This presentation provides a brief overview of the Clean Sky 2 Programme and the Clean Sky Joint Undertaking.

You will learn more about what partner roles are within the Programme, and if you are interested in submitting a proposal on a particular topic (as part of a consortium or on your own), you will get some practical guidance.
The initial Clean Sky Programme started in 2008 as one of five Joint Technology Initiatives launched under FP7 (the EU’s Seventh framework Programme for Research and innovation).

It was substantially driven by the aims for 2020 set out by the Advisory Council for Aeronautic Research in Europe (ACARE ), of improving fuel burn and cutting CO₂ emissions from aviation by 50%, reducing NOx by 80% and aircraft noise by 50% from levels in the year 2000.

Reaching these goals will require a final push from Clean Sky 2, including demonstrations to reach the targeted Technology Readiness Level 6. Since the initial Clean Sky programme will be completed by 2017, in July 2014 the European Commission launched Clean Sky 2 under the Horizon 2020 Framework Programme, to build on the successful achievements made to date. It follows the goals set out in the renewed ACARE Strategic Research and Innovation Agenda launched in 2012, looking at the period up to 2050.
Clean Sky is directly involved in three of the five pillars of ACARE’s strategic research and innovation agenda. It contributes to the fuel efficiency and environmental protection, and its actions concerning mobility and industrial leadership in the context of Horizon 2020 are vital.

The Programme is funded as part of Horizon 2020’s societal challenges, in particular “Smart, Green and Integrated Transport”.
In order to support ‘Smart, Green and Integrated Transport’, Clean Sky focuses its efforts on better environmental performance, fuel and energy efficiency, safe and seamless mobility, and industrial leadership.

To achieve these objectives, we need to enhance the innovative capacity of the European Research Area, by enhancing and bringing together the contributions of universities, research organisations, and large and small industries, especially SMEs.

The Clean Sky JU does not exist in isolation. It has built on earlier research performed in the EU Framework Programmes before it, as well as national research programmes and the strong private investment of the sector. Going forward this will continue.

A particularly important aspect in Clean Sky 2 will be to strengthen ties and extract more synergies with national programmes of member states and regional projects as well as the synergy between the European Structural and Investment Funds and the excellence objectives of Horizon 2020.
How is the programme technically structured?

The Clean Sky 2 programme builds on the original Clean Sky, and extends it in scope and content. It includes the now-familiar Integrated Technology Demonstrators, or ITDs, of the first programme. Focusing on three key application areas - airframes, engines, and systems - they work largely towards developing new technology streams for the next generation of aircraft, to be validated in integrated demonstrators either on the ground or in the air.

The second feature is the Innovative Aircraft Demonstrator Platforms, or IADPs. They are the big demonstrator platforms involving projects at full aircraft level, with large passenger aircraft, regional aircraft, and fast rotorcraft as the three sub-programmes.

Three transverse activities (Small Air Transport, Eco-Design and Technology Evaluator) integrate the knowledge of different ITDs and IADPs for specific applications and enhance synergies between different platforms through shared projects and results.
Eco-design covers technology issues like life-cycle engineering, recyclability, and materials processing or the design, production, operational or disposal cycles.

Small air transport focuses on general aviation planes seating between four and 19 people. It requires input from many sides, including plane-makers and systems and engine providers.

Technology evaluation is an important transversal function as it translates project results from engineer-speak into language other stakeholders can understand. This is important in terms of securing funding and providing value for money.

The total efforts related to the programme of “almost 4bn€” with a bn1,755 bn€ contribution of the European Commission with the balance contributed to the programme by its so-called “private members”, meaning the participants in the research activity, whether they are industry, SMEs, research organizations, or universities.
Building on the challenges facing “Smart Green and Integrated Transport”, Clean Sky 2 activities confirm a reasonable balance of projects among the three areas of energy efficiency and the environment, safe and seamless mobility, as well as building industrial leadership in European reality projects can and do impact on more than one of these three areas.

Take for example the Ultra-high bypass engines or open rotor, which will clearly bring about important gains in fuel efficiency and environmental performance, but which will also make European aircraft and their manufacturers, users and the supply chain more competitive.

The same considerations apply to fast rotorcraft, small air transport or regional turboprops: offering expanded safe and reliable mobility across Europe and strengthening the role of important European industrial players in the global aeronautical market.
Of the total Clean Sky 2 funding available, which as said is just over 1.7bn€, up to 30% will go to the partners – entities selected via Calls for Partners and engaged for the whole duration of the programme.

At least 30% of the funding will be awarded via calls for proposals and tenders.

These call mechanisms, Calls for Partners as well as Calls for Proposals and Calls for Tenders are open for participation for all the different players - SMEs, research organisations, universities and industry are all eligible. The remaining 40% of the budget is reserved for the 16 Leader companies, committed to manage and secure the success of large-scale demonstrators and to the decade-long research agenda with very significant in-kind contributions. All those efforts will benefit European aeronautics industry as a whole.
Disclaimer
The selection of Partners will be based on Horizon 2020 Rules for Participation, the rules for submission of proposals, evaluation and selection of Partners, as adopted by the Governing Board of Clean Sky 2, and will apply to the calls for Partners.
The content of this presentation is not legally binding.
This presentation wishes to provide a preliminary overview of these rules.
The proposed content/approach is based on the consultation with the "National States Representative Group" and the "Task Force" of the Clean Sky Partners.

Clean Sky 2
Thank you for your attention