



# Sustainability and Digitalisation: the paradigms for a new era of aeronautics

5 September 2023

13th EASN International Conference



Electronics



Helicopters



Aircraft



Cyber & Security



Space



Unmanned Systems

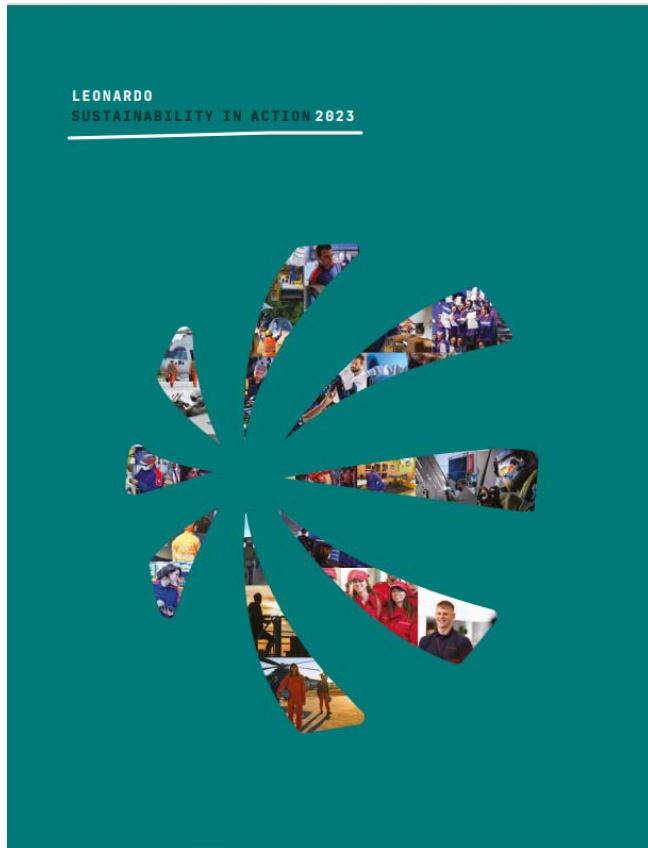


Aerostructures

# Institutions are setting objectives and regulations for Sustainability



# Company are setting process and roadmap for Sustainability



## GOVERNANCE

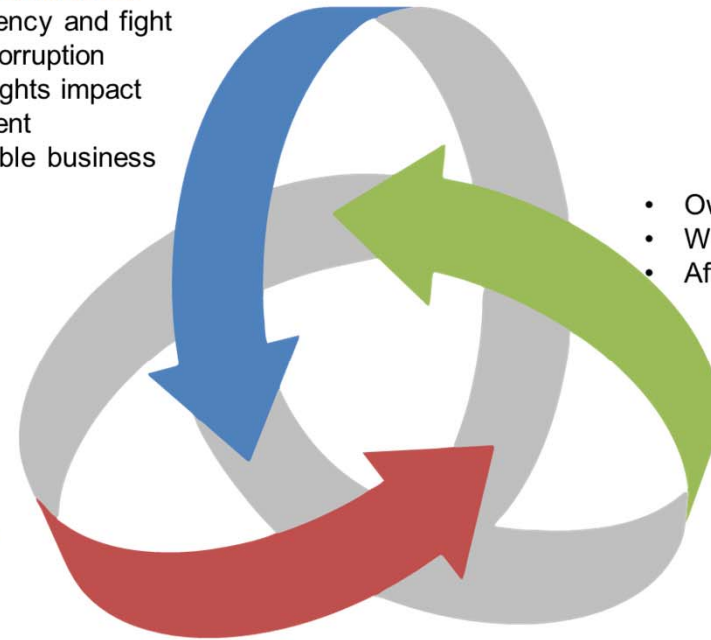
- Transparency and fight against corruption
- Human rights impact assessment
- Responsible business conduct

## SOCIAL

- Own workforces
- Workers in the value chains
- Affected communities.

## ENVIRONMENT

- Emission reduction
- Circular economy
- Sustainable Supply Chain



---

Aviation is one of the Sustainability objectives



**DECARBONISING  
AVIATION**



## A challenging path



# 4 SCENARIOS



Continuation of current trends



Pushing technology and operations



Aggressive sustainable fuel deployment



Aspirational and aggressive technology perspective



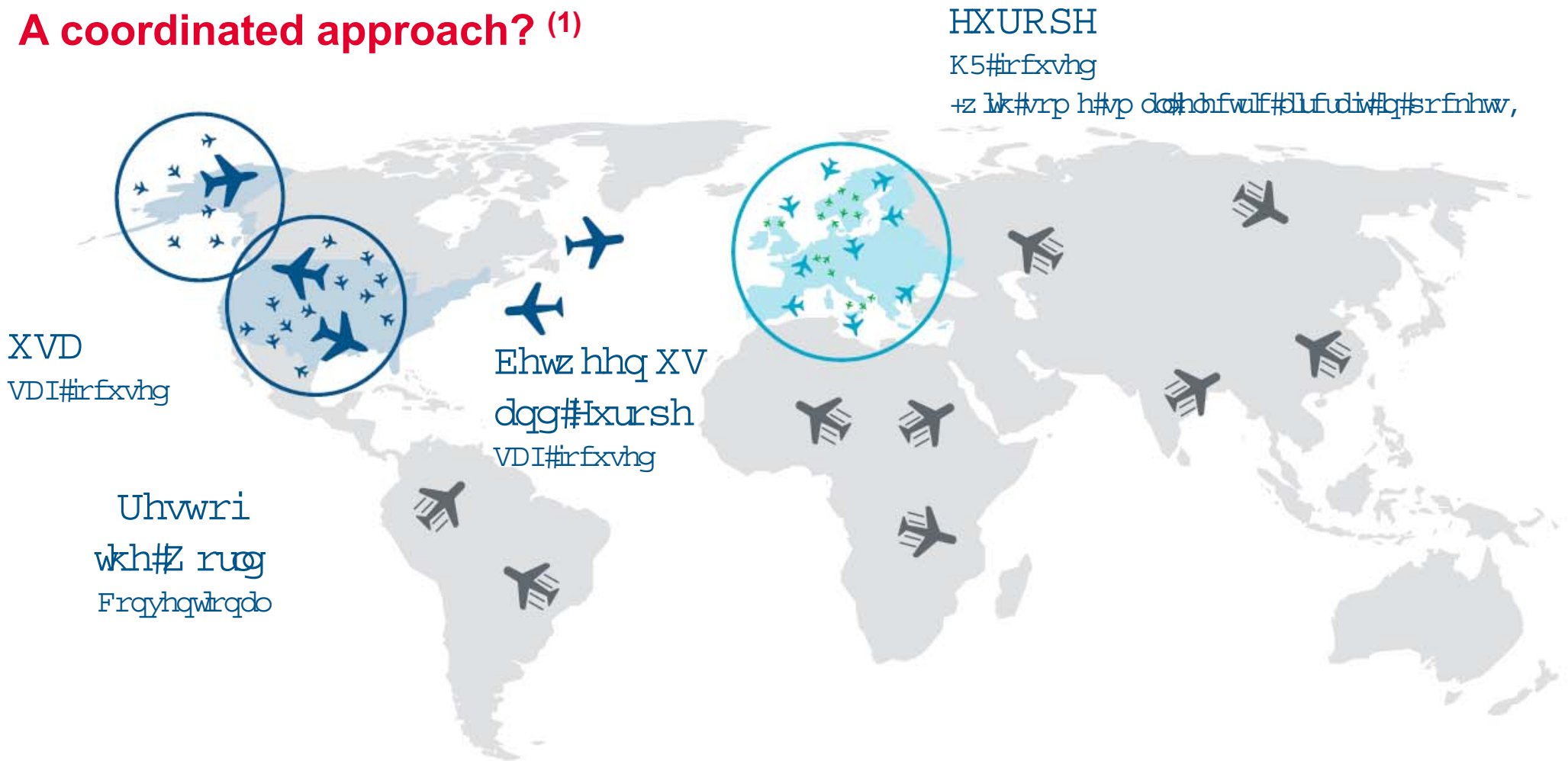
## Price for the transition to Net Zero Fleet <sup>(1)</sup>

	TOTAL	PREMIUM	BAU
• Improvements in technology	938 B€	198 B€	
• Improvements in ATM and operations	47 B€	29 B€	
• Alternative fuels	751 B€	441 B€	
• Carbon pricing / negative emissions	152 B€	152 B€	
<b>TOTAL</b>	<b>1.888 B€</b>	<b>820 B€</b>	<b>1.068 B€</b>

<sup>(1)</sup> Abstract from «Innovation Fund Stakeholder Consultation event» NLR / SEO report 13 June 2023. Aviation section



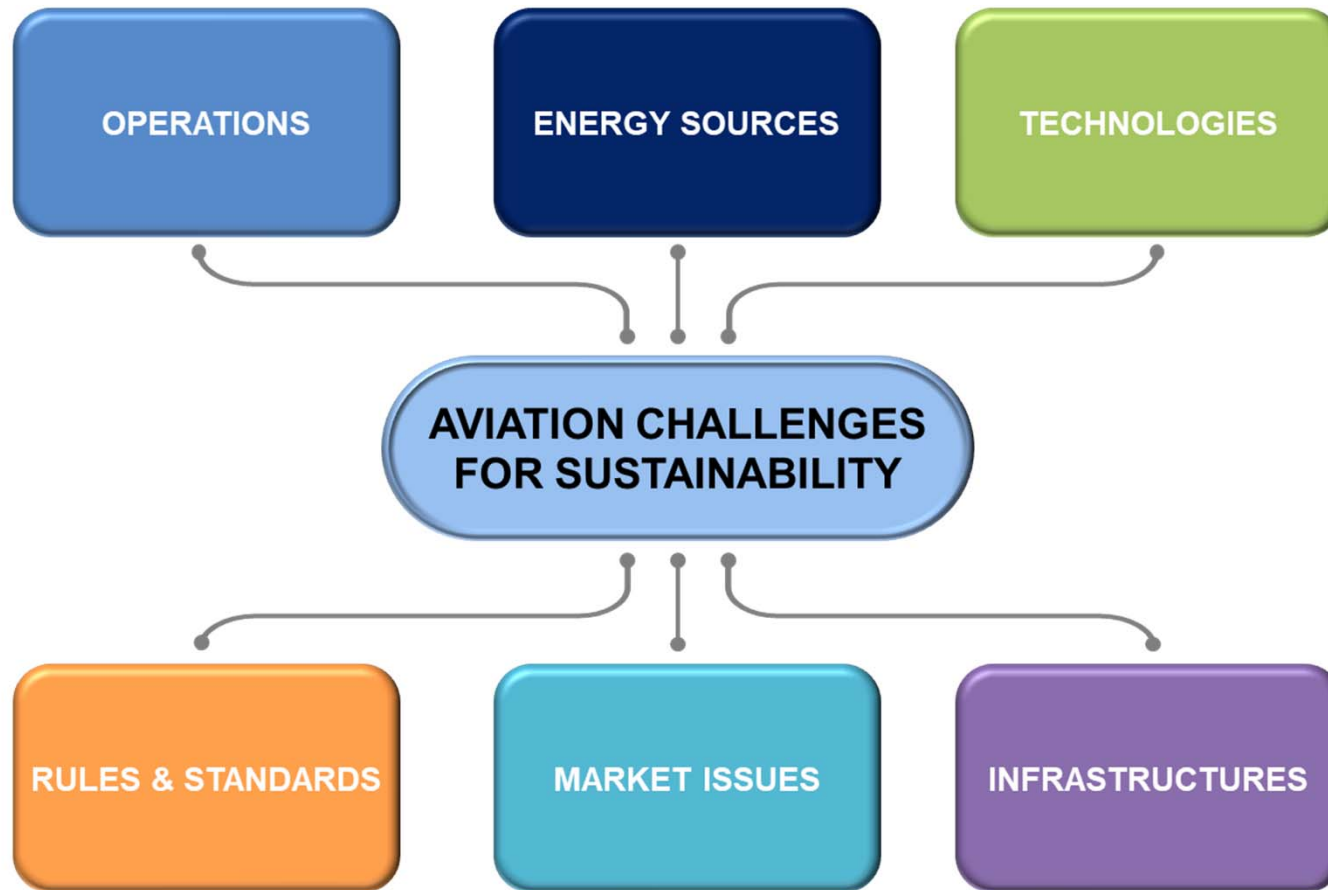
# A coordinated approach? (1)



(1) Dgdswhg from -Urdgp ds#r#Mxh# hur#Vfhqdlr-#Dq#kqfrruglpwhg z ruog#Jroqg#Ehujhu

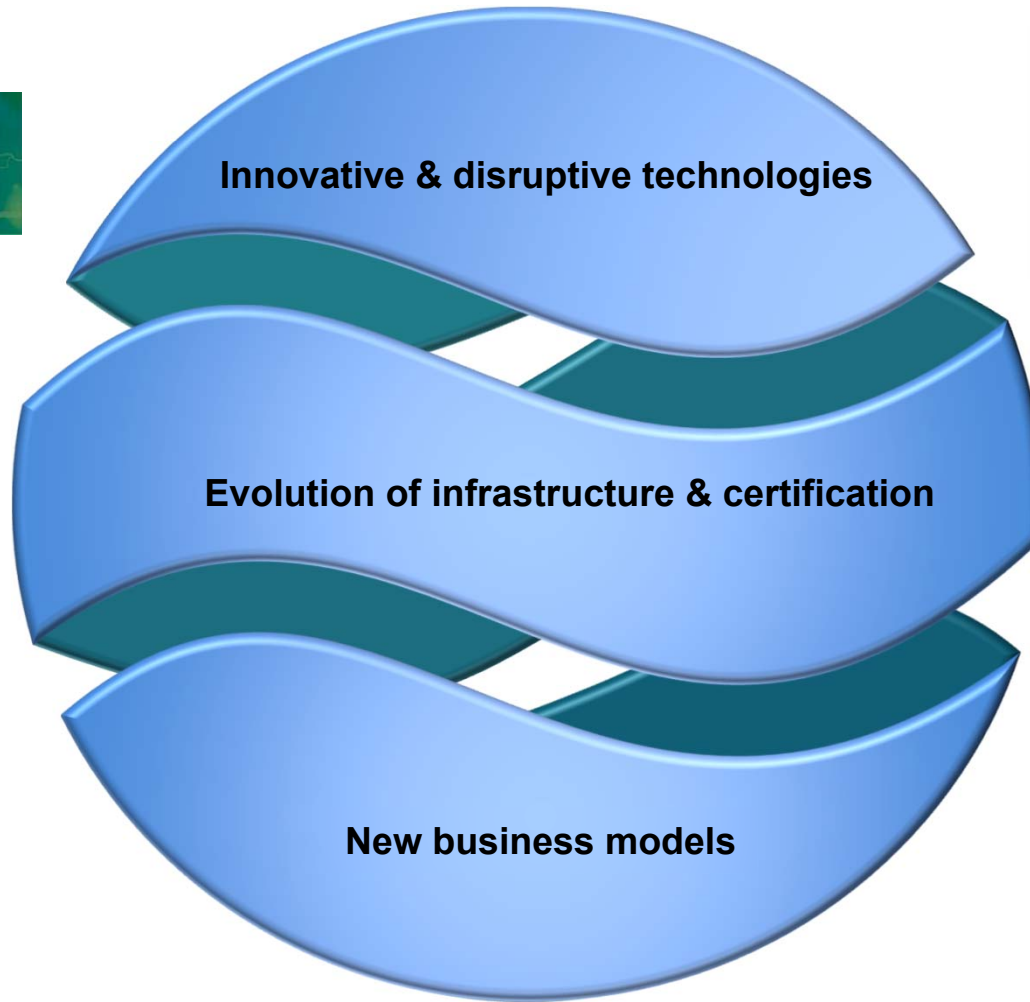


## A systemic revolution

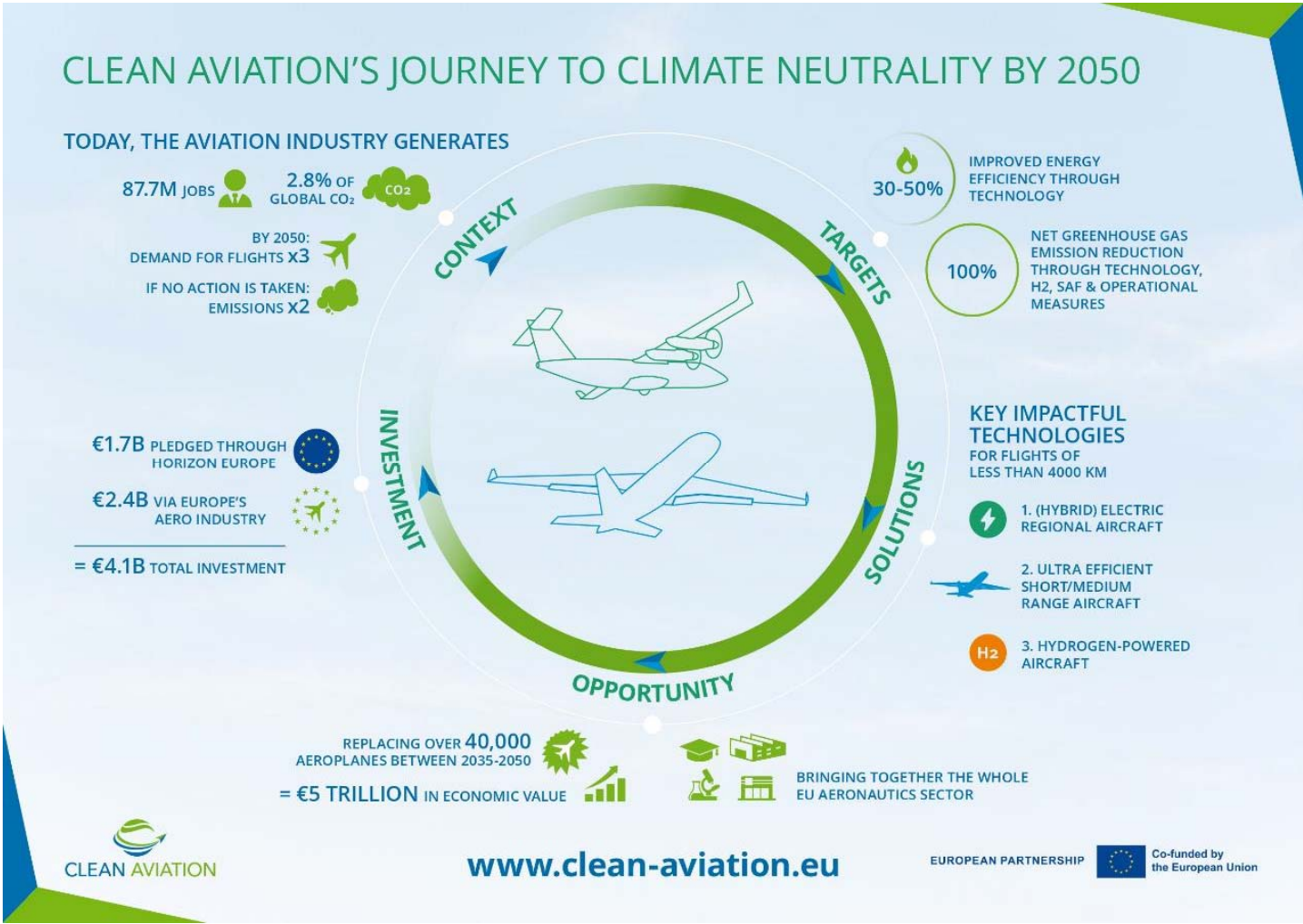




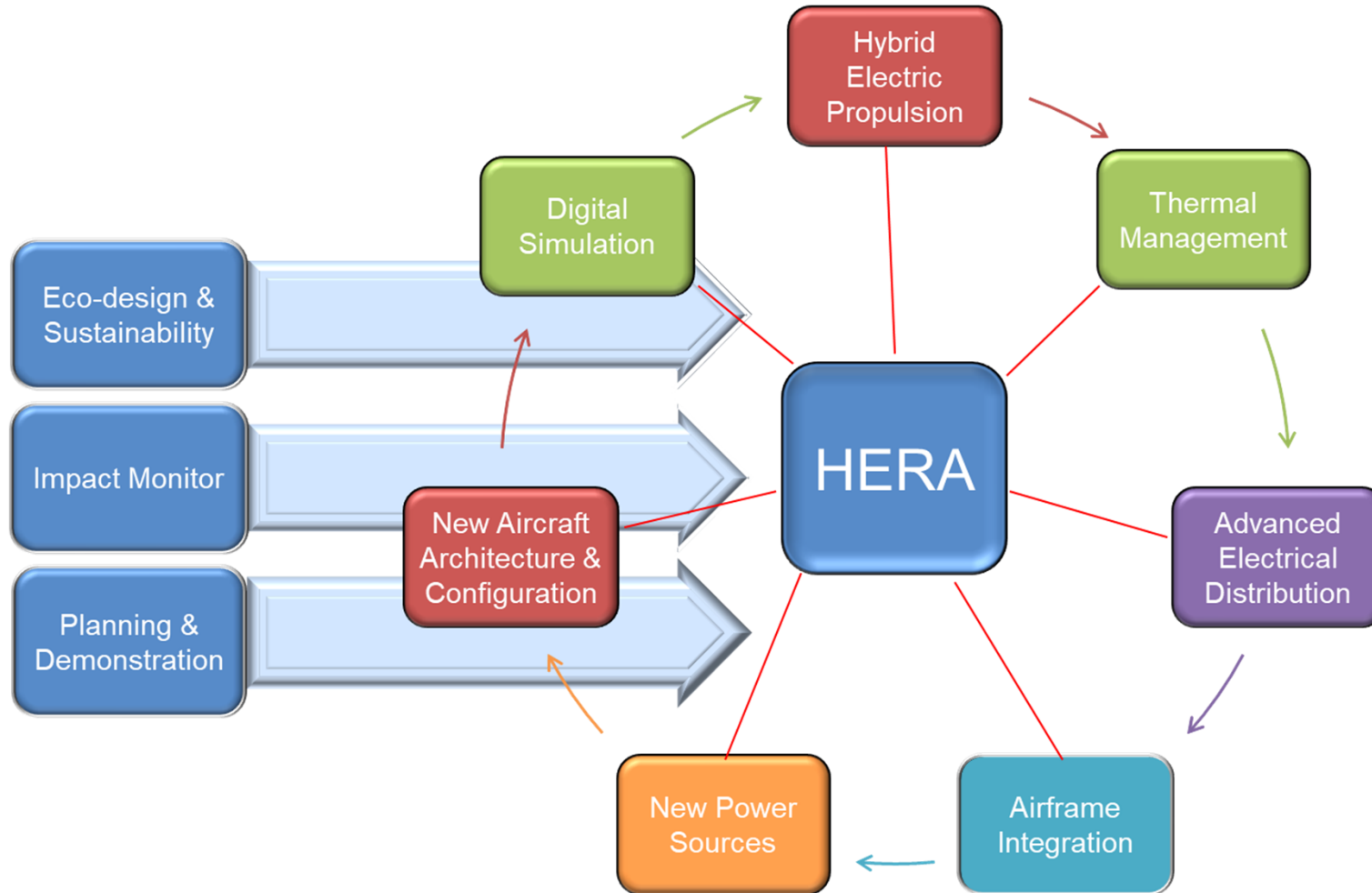
# Parallel synergic streams



# Clean Aviation - key step in the technology maturation



# Exploiting the Clean Aviation Ecosystem



---

**Is it enough?**



---

**We need to  
Reduce time to market**

**&**

**Enhance competitiveness!**



## Digitalisation benefits

- ① Reduce time and improve process robustness to design and certify the product
- ② Improve quality and flexibility in the Manufacturing and Assembly
- ③ Enable better Training services and Fleet support



# Digitalisation solutions

