ICAO EUR/NAT and ACI EUROPE

REGIONAL GREEN AIRPORTS SEMINAR

Hosted by the Ministry of Transport
Republic of Kazakhstan

Carbon governance of investment projects

Stanislas Lego

Sustainable Design Manager at Groupe ADP

Context

Key figures and general commitments on carbon emissions

SBTi roadmap

Investments carbon trajectory management

Whats'next

Towards sustainable airports

Projects carbon governance

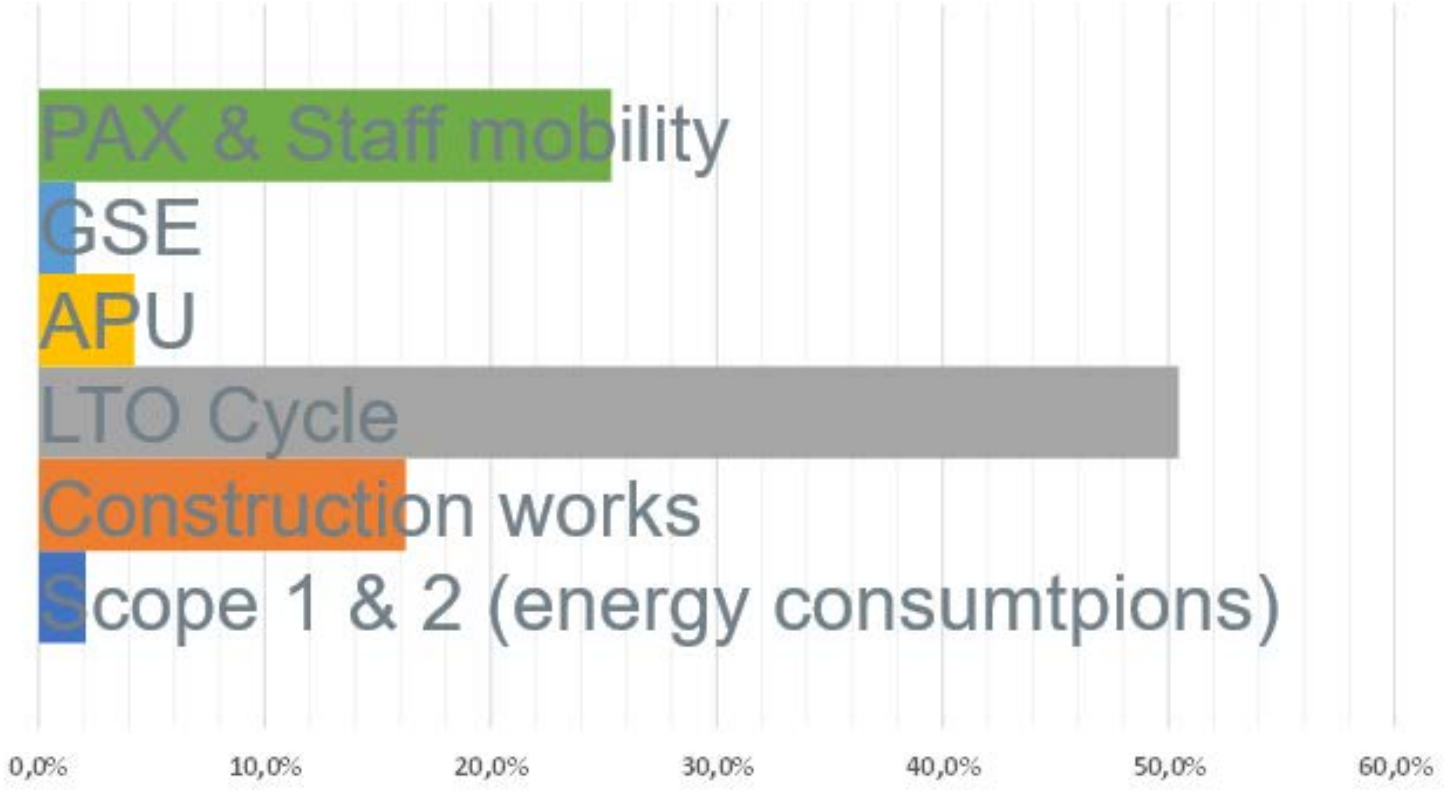
Objectives, process and tools

Case study

Application of the carbon follow-up

Context

Key figures and general commitments



Groupe ADP – overall commitments on Carbon Reduction

Construction	Internal Emissions	External Emissions	Dismantling
	Net Zero objective on both internal and external emissions for ADP Group		
	airport carbon accredited TRANSFORMATION **ACA4** **Net Zero scope 1&2**		
	SCIENCE BASED TARGETS DRIVING AMBITIOUS CORPORATE CLIMATE ACTION **SBTi** **2050** **Carbon Neutral Territory (CDG, ORY, LBG)**		
2025 Pioneers Objective	Set a life cycle carbon budget for all investment project >5 M€		

CO2 emissions at Paris airports
(source: ACA 2019 report)

Emissions of construction represent for ADP ~400 ktCO2eq / year, (i.e. 16% of emissions in 2019) hence ADP's 3rd largest emissions source, after aircraft and passenger mobility.

02

Project carbon governance

Objective, Process and Tools

01
ENVIRONMENT
IMAGINING THE SUSTAINABLE AIRPORT OF TOMORROW

BEING A PIONEER IN OUR CONSTRUCTION METHODS

OUR PROMISE

To promote sustainable, low-energy and high-quality infrastructure while reviewing our construction methods

OUR APPROACH

To meet the highest standards of low carbon construction as a project owner

- **Optimising and densifying our existing infrastructure to limit capacity increases**
- **Reusing materials on site and reducing vehicule traffic** (e.g. Runway 1 at Paris-Charles de Gaulle, Runway 3 at Orly)
- **Reducing the operating costs of new infrastructure, reducing the need for costly road infrastructure**
- **Promoting the development of competitive supply chains for low-carbon materials**

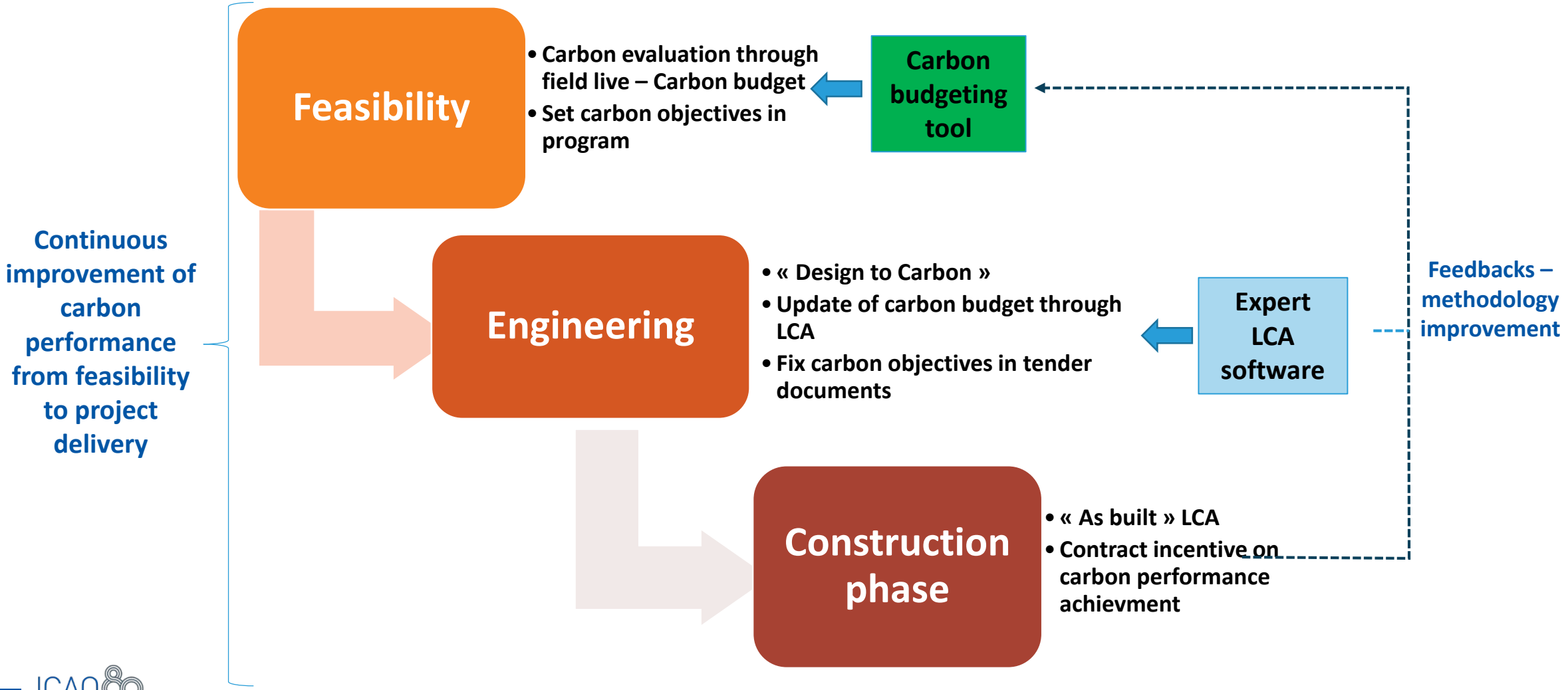
OUR QUANTIFIED OBJECTIVES

Set a **CARBON BUDGET FOR THE LIFE CYCLE** of all investment projects over €5m

Parisian airports (Paris-Charles de Gaulle/Paris-Orly) and Amman (AMM)
Airports controlled by TAV Airports: Ankara (ESB), Izmir (ADB), Bodrum (BJV), Gazipasa (GZP), Monastir (MIR), Enfidha (NBE) Skopje (SKP), Ohrid (ODH), Tbilisi (TBS), Batumi (BUS), Almaty (ALA)

Monitoring Carbon Performance

At all project phases



Monitoring Carbon Performance

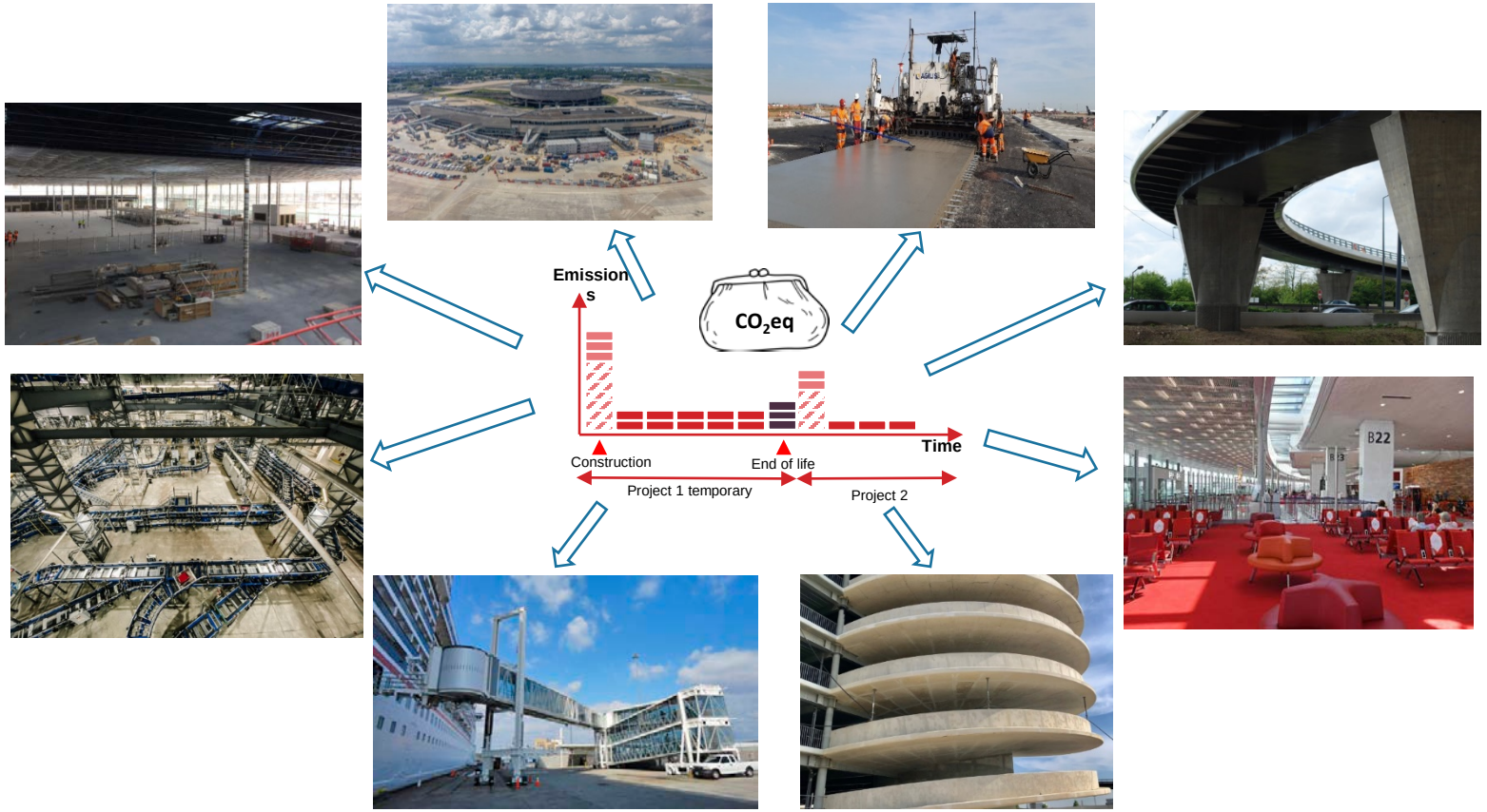
At all project phases

Project Phase	Feability	Engineering	Tendering	Construction Phase	Commissioning
Management	**Front End Project Team**	**Project Team**	**Project Team**	**Project Team**	**Project Team**
Help and assistance	• **Sustainable design team**	• **Engineering teams** • **Framework agreement** • **Sustainable design team**	• **Eng Teams** • **Sust design team**	• **Construction companies** • **Sustainable design team**	• **Construction companies** • **Sustainable design team**
Mission	• Upstream environnemental ambition • Environnemental Program • **Carbon Budget**	• Carbon objectives in Tender documents • **Carbon LCA study** at each engineering steps, basic and detailes design	Review of the environmental criteria in the technical offers	• Dedicated environmental follow up during execution phase • **Carbon LCA study** update during exécution	• Decision on environmental incentive payment • **As built carbon LCA**

Carbon Budgeting Tool

Evaluate a carbon budget for all investment projects at feasibility stage

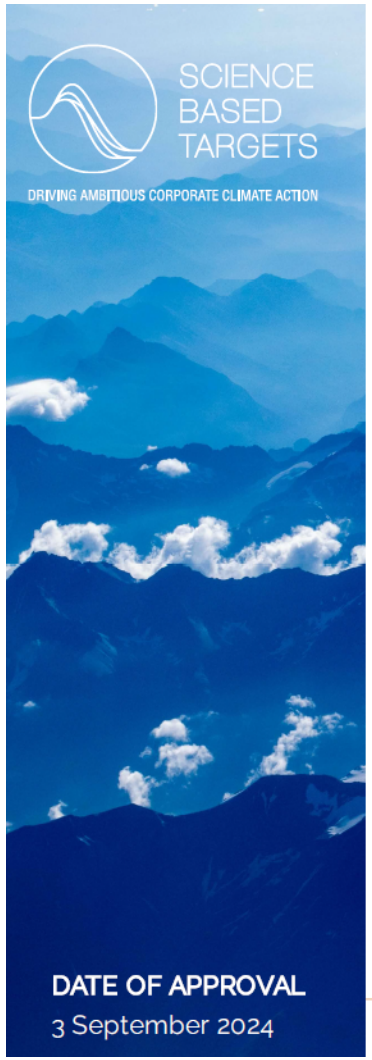
- The carbon budget covers **the whole project life cycle** (construction-material /operation/maintenance/end of life)
- **The carbon budget must be optimized** throughout the project life up to project delivery by giving all construction companies and technical teams **clear carbon performance targets**.



03

SBTi Roadmap

Investments carbon trajectory management



APPROVED

NET-ZERO SCIENCE-BASED TARGETS

The Science Based Targets initiative has validated that the science-based greenhouse gas emissions reductions target(s) submitted by Aéroports de Paris S.A., conform with the SBTi Corporate Net Zero Standard.

SBTi has classified your company's scope 1 and 2 target ambition as in line with a 1.5°C trajectory.

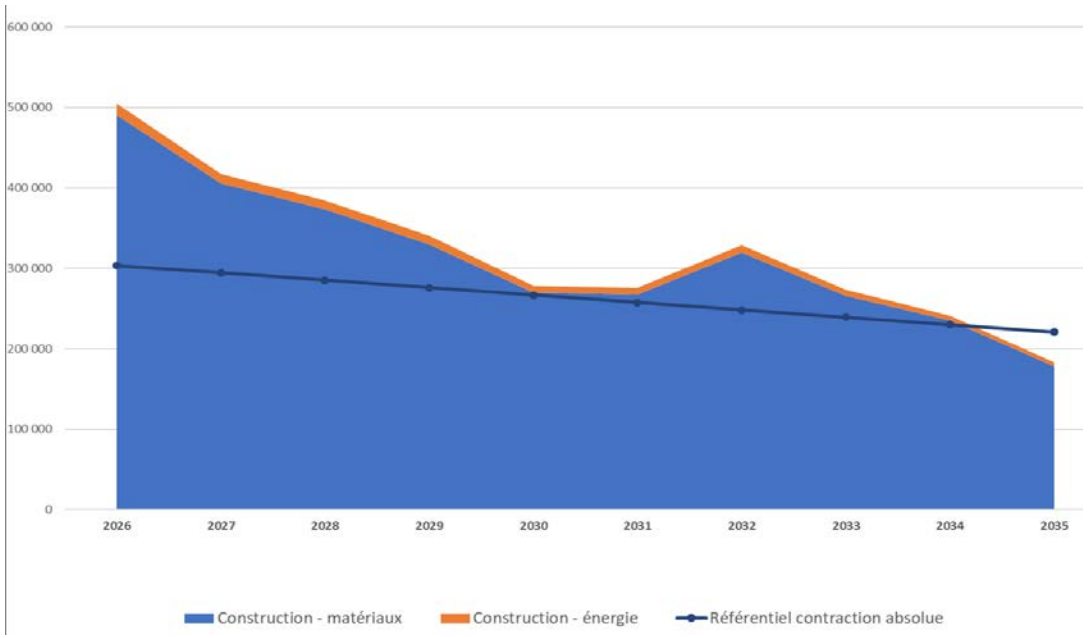
The official net-zero science-based target language:

Overall Net-Zero Target: Aéroports de Paris S.A., commits to reach net-zero GHG emissions across the value chain by 2050.
Near-Term Targets: Aéroports de Paris S.A., commits to reduce absolute scope 1 and 2 GHG emissions 68% by 2030 from a 2019 base year.* Aéroports de Paris S.A., also commits to continue active annual sourcing of 100% renewable electricity through 2030. Aéroports de Paris S.A., further commits to reduce absolute scope 3 GHG emissions 27.5% by 2030 from 2019 base year.
*The target boundary includes land-related emissions and removals from bioenergy feedstocks.
Long-Term Targets: Aéroports de Paris S.A., commits to reduce absolute scope 1 and 2 GHG emissions 90% by 2035 from a 2019 base year.* Aéroports de Paris S.A., also commits to maintain a minimum of 90% absolute scope 1 and 2 GHG emissions reductions from 2035 through 2050 from a 2019 base year.* Aéroports de Paris S.A., further commits to reduce absolute scope 3 GHG emissions 90% by 2050 from 2019 base year.
*The target boundary includes land-related emissions and removals from bioenergy feedstocks.

SBTi roadmap

Set ambitious carbon targets on major projects

CO2 trajectory of the long term investment plan



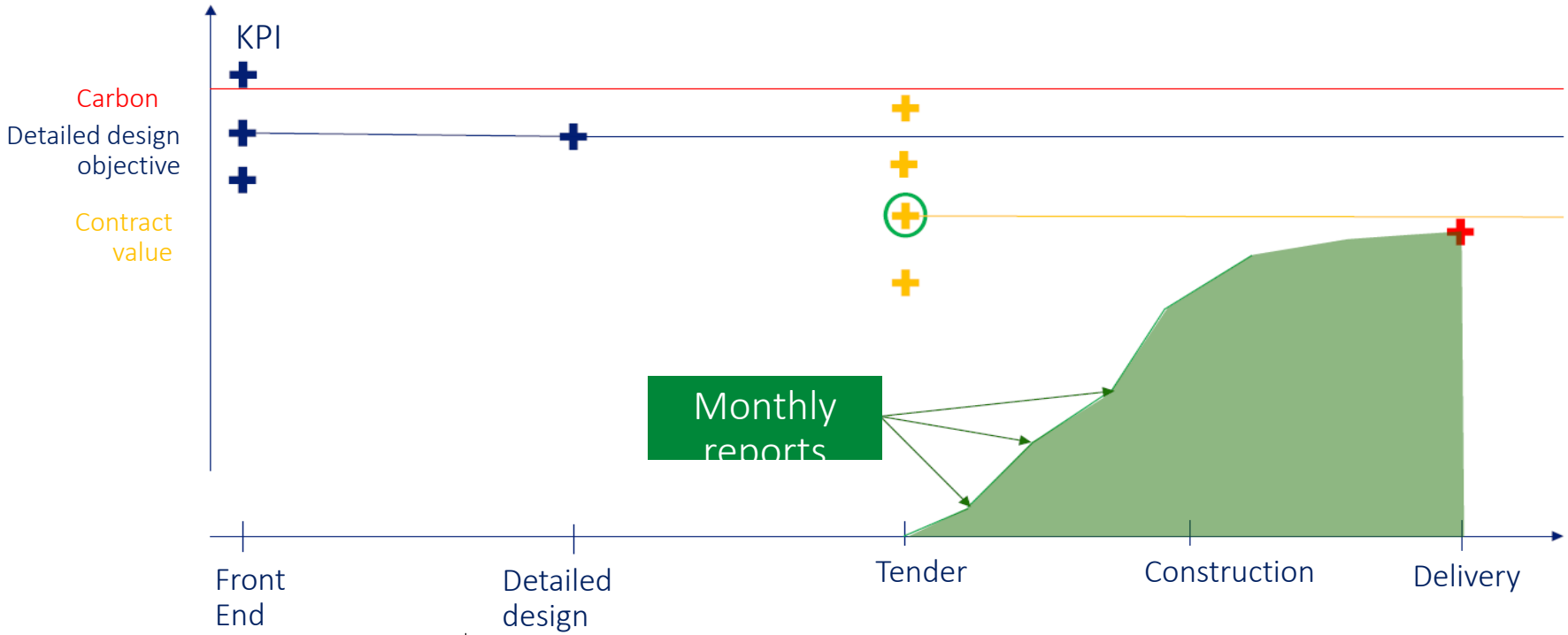
- To meet Mid Term SBTi objectives, specific carbon criteria shall be fixed on major projects:
  - On the **most carbon intensive projects (in period 2026-2030):** A performance of circa **35%** should be targeted
- Continuous improvment on sustainable design for any project type
- Investigation on the carbon reduction of renovation works

04

Case study

Application of the carbon follow-up

Case study: Renovation of 3 taxiways at CDG



ENGINEERING

Program, technical, operation optimisation:

Selection of concrete vs asphalt, maximising recycling content, land management, design and operations optimisation

TENDERING

Innovative hybrid composition, biofuled machineries, onsite recycling and concrete plant

CONSTRUCTION/WORKS

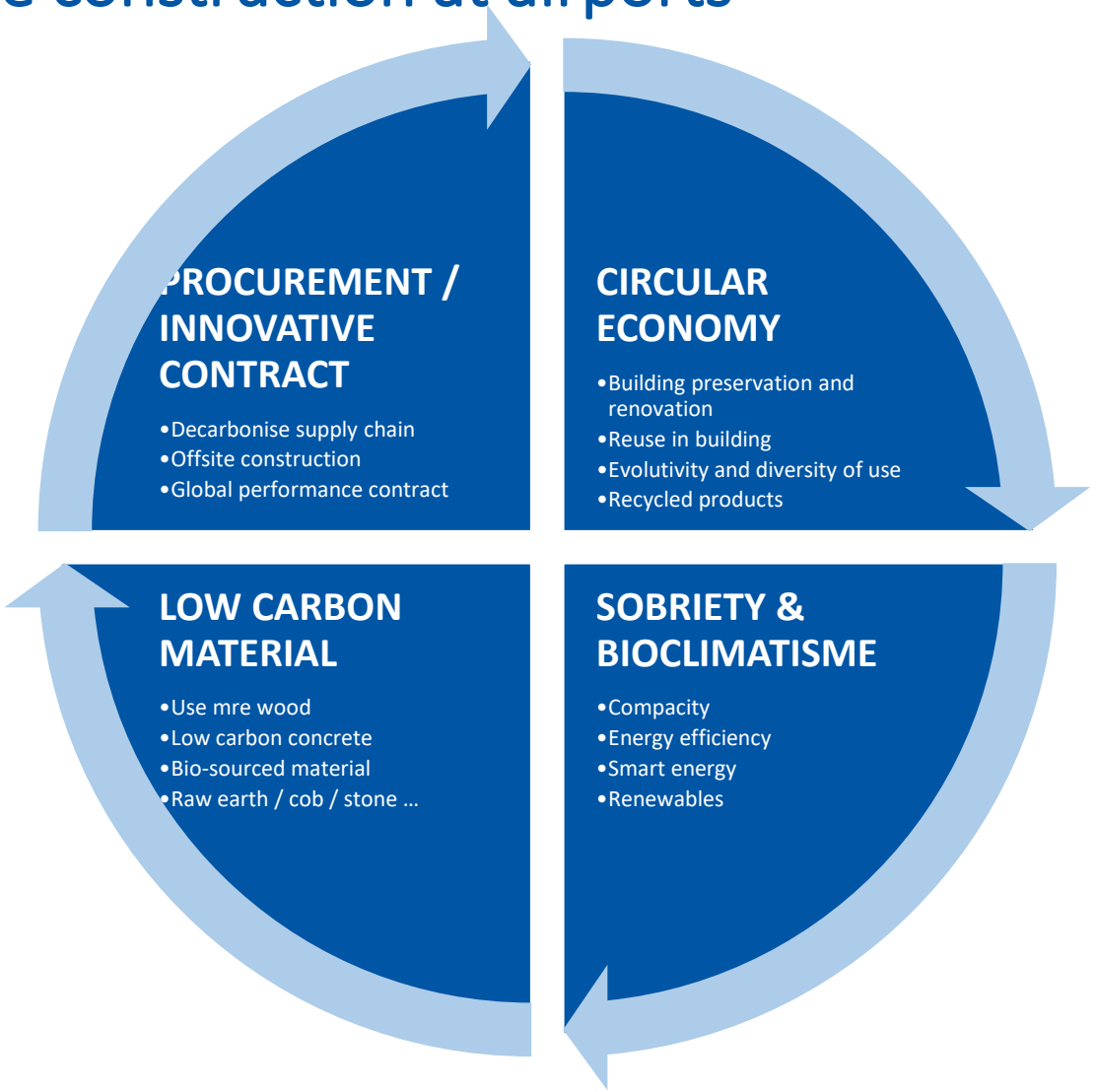
Environmental follow up during works/operations, subsidiary environmental audit, logistics optimisation

05

What’s next

Towards sustainable airports

Sustainable construction at airports



Thank You

ICAO 80