



The Greening of Streaming:

Pioneering Sustainability in Digital Entertainment

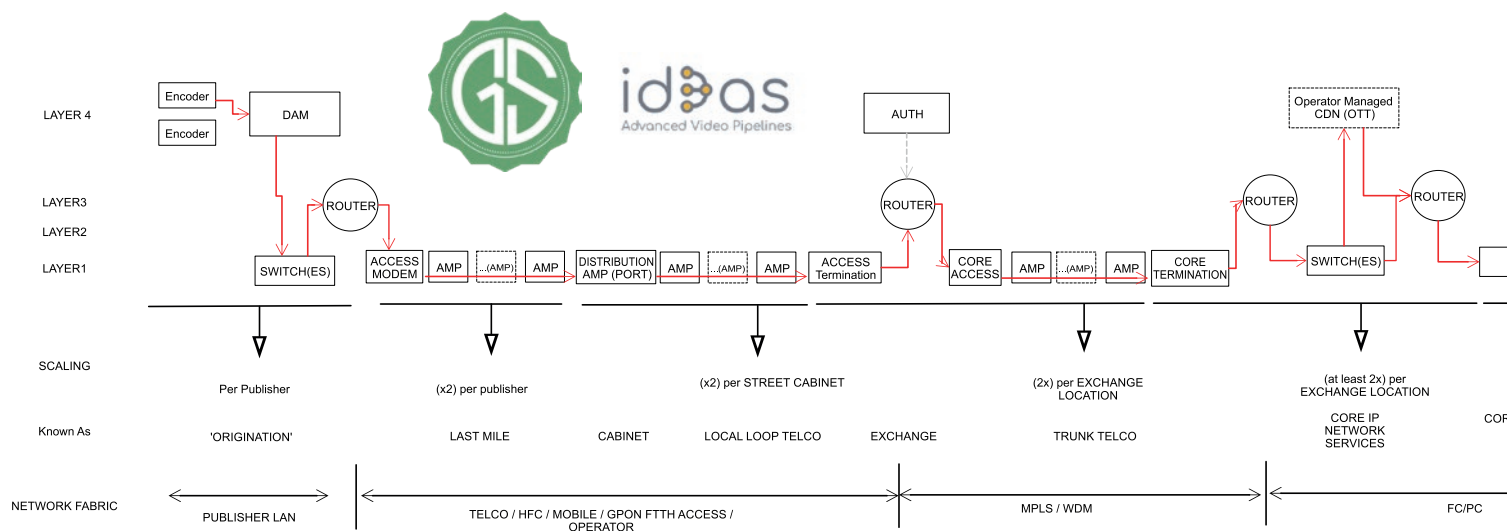
By Melissa Cogavin, Managing Editor, SCTE

Post-Covid, with the demand for data seemingly insatiable, the environmental impact of streaming services has become a significant concern; as part of our Sustainability Focus in each issue, we highlight the efforts being made across our industry to reduce our carbon footprint and offset our emissions.

The Greening of Streaming project is at the forefront of a sustainability revolution within the entertainment industry, aiming to mitigate the carbon footprint of streaming platforms and promote eco-friendly practices. Founder Dom Robinson is a charismatic and tireless champion of this project, and a short space of time has brought together an impressive roster of SCTE members, many of whom will be reading this no

doubt. They are also supported by industry bodies IABM, EBU and Fraunhofer Fokus.

It isn't that long ago that DVDs, CDs and terrestrial TV were the only ways to consume entertainment. In a few short years our viewing habits have completely transformed.





**Dom Robinson, Founder
Greening of Streaming**



The convenience and accessibility streaming services offer have propelled their popularity, but this has come at a significant cost to the environment; few outside the industry have the slightest idea how much either. The energy required to power data centres, deliver content and support the immense infrastructure behind streaming platforms has led to a considerable carbon footprint. As the demand for high-quality video content continues to grow, so does the environmental impact.

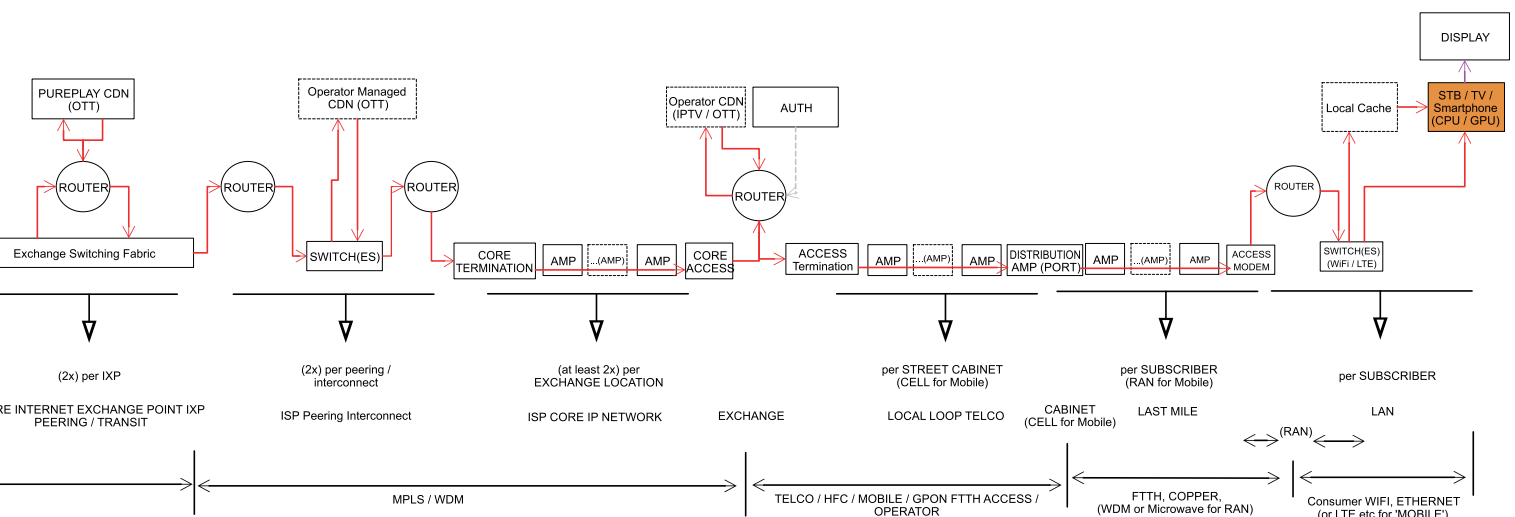
Use of the internet accounts for 3% of the world's carbon emissions, and 70% of the content we consume is streamed. Streaming content for an hour produces the same amount of carbon as driving a car for ¼ mile. Recognising the urgency of this issue, the Greening of Streaming project has emerged as a collaborative effort involving streaming industry leaders, environmental organisations and technology innovators. The project's main objective is to implement strategies that reduce the environmental impact of streaming while ensuring a seamless and satisfying user experience.

One of the primary focuses of the Greening of Streaming project is the development of energy-efficient infrastructure, including the LESS Accord, (Low Energy Sustainable Streaming). Data centres require vast amounts of energy to operate and are reliant on fossil fuels to be cooled, although as the demand for content increases and new data centres are being built all the time, advantage is being taken of colder climates as they can take in outside air to cool themselves. Facebook's own data centres are located near the Arctic Circle in Sweden for this reason. Such gestures barely touch the surface however.

The project encourages the adoption of renewable energy sources, such as solar and wind power, to power these data centres. Additionally, advancements in cooling technologies and server optimisation are being explored to reduce energy consumption further.

High-definition and 4K streaming contribute significantly to the data load being transmitted across the internet. This not only requires more energy but also strains network resources. Robinson and his team advocate for improved video compression algorithms and bandwidth optimisation techniques to deliver the same quality content with reduced data usage. This not only benefits the environment but also enhances the user experience by ensuring smoother playback even in areas with limited bandwidth.

While technological advancements play a crucial role in reducing the carbon footprint of streaming, Robinson says user behaviour is equally important. The project emphasises raising awareness among viewers about the environmental impact of their streaming habits. Encouraging users to adjust



video quality settings based on their device and network capabilities can significantly contribute to energy savings. Within the industry where awareness is already high, these recommendations may well land, but without the heft of a government campaign aimed at the public, the Greening of Streaming has a job on its hands. The project is in discussions with Parliament currently.

Robinson's sheer determination has a lot to answer for; in a few short years he has gained the consensus of competitors across the marketplace, all of whom recognise the benefits of getting behind the Greening of Streaming.

One area Robinson is particularly keen to push is the importance of measuring and reporting the environmental impact of streaming platforms. This involves tracking energy consumption, carbon emissions, and other relevant metrics. By making this information accessible to the public, users can make informed decisions about their choice of streaming

services and motivate service providers to adopt sustainable practices.

When a new industry emerges, industry bodies always pop up to promote, lobby and support the players. The Greening of Streaming is no different, but it is more than a dusty, policy-led trade association. The SCTE is delighted to support such a worthwhile initiative and wish Dom Robinson and his team the very best for the future.

Greening of Streaming will be at IBC, presenting the four cornerstones of the LESS Accord (Low Energy Sustainable Streaming) on September 15 in Room E-105 from 3pm-5pm, followed by drinks at The Beach. Spaces are limited.



Please register your interest in advance via: www.greeningofstreaming.org/less



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