliance for a green recovery with 180 ministers, MEPs, CEOs, NGOs & Trade Unions. We will come out of this historic crisis stronger : bit.ly/3b1A5Bn#greenrecovery #Covid-19 bloomberg.com/news/articles/...

MEPs urge Commission to put Green Deal on ice amid COVID-19 crisis

Written by **Martin Banks** on 1 April 2020 in **News**

Nearly 40 MEPs have asked that the European Green Deal, a Commission flagship policy, is dropped for the time being due to the coronavirus crisis.

The Green Deal roadmap has been laid down in December 2019, and since then a number of policy initiatives have been taken already. This is only the beginning.



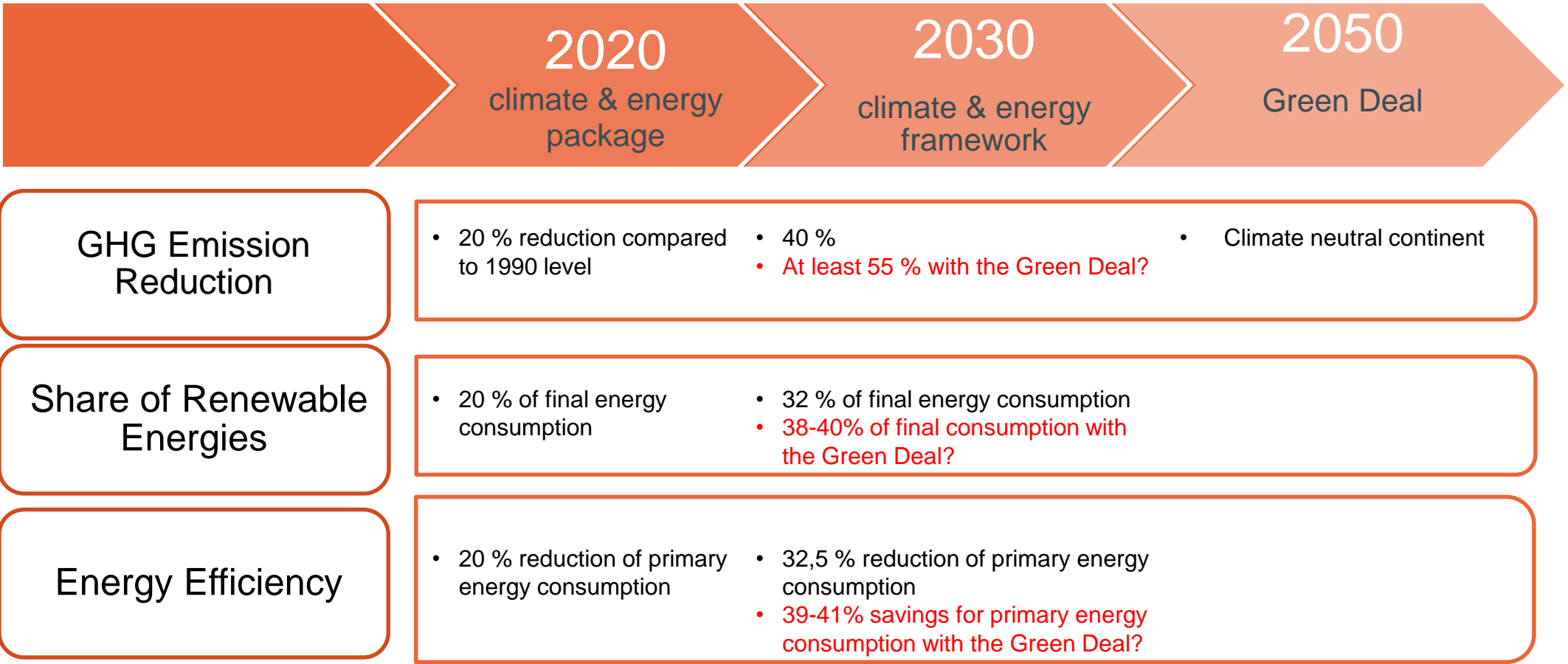
Climate neutrality by 2050 and increased targets for 2030

- Chief Goal = achieving climate neutrality by 2050, embedded in the Climate Law
- Heated debates on raising the current 2030 of 40% GHG emission reduction
 - On 17 September 2020, the EC has presented:
 - A plan to increase the EU's greenhouse gas emission reductions target for 2030 from at least 40 % to at least 55 % compared to 1990 + an Impact Assessment
 - Its general assessment of the National Energy and Climate Plans (NECPs)
 - NECPs will need to be revised according to possible new targets, starting in 2023
- By June 2021, proposal to revise “relevant legislative measures to deliver on the increased climate ambition”, such as increasing the 2030 targets in the Energy Efficiency Directive and the Renewable Energy Directive

On the menu

- Climate law proposal (04/03/20) and 2030 climate plan (17/09/20)
- Review of:
 - ETS Directive and Effort Sharing Regulation (national non-ETS targets)
 - Energy Efficiency and Renewable Energy Directive
 - Energy Taxation Directive
- Proposal Carbon border adjustment mechanism (2021)

Climate Goals of the European Union



Mobilising green finance/investments and ensuring a just transition

- The European Commission published its European Green Deal Investment Plan in early 2020. According to the EC, the plan should mobilize at least €1 trillion of sustainable public and private investments over the next decade.
- On July 21st, the European Council reached agreement on the Multi-Annual Financial Framework (MFF 2021-2027) and on the post COVID recovery plan *Next Generation EU*
 - Total MFF amounts to 1074,3 billion out of which 30% should be spent on climate related investments.
 - Socio-economic impact of the transition should be balanced by the *Just Transition Fund* amounting to 17,5 billion
 - Other relevant financing instruments include *Invest EU* (8,4 billion) to stimulate (ao.) public and private investment in sustainable infrastructure and the research and innovation programme *Horizon Europe* (80,9 billion)
- *Next Generation EU* (750 billion of which 390 billion subsidies) is a one-off raise of the MFF with a view to re-start the European economy.
 - Recovery and resilience facility (560 billion of which around 5,15 billion for Belgium)

On the menu as well

- Taxonomy Regulation
- EU Green Bond Standard
- Renewed Sustainable Finance Strategy
- Review Non-Financial Reporting Directive
- 2021: Review of State Aid Guidelines

Energy: a focus on energy infrastructure, with many initiatives in 2020 already (1)

Decarbonising the EU's energy system is critical to reach our climate objectives.

Key Principles:



Prioritise energy efficiency and develop a power sector based largely on renewable sources



Secure and affordable EU energy supply



Fully integrated, interconnected and digitalised EU energy market

- Increasing **offshore** RES production is considered essential, building on regional cooperation between Member States. Between 230-450GW offshore wind needed by 2050 to reach objectives.
- The **TEN-E regulation** will be reviewed to bring it in line with the Green Deal objectives, in particular as regards eligibility of infrastructure projects for and effectiveness of PCI status. The organisation of infrastructure planning at EU level is on the table, with a push for more integrated planning across sectors (allowing to compare e.g. electricity and gas solutions) – with a potential impact on the TYNDP processes, outputs and governance.

On the menu

- Strategy on smart system integration
- Hydrogen strategy & Hydrogen Alliance
- Offshore strategy (November 2020)
- Revision of TEN-E regulation (Q4 2020)



Energy: a focus on energy infrastructure, with many initiatives in 2020 already (2) – spotlight on energy system integration

- [The Energy system integration](#) strategy was designed to **address the parallel sectoral approach of the energy sector** from generation to end users, in silos, lacking coordination.
- The **coordinated planning and operation of the whole energy system** (including all energy carriers, infrastructures and consumption sectors) is considered by the Commission as the most effective and affordable way to enable the decarbonisation of the European economy and reach the objectives of the Paris Agreement and of the upcoming Climate Law (climate neutrality by 2050).
- The Commission also underlines that this strategy will **provide additional flexibility** (including from consumers) and boost the development of **new storage capacities** supporting the resilience of the energy sector and security of supply
- There are three main pillars to this strategy:
 - A **more 'circular' energy system**, with energy efficiency at its core.
 - A greater **direct electrification** of end-use sectors.
 - For those sectors where electrification is difficult, the strategy promotes **clean fuels**, including renewable hydrogen and sustainable biofuels and biogas.





Energy: a focus on energy infrastructure, with many initiatives in 2020 already (3) – spotlight on hydrogen

- In an integrated energy system, hydrogen can support the objective of reaching full decarbonisation by 2050. The [EU Hydrogen Strategy](#) addresses how to transform this potential into reality, through investments, regulation, market creation and research and innovation.
 - Focus on hard-to-abate sectors, but also storage
 - Priority for renewable hydrogen but flexible on short- and medium term
- The EC proposes a phased approach:
 - From 2020 to 2024, support the installation of at least **6 gigawatts** of renewable hydrogen electrolyzers in the EU, and the production of up to **one million tonnes of renewable hydrogen**.
 - From 2025 to 2030, hydrogen needs to become an intrinsic part of our integrated energy system, with at least **40 gigawatts** of renewable hydrogen electrolyzers and the production of up to **ten million tonnes of renewable hydrogen** in the EU.
 - From 2030 to 2050, renewable hydrogen technologies should reach maturity and be deployed at **large scale** across all hard-to-decarbonise sectors.
- Launch of the [European Clean Hydrogen Alliance](#)



Mobility: accelerating the shift to sustainable and smart mobility

- Europe must reduce emissions from transport further and faster since transport accounts for a quarter of the EU's greenhouse gas emissions, and still growing.
- **By 2025, about 1 million public recharging and refuelling stations** will be needed.
- **AFID** and TEN-T revisions could include issues such as minimum targets per member state for public charging infrastructure, new metrics and methodologies to assess the right geographical coverage of infrastructure to meet the demand of EV drivers, smart charging rules, harmonisation of payment solutions, open and shared data, data interoperability,...

On the menu:

- Strategy for sustainable and smart mobility
- Review of the Alternative Fuels Infrastructure Directive (AFID) and the TEN-T Regulation
- Revision of the legislation on CO2 emission performance standards for cars and vans

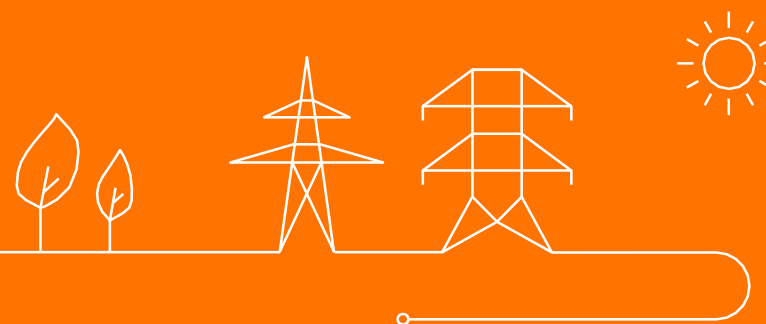
Digitalisation including data strategy

- The EU digital strategy (°19/02/2020) includes a **data strategy** with a focus on making data more accessible and interoperable, across sectors, between private and public players and across countries
 - Establishment of EU-wide common, interoperable data spaces in key sectors including energy and mobility
 - Links to the CEP and the smart sector integration strategy
- And it includes a **white paper on AI**:
 - Streamline research, foster collaboration between Member States and increase investment into AI development and deployment;
 - Policy options for a future EU regulatory framework that would determine the types of legal requirements that would apply to relevant actors, with a particular focus on high-risk applications
- **Cybersecurity**: link with CEP network code on cybersecurity

On the menu

- Framework for governance of common European data spaces
- Digitalisation of energy action plan
- AI Regulation and Digital services act
- European “Data Act”: remove barriers and introduce rules for B2B and B2G data sharing
- Making public sector datasets available across EU for free and through standardized API's
- Implementing Act on interoperability of data (following CEP)

Q&A



Thank you!

For information or question, do no hesitate to send an e-mail to info@kbve-srbe.be