PAPERLESS PLANES for DE LTA

Lauren Borrelli, Marybeth Bucklen, Iris Lu, and Ryan Scallan

At Delta Airlines, **Sky magazines** are placed in the back pocket of every seat across all flights for a total of **148,000+ magazines per month**. Reducing the number and/or weight of paper magazines, or transitioning to digital copies downloaded in-flight via the free Delta Studio, would reduce weight on planes thus reducing overall fuel consumption.

Scenarios	Benefit	Challenges
Remove all	Greatest financial and carbon savings	Most difficult to create buy-in
Reduce 50 %	Easy to pilot, minimize impact on customers	Create buy-in to minorly alter logistics
Reduce 1 oz	Match competitor airline strategy	Maintain brand quality

Carbon Analysis

Savings in Ibs CO₂ / year

Remove all

Reduce 50%

13.9 M

Reduce 1 oz 3.0 M

Based on reduction of fuel burned from reduced flight weight

Carbon savings of removing all magazines = Carbon emissions of 800 RT flights from ATL – Tokyo

Example Calculation for Status Quo (1 magazine per seat):

Plane Size	No. Planes		Seats / Plane		Magazine Weight (lb)		Fuel to Carry 1 lb/plane/yr (gal)		Total Fuel (gal/yr)
S:	481	X	147	X	0.58	X	13.7	=	560,708
M :	289	X	206	X	0.58	X	19.3	=	650,137
L:	78	X	283	X	0.58	X	24.0	=	303,076

1,513,921

Total Fuel (gal/yr)	CO ₂ Emissions Coefficient (Ibs CO ₂ / gal of jet fue		Total CO ₂ emissions from magazines on board per year (lbs CO ₂ / year)
1,513,921	x 18.4	=	27,856,145

Financial Analysis

Remove all

Reduce 50%

Savings in \$ / year

\$1.51 M

Based on savings on fuel cost and reduce carbon offsets purchases

Cost savings of removing all magazines = Carbon of 1,951 RT Flights between ATL - Tokyo

Assumptions & Considerations:

- Fuel price is \$1.99/gal. With prices fluctuating and on the rise, this estimate is conservative.
- Carbon offset price is \$1/metric ton.
- For Delta, magazine production costs are considered inconsequential due to guaranteed shared revenue agreement with partner.
- Little to no change in advertisement revenue would mean NPV = fuel cost savings listed above.



Co-Benefits

- Digital can be translated into more languages + text to audio conversion + archive accessibility = increased readership
- Hyperlink clickability allows users to go straight to other articles or advertisers of interest leading to immediate purchasing power and additional review streams
- Less waste generated by paper magazine's end-of-life

Key Deliverables

: indicates completion or approval

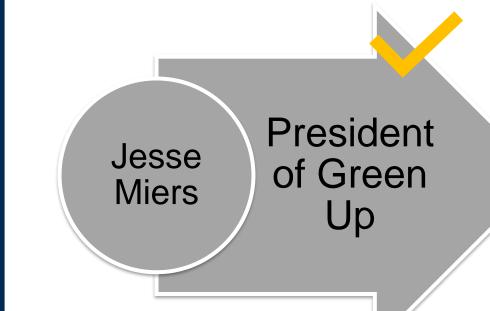
Gather relevant data

Financial benefits

Carbon savings



Decision Makers



Lisa Bauer VP In-Flight Services Julietta
McCurry

Managing
Director
of US
Marketing
Comm

Tim SVP Marketing



Special thanks to the Delta Green Up and Sky magazine team for their aid with scoping the project and providing the necessary resources to carry out the analysis. Additionally, thanks to Beril Toktay and Kim Cobb for their guidance and encouragement.