



ROYAL
AERONAUTICAL
SOCIETY

SASIG

Strategic Aviation Special Interest Group
of the Local Government Association

DELIVERING SUSTAINABLE GROWTH IN AVIATION

What does Sustainable Airport Development Look Like?: A Local Government Community Perspective

Chris Cain
Head of Secretariat to SASIG
(Director Northpoint Aviation)

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Who Are SASIG?

- **Strategic Aviation Special Interest Group** of the Local Government Association
- One of the largest SIGs in LGA - comprises 30 Local Authorities from across the country, all with a common interest in strategic aviation (i.e. policy and regulatory) issues.
- The Local Authorities comprise a population of around 11 million people, more than a fifth of the total population of England.
- Recognised by DfT, DEFRA etc as representing local government and communities – core consultee

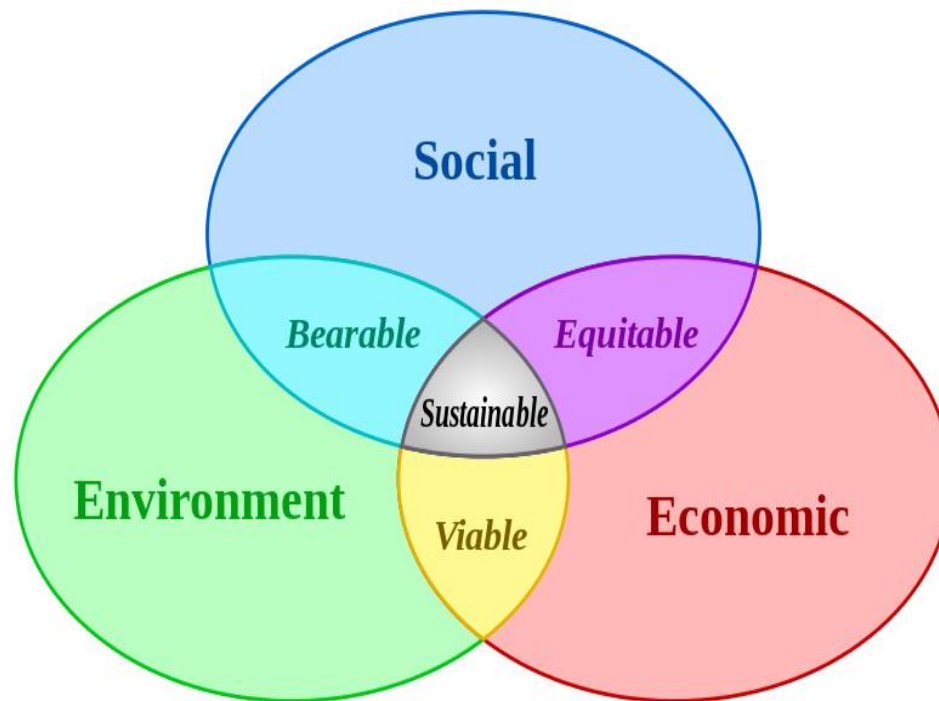
What are SASIG's Objectives?

- To promote the need for long-term, sustainable aviation policies that lead to a reduction in the environmental impact of aviation whilst securing appropriate social and economic benefits;
- To increase understanding of the local and global impacts of aviation on the environment and communities;
- To identify and promote the changes needed to move towards sustainable aviation practices within the industry and Government; and
- To work with other organisations and the Government on the formulation of policy advice.

SASIG's Policy Principles

- To [allow] social and business ... travel from [the] nearest airport where feasible.
- To capture ..., the social and economic benefits of aviation using robust and objective evidence.
- To direct aviation growth to locations where it will assist sustainable economic regeneration.
- To offer the aviation industry tough but realistic parameters [within] which to secure growth.
- To ensure that good quality surface access links are provided to airports, particularly public transport links that create integrated hubs.
- To promote better point to point air services from regional airports,
- To minimise adverse impacts – social, economic and environmental – by protecting people and non-transferable habitats.
- To ensure that the air transport not local communities pay the ... costs of the impact of ... air journeys.
- To work with Governments to ensure noise impact on local communities [from] airport growth, airspace change is minimised and mitigated.
- To encourage Governments and the aviation industry to make greater efforts to reduce aviation's impacts on climate change.
- To [ensure] the full spectrum of policies on issues relating to aviation [are applied].
- To press for innovative policies to address the health, social and wider impacts of airport development.

Sustainable Airport Development



SASIG supports the holistic definition of sustainable development with a focus on the best interests of local communities

Differentiation Application Based on Size, Geography, Local Environment

- Newquay is not Heathrow!
- Northern Powerhouse, West Midlands Engine and peripheral regions of UK – strong support for Airport development based on economic/social benefits.
- Congested/densely populated South East, emphasis is surface access and environmental impacts.
- Rural vs urban or suburban locations.



The Three Strands of Sustainability Applied to Airports

- Economic:
 - Financially viable
 - Direct, indirect, induced impacts
 - Wider catalytic benefits
- Social:
 - Access to social infrastructure
 - Equitable
 - Cultural and welfare benefits
- Environmental Protection:
 - Minimise impacts
 - Mitigate
 - Compensate

Environmental Protection – Design, Mitigation and Compensation

Design out

- Early engagement with local stakeholders
- Establish environ principles (e.g. not increase significant effects, Bream, carbon neutrality, increased PT mode split, lighting)
- Plan for secondary impacts

Mitigate

- Noise monitoring
- Noise insulation
- Operating hours
- AQ Management Plan
- Use of electric/ bio-fuel airside vehicles/taxis/PT
- Renewable energy sources/ generation

Compensate

- House purchase: market value + 15%
- Compensation for loss of value
- Council Tax
- Congestion Charge
- Community Levy
- Community Fund

Environmental Planning for Airports

<p>Short Term Planning:</p> <ul style="list-style-type: none"> • Commit to be leader in ‘green’ aviation. • Prepare Environmental management strategy • Energy Audit • Prepare environmental management plan • Waste Management Plan • Carbon Impact Plan • Noise Management Plan 	<p>Medium Term Initiatives</p> <ul style="list-style-type: none"> • Electric Ramp vehicles and GPUs • Bio-Diesel Taxi • Shared taxis schemes • Optimise PT usage up • ACI Carbon Accreditation • Wind turbines/solar on car parks, biomass units • Carbon Offsetting • Offer bio-fuel Jet A1 • Noise reporting 	<p>Long Term Initiatives</p> <ul style="list-style-type: none"> • Make environmental sustainability core theme of masterplan. • Optimise airspace with local interests • Continuous decent/ Precision R-Nav • Ground start push vehicles • Single engine running on taxiways
<p>Short Term Easy Wins</p> <ul style="list-style-type: none"> • Clear noise insulation • Low energy lights, improve insulation • Landscaping/lighting optimisation • CSR strategy • Community engagement • Source food locally • Comprehensive recycling 	<p>New Development/Refurb’s</p> <ul style="list-style-type: none"> • Bream design • High energy efficiency - smart control systems • Low carbon materials • Solar panels • Maximum natural light and ventilation • Raise PT targets • Compensation regime • Community Fund 	<p>Visionary Thinking</p> <ul style="list-style-type: none"> • Aim Carbon neutrality • Major renewable energy plant on-site or locally • Gate to gate operations • Community airports • Recognise secondary impacts – help plan • Investment in Circular Economy

Environmental Protection – Priorities for Local Authorities and Communities

- **Noise:** Night flights, airspace change, concentration, loss of relief periods; operating hours, insulation schemes; compensation.
- **Air Quality:** Statutory obligations, impacts on health
- **Surface Access:** Congestion, community severance, quality of public transport, rogue car parking
- **Planning:** Loss of PPG 24 (Crawley, Mobberley cases); Permitted Development – commercial to residential (Article 4); confusion over safeguarding; visual impacts/lighting
- **Secondary impacts:** Housing market overheating (land/property shortages, prices/rents rises): labour market shortages; rat running/congestion away from core transport corridors; pressures on social infrastructure), loss open space.
- **Climate change:** Obligations under Climate Change Act
- **Other environmental impacts:** ecology, water resources, historic environment, property take,

Working with Local Communities

- Keeping local communities informed and engaged is key to securing development approvals – identify key issues of concern and seek to address them directly
- Provide objective information on impacts and ensure local residents and key stakeholders have a chance to voice their concerns.
- React to these positively within the limits of affordability and regarding the impact on their local environment and where appropriate provide mitigation or compensation
- Close involvement with Council Members leads to effectively dialogue between airport and local residents

ACI Carbon Accreditation

- Direct 'control', e.g. onsite fuel consumption (Scope 1)
- Indirect 'influence', e.g. onsite electricity consumption (Scope 2)
- Indirect 'guidance', e.g. business travel and electricity transmission and distribution losses (Scope 3)³⁹

9.8.4 The majority of emissions (approx. 72% in 2012) are derived from the Operator's onsite electricity consumption with the remainder being associated with fuel consumed either for heating, transportation or by generators.

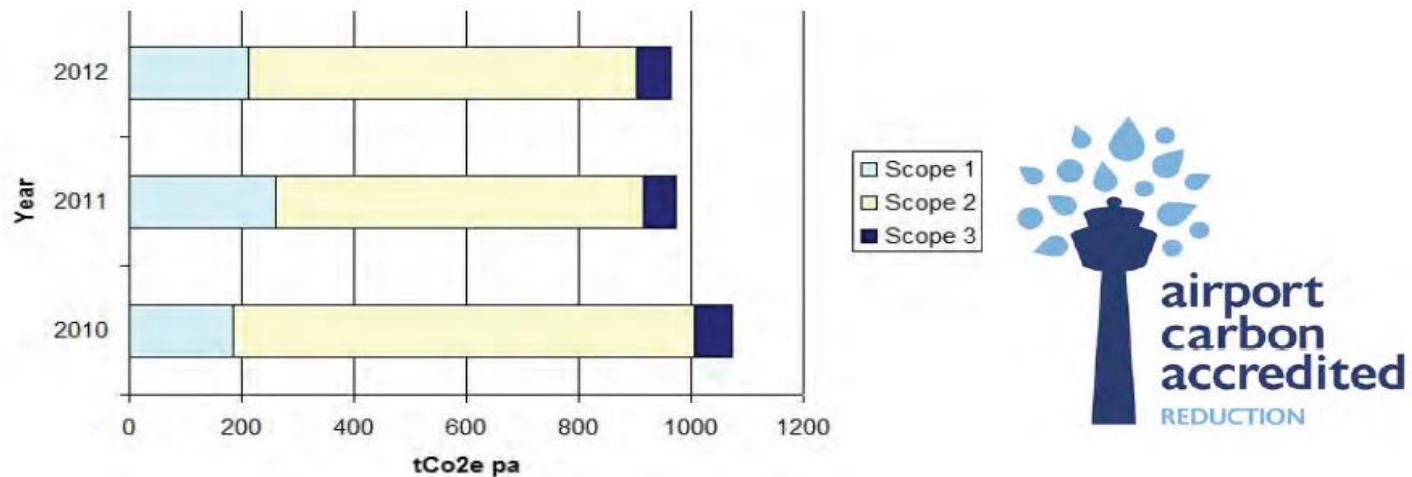


Figure 15 CAL Carbon footprint 2010–2012

What Next? The Circular Economy

OUTLINE OF A CIRCULAR ECONOMY

PRINCIPLE 1

1

Preserve and enhance natural capital by controlling finite stocks and balancing renewable resource flows
ReSOLVE levers: regenerate, virtualise, exchange

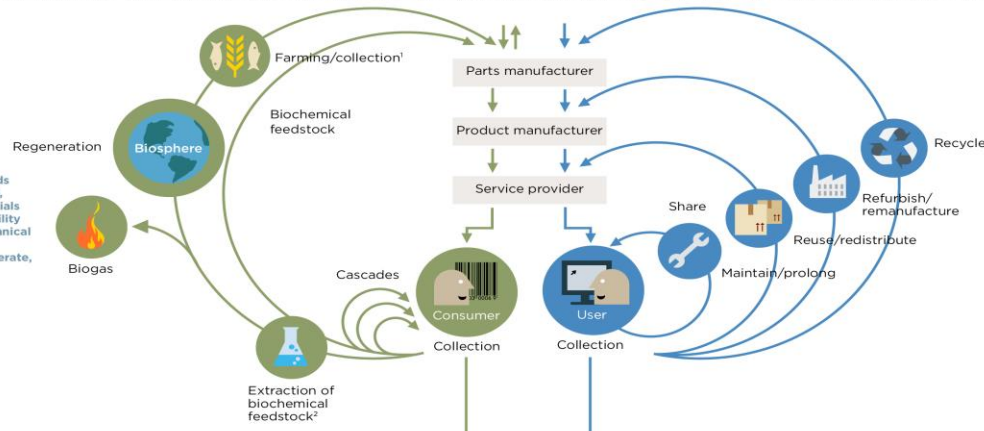


Renewables flow management

Stock management

PRINCIPLE 2

Optimise resource yields by circulating products, components and materials in use at the highest utility at all times in both technical and biological cycles
ReSOLVE levers: regenerate, share, optimise, loop



PRINCIPLE 3

3

Foster system effectiveness by revealing and designing out negative externalities
All ReSOLVE levers

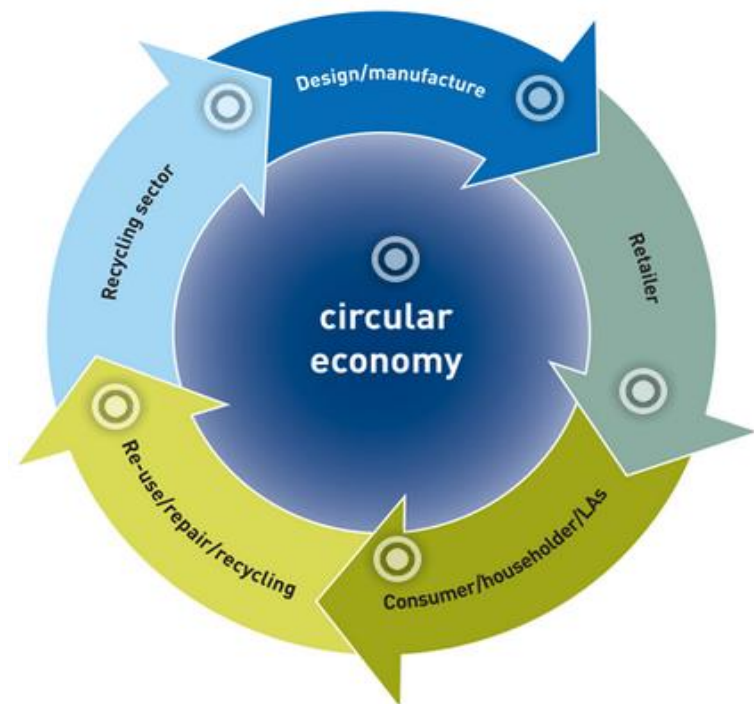
Minimise systematic leakage and negative externalities

1. Hunting and fishing
2. Can take both post-harvest and post-consumer waste as an input
Source: Ellen MacArthur Foundation, SUN, and McKinsey Center for Business and Environment, Drawing from Braungart & McDonough, Cradle to Cradle (C2C).

Source: Ellen MacArthur Foundation

What is the Circular Economy?

- A circular economy is an alternative to a traditional linear economy (make, use, dispose) in which we keep resources in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life.



The Circular Economy is Coming – Airports Need to Prepare!

- 17 December 2012, the European Commission published *Manifesto for a Resource Efficient Europe*.
- "In a world with growing pressures on resources and the environment, the EU has no choice but to go for the transition to a resource-efficient and ultimately regenerative circular economy."
- Document highlighted the importance of "a systemic change in the use and recovery of resources in the economy" in ensuring future jobs and competitiveness, and outlined potential pathways to a circular economy,



Cornwall Airport Newquay Artist's Impression - 2030

Conclusions: Developing a Sustainable Airport

- Show commitment and vision
- Lead policy don't react to it
- Be transparent and engage
- Set clear objectives and develop comprehensive short, medium and long term plans
- Establish terms of affordability and realistic timescales but commit to long term investment
- Keep abreast of best practice and new technologies
- Be proud of and publicise success and account honestly for failures
- Begin to think about the application of Circular Economy principles