

Energy report confirms that virtual events reduce carbon emissions by more than 99%

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This is the conclusion drawn from a recent paper 'Making industrial exhibitions green', based on existing life-cycle assessments (LCA) adhering to the ISO 20121:2012 standard, comparing a V-Ex virtual trade show with several live physical events.

There are clearly a huge number of practical and ecological benefits to hosting an event online, however a reliable study and comparison has not been completed on large scale events until now. Aside from the added convenience to visitors of it being available 24/7 there is no travel required to visit a virtual conference or exhibition; other than reaching for an iPad, PC or mobile.

Although webinars have been around for several years, there is currently only one real option when it comes to a full-scale digital trade fair in an online exhibition hall. Hence, the IndustryExpo.online industrial trade fair hosted on the V-Ex Virtual Exhibition platform was used in the test case.

The scale of the industry... and the issue

The reference paper states that the number of tradeshow organised during 2019 – just in continental Europe exceeded 2,670 bringing together over 735,500 exhibitors and 75.4 million visitors. When you consider the carbon dioxide equivalent (CO₂-

eq) for a single three-day, mid-size trade show is nearly 6,000 tonnes, then this extends into the millions of tonnes globally per annum.

Carbon reduction

The bald figures create a very strong argument for going digital: a virtual exhibition will create less than 1% of the carbon emissions (CO₂-eq) of a live event.

The impact made by visitors: excerpt from *'Making industrial exhibitions green'*

A three-day conference with 800 attendees has a carbon footprint of 455 tonnes of CO₂ equivalents (CO₂-eq), corresponding to an average of 0.57 tonnes CO₂-eq per participant. The main contributors to these emissions are travel activities, which accounts for a total of 378 tonnes CO₂-eq or 0.47 tonnes CO₂-eq per attendee. These are followed by hotel overnight stays (39 tonnes CO₂-eq in total) and catering (20 tonnes CO₂-eq, 0.25 tonnes CO₂-eq per individual).

Fig 1. (Image 4) Direct comparison between physical and virtual trade fairs in tonnes CO₂-eq

The impact of putting on the show: excerpt from 'Making industrial exhibitions green'

A three-day fair with 120 exhibitors and 11,600 m² of occupied surface can generate 75.5 tonnes CO₂-eq, 50.6% of which come from heating and lighting of the venue, for a total of 38.2 tonnes CO₂-eq. The second greatest contributor to the environmental impact of the preparation of a fair is the assembly of spotlight bars and carpets (over 20% of total emissions). This activity was followed by the assembly of electronic equipment, which is responsible for over 15% of total CO₂-eq.

Fig 2. (Image 5) A virtual show, even with fewer exhibitors, received approximately three times as many visitors as a larger live show.

About ISO 20121:2012

The ISO 20121:2012 standard was used to assess the impact of the live shows that were surveyed. According to the official ISO website: 'Events take a heavy toll on resources, society and the environment, often generating significant waste.' To ensure the results represent a reliable source of comparative information the standard has been developed with input from many different stakeholders, including representatives from the event industry. It addresses all stages of an events' supply chain and includes monitoring and measuring guidelines.

Where to start making changes

Using virtual exhibition platforms such as V-Ex, which already hosts full-scale digital exhibitions, traditional venue owners can now rely on rendering physically accurate trade shows using real-world lighting, materials and dimensions to recreate virtual twins.

Designed from the outset as an interactive, 3D environment to support online conferences and large-scale virtual trade shows with hundreds of stands and thousands of visitors, V-Ex offers a large part of the physical exhibition experience, but without many of the drawbacks, including the carbon footprint.

The 'virtual' halls and stands can look visually identical to the bricks and mortar versions and host most of the same trade show subjects. Trade shows that deal with services, physical products or software transfer very easily to a digital format.

Recruitment, professional services, machines, technology, components, toys, planes, trains and automobiles all work well – live animals and arena events not so much. Seminars, presentations and conferences also work well as presentations can be pre-record or live streamed.

The V-Ex application is currently in its 4th generation, with 10 years of usage and development behind it. V-Ex allows owners of venues and live events to expand into the virtual world – offering exhibitors the chance to engage with a global audience, 365 days a year. A powerful CMS and analytics package drives visitor engagement while simultaneously delivering vital feedback and generating qualified sales leads in real-time.

For more information visit www.V-Ex.com

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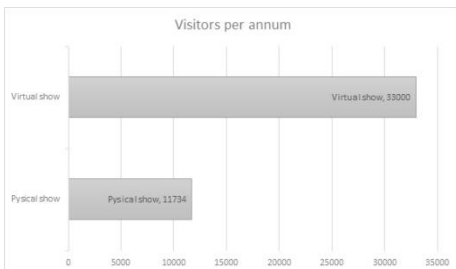
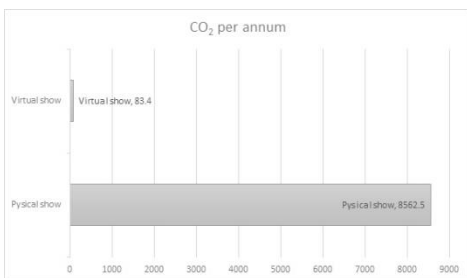


Image 1: The V-Ex application is currently in its 4th generation, with 10 years of usage and development behind it.

Image 2: The 'virtual' halls and stands can look visually identical to the bricks and mortar versions and host most of the same trade show subjects.

Image 3: A powerful CMS and analytics package drives visitor engagement while simultaneously delivering vital feedback and generating qualified sales leads in real-time.

Image 4: Fig 1. (Image 4) Direct comparison between physical and virtual trade fairs in tonnes CO2-eq

Image 5: Fig 2. (Image 5) A virtual show, even with fewer exhibitors, received approximately three times as many visitors as a larger live show.

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About V-Ex

V-Ex has been an established provider of virtual events and digital services for over 10 years. The company owns and operates an online platform that delivers unrivalled digital experiences, from large-scale events, supplier conferences and exhibitions to sales and training environments. The event delivery team works with the 3D design and development department to create stunning visual experiences that deliver both live and permanent projects to unlimited global audiences.

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