

ANALYSIS: Impact agency sees future in emissions milestone system

By Oliver Clark | 02 Mar 2023 - 09:50:11 GMT

Carbon intensive industries, such as airlines, are coming under ever more public and political scrutiny to improve their emissions footprint.

Many have announced initiatives, such as sustainable aviation fuel partnerships or participation in low-emission aircraft research, but discerning the extent to which they succeed in reducing emissions remains a challenge.

Financiers are continuing to search for ways to both measure and reward emissions reduction.

One of the most popular methods has been so-called sustainability-linked financing structures, in which a loan is advanced to finance the delivery of more fuel efficient aircraft and the interest rate can be tweaked up or down depending on whether the airline meets independently assessed emissions targets.

But sustainability-linked financing remains in its early stages and how they contribute to the longer-term goals of the industry to reach net-zero by 2050 remain rudimentary.

Aviation finance group Impact has set out a framework under which it believes airlines could demonstrate real progress in decarbonising, through decoupling emissions from capacity improvements.

In a new white paper, the group recommends using different levels of increasingly difficult-to-achieve thresholds for a simple and transparent scoring system to reach milestones" and replacing the need for ambiguous reference benchmarks.

Milestones would be defined by categories of capacity growth and decarbonisation. Once an airline has accomplished a particular milestone, its sustainability score rises accordingly.

THE MATRIX

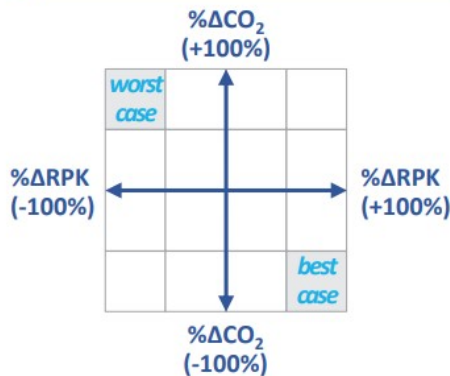
Impact has drawn inspiration for its milestone concept from Finnish scientist Petri Tapio, who proposed in 2005 to relate changes in CO₂ emissions to changes in economic output, to assess the "delinking [of] economic growth from increasing environmental problems".

In applying Tapio's concept to aviation, percentage changes of CO₂ and percentage changes of capacity, as measured in revenue passenger kilometres, are plotted in a two-dimensional co-ordinate system – the matrix – in which an airline's capacity shrinkage or growth is shown on the horizontal axis and CO₂ increase and reduction on the vertical axis.

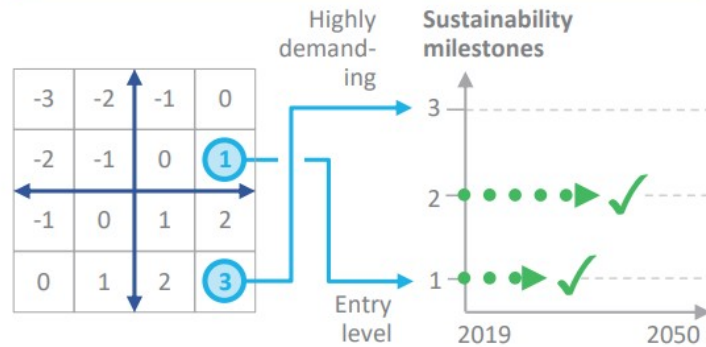
At the co-ordinate origin in the centre, the changes of CO₂ and capacity are zero, respectively. Changes are measured in principle against the year 2019.

Impact says there can be flexibility for airlines seeking to refer to a different base year.

1 Sizing the matrix



2 Scoring the positions



3 Setting the milestones

The co-ordinate system is then overlaid with a grid of categories with assigned values. Each category represents specific progress or regression in RPK and CO₂ development, measured as a percentage change from 2019.

Airlines are then scored according to the demonstrated decoupling of the two values over time.

They can receive minus scores if there are signs of regression.

The highest scores are reserved for airlines that can demonstrate absolute rather than relative decoupling of emissions and RPKs.

At the end of 2030, points achieved through relative decoupling will be frozen at their current levels.

They will not be lost, but higher value points will only be awarded for absolute decoupling from then on, i.e. actual CO₂ reductions relative to the underlying base year.

STANDARDISED DATA

Avinomics managing partner Philipp Goedeking, one of the report's authors, tells Cirium that for the milestone concept to succeed there will need to be a high take up by airlines providing current and historic emissions data, going back at least to 2019.

"If we don't have the numbers, we don't know what we are doing," he says.

Impact has collected historic ESG and emissions reports produced by airlines up to now, but Goedeking says there are still operators that do not produce the necessary data, or provide it in a standardised manner.

He says there is evidence of some progress in recent years in "relative decoupling" by airlines, which occurred before the development of SAF and other initiatives. But he highlights that trends cannot be analysed without data.

"What was real and what was greenwashing? How much progress has been overwritten by even stronger growth? You need substance," he says.

"Year by year [we] see some airlines that have made significant progress from one year to another or over a period of three years, and then nothing happens. Or they have done nothing for many years and then all of a sudden something happens.

"This was the reason why we need to refer to a base year," Goedeking says. "[To see] what matters from an Archangel Gabriel perspective – how much have we managed to decarbonise by 2050 compared to 2019."

Ulrike Ziegler, president of Impact's board of directors, is hopeful the organisation's members, which include banks and leasing companies, will begin deploying the milestone and decoupling standards within six to 12 months.

She expects there will be growing pressure for airlines to provide standardised data for the calculations, because failure to do so may leave them potentially cut off from some financing options.

"Airlines will be accountable because if one, two, 10 start reporting with these metrics others will have to follow suit," she says.

Goedeking adds that airlines that fail to provide emissions data will be marked with the lowest possible score or a "very dirty" moniker.

He suggests the milestone concept could also offer a transparent measure by which airline progress can be measured not just by financiers but the wider public.

"My view is public scrutiny will probably be the longest or one of the longest levers to impose behavioural change at the consumer and importantly the airline side.

"This public scrutiny is something we really want to push forward to create transparency, and this requires a way of transparency that is watertight against the claim that this is just another form of greenwashing. It only works if it is true, right and unbiased."

Impact says that in regard to lease and loan contracts – irrespective of whether "use-of-proceeds" or "sustainability-linked" prevails – clear sustainable development criteria, or covenants, are becoming increasingly indispensable to complement financial covenants.

As an example of a sustainability-driven covenant for the financing of aircraft, Impact describes decoupling as a "nearly ideal metric".

It says no assumptions or forecasting models are required to set appropriate milestones.

The rules are "fully transparent, and the thresholds remain constant until 2050", it argues.

"The concept of milestones is analytically sound and easy to understand, interpret and implement. Airlines that have developed their sustainability further than others from the outset have significantly better chances of reaching the milestones earlier than less ambitious competitors.

"Last but not least, the milestone concept measures exactly what it is supposed to. Forecast-based benchmarks, in contrast, could turn out to be of little practical benefit, at least for aircraft finance applications," the report states.

