MEETING THE GLOBAL CLIMATE AND CLEAN AIR CHALLENGE WITH CLEAN DIESEL
The global emissions crisis surrounding Volkswagen’s diesel engines unleashed a direct attack on the credibility of clean diesel technology, at the very core of the Diesel Technology Forum’s work and message. Waves of cascading international media and an explosive social media environment fueled an “end of diesel” narrative. The Diesel Technology Forum’s rapid response capabilities were put to the test, requiring strategic engagement in a unique crisis of global proportions, playing out in newspapers and online around the world. DTF’s media expertise rose to the occasion, engaging both conventional and social media, projecting a rational and credible voice during a time in which the reputation of clean diesel was in the crosshairs of every journalist. This still-ongoing crisis demonstrated first-hand the unique value and importance of the Diesel Technology Forum.

The Forum’s efforts and influence into the international media space in Europe and India expanded in earnest in 2015 to introduce a positive voice into a sea of voices already well at work with an anti-diesel agenda. Translated content and news releases tailored for various languages and countries resulted in a large share of online media views. Supplementing the media and content outreach, the Forum sought allies and coordination of effort with other industry organizations.

And in the U.S., an unmatched effort to systematically educate and engage key policymakers reached new levels of contact and engagement, ensuring that both Washington, DC and state policymakers received targeted and localized fact based information about the importance and future for clean diesel power. In the pivotal state of California, Governor G. Edmund Brown’s challenge to cut petroleum consumption by 50 percent was the backdrop for a strategy that included member-led technical briefings to key stakeholder audiences including CARB officials and legislative staff and a live-streamed media event featuring the Senate Pro Tem Leader and champion of the Governor’s approach.

The Forum’s 2015 campaign was infused with new knowledge and research on the societal and customer benefits of new technology clean diesel engines, as well as the market success in passenger and commercial vehicles. Investments in social media and international media platforms and delivery systems, along with public opinion and policymaker research further distinguishes the unique role of the Diesel Technology Forum as a resource, educator, communicator and valued asset for the diesel industry.

While many years in the history of the Diesel Technology Forum have been noteworthy, 2015 was a year of exceptional challenges.
Going Global: Spreading the Clean Diesel Message on a Global Scale

As the lifeblood of the global economy, diesel engines have long been used in every corner of the world. Reaching a broader international audience was a key objective of the 2015 Diesel Technology Forum program. Concerns first identified in 2014 about negative headlines on diesel technology in Europe erupted in 2015 to proposed or enacted bans on diesel cars in Paris and London. Variations between laboratory certification and real driving emissions further fueled a negative and unbalanced view on diesel.

An anti-diesel climate extended beyond Europe to India, where significant air quality problems in Delhi brought about a focus on traffic congestion, vehicles and fuels, including bans on some larger diesel cars. A high-stakes global climate conference in Paris brought another dimension to the global focus on emissions and diesel in 2015.

With these policy developments and increasingly anti-diesel sentiment as the backdrop, the Diesel Technology Forum launched an international communications campaign based on media outreach and leveraging relationships with industry allies. Using country-specific translated materials and content, distributed through multiple channels and through the new Agility™ media outreach platform, DTF’s clean diesel message provided a new perspective around the globe. Coordinating and sharing insights, strategy and messaging ensured a consistent and on-key industry voice and message.

The effort included 38 translated press releases into eight languages (French, German, Italian, Spanish, Portuguese, Japanese, Chinese, Hindi). Issues for the outreach included the role of clean diesel technology to achieve global climate goals (COP21), and the U.S. clean diesel success story built on new diesel technology and renewable fuels. The Forum also leveraged globally recognized events including International Earth Day, and the world’s cleanest agricultural equipment on display at the 2015 World AG Expo.

International media outreach targeting North and South America, Europe and the Middle East (including India) was successful and featured coverage of the Diesel Technology Forum news and messages in key international outlets including major wire services such as Reuters, Agence France-Presse, the Agencia EFE (Spanish language news service), BBC Radio and TV; in France TVS Montde, Ouest, Le Parisien. Other outlets include Daily News and Analysis (India), Channel News Asia and Radio Programas del Peru.

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### DIESEL TECHNOLOGY FORUM PRESS RELEASE VIEWS BY COUNTRY

<table>
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### INTERNATIONAL MEDIA OUTREACH

**ENGLISH**
 Media Advisory - Global Web Event - Clean Diesel Power: Meeting the Climate Challenge for COP21
(November 17, 2015)

**HINDI**
 राष्ट्रीय मानक को पार करने वाले इनजीनियरिंग साइनूरेंसिंग के लिए दूरदर्शन
(सिस्टम्स) में अनुशंसा की जाएगी
(11 नवंबर, 2015)

**CHINESE**
 年度全球柴油技術論壇
（2015年11月17日）

**JAPANESE**
 産業機械年度グローバル・フォーラム
（2015年11月17日）

**ITALIAN**
 Comunicato stampa - Evento Web globale - Diesel pulito: una risposta all'emergenza climatica per la COP21 e non solo
(11 novembre 2015)

**PORTUGUESE**
 Aviso para a mídia - Evento global na web - Energia limpa a diesel: enfrentando o desafio climático para a COP21 e depois
(11 de novembro de 2015)

**SPANISH**
 Aviso para medios - Evento web mundial - Potencia diesel limpia: superando el desafío climático de COP21 y más allá
(11 de noviembre de 2015)

**SPANISH**
 Comunicado de prensa: Evento web global. Energía diesel limpia: superando el desafío climático de COP21 y más allá
(11 de noviembre de 2015)

**GERMAN**
 Hinweis für die Medien - Globales Online-Event - Saubere Dieseltechnologie: Herausforderungen des Klimawandels für COP21 und darüber hinaus
(11 November 2015)

**FRENCH**
 Avis aux médias - Évènement Web mondial - Energie diesel propre : Réveiller le défi climatique pour COP21 et au-delà
(11 novembre 2015)
Global climate discussions over the last decade reached a pinnacle in Paris at the 21st meeting of the Conference of Parties (COP21) in December 2015 where leaders from over 200 countries established a new agreement to reduce greenhouse gas emissions and limit global warming to less than 2 degrees Celsius.

In advance of the talks, the Obama Administration released the U.S. Intended Nationally Determined Commitment, or INDC, calling for a 26 to 28 percent reduction in greenhouse gas emissions by 2025 relative to 2005. That plan relies on a series of promulgated and proposed regulations, the most notable being the proposed Clean Power Plan calling for significant greenhouse gas emission reductions from the electricity generating sector. Other features of the U.S. INDC are also key to deliver GHG reductions, including meeting aggressive vehicle efficiency targets in both passenger cars and commercial vehicles. Diesel technology will play a critical role in delivering substantial benefits in both cases.

The Forum launched a four part plan: real-time monitoring of social and conventional media, outreach to key stakeholder groups, engaging with international media and NGOs, and reporting to members preceding and throughout the 11-day global summit.

On November 24, in advance of COP21, DTF held its first global webcast to promote how clean diesel technology would be vital for the U.S. and other countries in achieving their emission reduction strategies. Three press releases were translated in several languages and distributed to an international audience via online and direct email services, receiving 175,000 online views and web hits and more than 770 online media postings internationally.

Clean Diesel Power: Meeting the Climate Challenge for COP21 and Beyond – See the recorded webcast or access the presentation.

Meeting the Climate and Clean Air Challenge in California

In 2015, California continued its long tradition of leadership in advancing clean air and climate change policies. During Governor Brown’s second inaugural speech, he announced a challenge for California to cut greenhouse gas emissions by 50 percent, double renewable sources of electricity and halve petroleum consumption by 2030 under what was known as the "50/50/50 by 2030" plan. Many elected leaders in the Capitol building rallied behind SB 350, introduced by California Senate Leader Pro Tem Kevin De Leon, that implemented many features of the Governor’s challenges.

Diesel’s unmatched energy efficiency coupled with a growing renewable fuel capability positioned diesel technology as an important factor in meeting California’s “50/50/50” challenge. DTF seized the opportunity to engage in this timely debate and insert the clean diesel message into the policy discussion in Sacramento. The Forum launched an outreach and education plan with new tactics to raise awareness of the importance of diesel technology and foster dialogue about policies to encourage greater access to clean diesel technology. This educational effort positioned member technology and policy experts to directly engage policymakers and legislators in a dialogue about diesel technology and innovation, and provide important perspectives on the Governor’s challenges.

A series of messages outlining diesel’s role in achieving California’s goal laid the groundwork, and was delivered directly to over 100 of the influential members of the California Senate and Assembly along with their staff involved in shaping SB350. An advanced technology briefing was followed by a capstone media event highlighting the benefits, future role and importance of diesel in meeting California’s complex and challenging energy, climate and clean air goals.

ADVANCED TECHNOLOGY BRIEFING AND DISCUSSION

Under the umbrella of the California Clean Air Dialogue, an arm of the California Council on Energy and Economic Balance, DTF brought together key stakeholders in California’s energy, climate and environmental discussion. DTF member companies Caterpillar, CNH Industrial, Cummins, Daimler, Deere and Volvo along with the Truck & Engine Manufacturers Association and DTF staff, provided attendees with a technical update on advanced heavy-duty on- and off-road technology and clean fuels along with the market uptake of clean diesel vehicles and equipment in California. Panelists also discussed the current and future state of emissions and efficiency improvements and the challenges in meeting customers’ needs and California policies.
REALCLEARPOLITICS POLICY EVENT AND RECEPTION

Leveraging the Governor’s “50/50/50” challenge in his 2015 Inaugural Address, DTF engaged RealClearPolitics in a sponsored media event - 50/50/50 by 2030: Transportation and the California Energy Challenge. The event brought together influential academic and industry stakeholders in a moderated conversation that included legislative leaders such as California Senate Leader Pro Tem Kevin de Leon, to discuss the challenges and solutions to achieve this ambitious energy challenge. Attendance at the session including in-person and live streaming reached over 1,600, with live social conversation and unique hashtags. The Forum capped off the day with a “Meet & Learn” reception featuring seven exhibits with member representatives having unique opportunities to engage key policymakers and legislative staff.

A recorded version of the RealClearPolitics session and other resources from the event are available at this link.


NEW RESOURCES: THE TRANSFORMATION TO CLEAN

Several new resources were developed for the event including a California state fact sheet and three Policy Insider articles sent directly to California policymakers to promote the event and generate attendance:

- Meeting the Energy and Climate Challenge in California: FOCUS: Fuel-Sipping Trucks
- Meeting the Energy and Climate Challenge in California: FOCUS: Cleaning the Air with Clean Diesel
- Meeting the Energy and Climate Challenge in California: FOCUS: Can Biofuels Save the Day?

A new exhibit was also created to tell the story of clean diesel’s transformation to clean as well as key facts on diesel’s vital role in powering the economy. The new exhibit included a new graphic that was designed to show the many applications of diesel demonstrating how 15 sector of the economy rely predominantly on diesel engines.
Crisis Response & Damage Control: Threats to the Clean Diesel Image

In mid-September, the Forum’s 2015 program was interrupted. News reports of problems involving emissions certification of some Volkswagen diesel cars began as a trickle but rapidly exploded into a never-before-seen ocean of biting global coverage, much of which was directly attacking the credibility of the entire clean diesel brand.

That began the start of the largest single crisis involving diesel technology in history, and one that strikes at the core of the clean diesel brand and the work of the Diesel Technology Forum.

The crisis played out in the media at unprecedented levels: in the first five days of the crisis, 24,500 total news reports were identified and the story was front page news on the New York Times, Wall Street Journal, and all the nightly network newscasts. DTF quickly developed a strategy centered on a single goal: to defend the image of clean diesel. The Forum worked to ensure that the aggressive cycle of news stories and social media conversation did not turn a still-evolving situation involving a single manufacturer into an indictment of all clean diesel technology from all manufacturers.

DTF’s influence and credibility in the digital and social space were highlighted in the crisis as two of the top trending articles on social media included links to DTF’s What is Clean Diesel page on the Forum’s website. Top referring sources for traffic to the Clean Diesel page on the Forum’s website.

DTF’s official statement issued five days after news reports began received significant media attention. As the primary voice for the industry defending clean diesel technology, DTF was quoted in numerous media stories – both domestically and internationally – including articles by major media outlets around the world including BBC (TV and radio), Reuters, Bloomberg, Agencia AFE (Spanish news service), Wall Street Journal, Washington Post, Los Angeles Times, Detroit News, Chicago Tribune, CNBC, U.S. News and World Report and many more.

Within one week of the crisis, DTF staff was making personal visits to key Washington, DC Congressional offices and stakeholder groups. In these meetings the Forum reinforced the clean diesel brand and presented third party validation of clean diesel technology from EPA, the California Air Resources Board, the National Academy of Sciences and others. Staff of the U.S. House of Representatives received briefing materials and background on clean diesel technology leading up to Congressional hearings on the matter.

The crisis media environment was further fed by explosive social media chatter, with unrelenting criticism of “clean diesel” along with new hashtags further branding the crisis (#Dieselgate). Leading the social conversation consistently throughout were opportunistic technology and investor group advocates seeking to promote battery technology at the expense of the VW situation. Twitter was the predominant social channel, peaking on September 22 at nearly 1,300 tweets linking the VW situation.

Echoing that, the California Air Resources Board urged consumers not to blame diesel for Volkswagen’s actions: “These diesel engines can perform cleanly,” the agency’s David Clegern said. “There are diesel engines that meet the current diesel emission standards.”

DTF’s positive spin on the crisis.

Volkswagen Scandal Delivers ‘Black Eye’ to Diesel Tech as a Whole

(NBC News, September 24, 2015)

During a Wednesday web conference, officials from the Washington, DC-based Diesel Technology Forum attempted to put a more positive spin on the crisis.

A statement from the industry trade group argued that, “The circumstances involving a single manufacturer do not define an entire technology, or an industry. Vehicle manufacturers and engine makers have invested billions of dollars in research and development to successfully meet the most aggressive emissions standards in the world.”

Diezel FANs Fear Volkswagen Emissions Scandal May Tarnish Technology

(The Los Angeles Times, September 24, 2015)

“But diesel is a proven technology,” said Allen Schaeffer, executive director of the industry group Diesel Technology Forum. “Nothing has changed in the laws of physics. This is still the most energy-efficient internal combustion engine.”

Echoing that, the California Air Resources Board urged consumers not to blame diesel for Volkswagen’s actions: “These diesel engines can perform cleanly,” the agency’s David Clegern said. “There are diesel engines that meet the current diesel emission standards.”

“I attempted to put a more positive spin on the crisis.”

REACHING PEOPLE THAT MATTER: POLICYMAKER ENGAGEMENT

Diesel engines, vehicles, equipment and fuel are all important to the economy and they play an integral role in clean air, climate change and energy policy. Educating policymakers and thought leaders about the importance of clean diesel technologies was a significant and successful DTF effort in 2015. Educational messages linked the clean diesel message to ongoing policy discussions concerning National Ambient Air Quality Standards, petroleum reduction strategies, greenhouse gas reduction goals, grid reliability, climate change adaptation and even energy security and diplomacy.

While diesel plays an integral role in these policy discussions, diesel is important to each and every state. Lawmakers on the Hill, in state capitols and counties and cities around the country were also informed by DTF's newly updated state fact sheets. The state fact sheets were distributed to thousands of Hill staff, elected state leaders and staff and others.

DTF member company experts joined the Diesel Technology Forum and the U.S. Coalition for Advanced Diesel Cars at a Congressional briefing on March 11 at the Capitol Visitor Center where the latest light-duty registration data was unveiled as well as a discussion on what's behind the growth in the light-duty diesel market, its many economic and clean air benefits, and why diesel is important to many auto manufacturers' vehicle line-up.

Media attendees included Consumers Union (publisher of Consumer Reports) and E&E News (the publisher of Greenwire, Climate Wire and other energy and environmental news). The event was attended by 28 attendees including six congressional offices, the Committee on Energy and Commerce, the Fuel Cell & Hydrogen Energy Association and the National Automobile Dealers Association.

TESTIMONY AND FILINGS

In 2015 DTF testified or filed statements on a number of clean diesel issues to have the industry statement on record:

- Outlined benefits of new technology diesel to EPA in reducing NOx and helping attain new ozone standard
- Demonstrated number of diesel drivers in North Carolina as legislature considers bill that would tax diesel greater than gasoline (SB 639)
- Participated in industry-wide effort to urge greater federal funding for diesel retrofit programs
- Highlighted clean air benefits of new technology diesel as Ohio legislature considered tax incentives for purchase of natural gas trucks (HB 176)
- Provided comments to California concerning fuel sipping and alternative fuel capabilities of new technology diesel in meeting the state's petroleum reduction goals
- Provided comments before California legislature concerning NOx reduction properties of new technology diesel as legislature considers providing purchase incentives for “ultra-low” NOx trucks (AB 1185)
- Outlined importance of diesel technology to EPA in meeting proposed fuel economy standards for heavy-duty vehicles
- Comments to California Energy Commission and UC Davis Institute of Transportation Studies on Assessment of Critical Barriers and Opportunities to Commercialize Medium and Heavy-Duty Truck Technologies in California
MEDIA MATTERS

Media relations is a core competency of the Diesel Technology Forum. The Forum’s staff reviews on average about 500 to 1,000 news stories captured from around the world, with some mention or comment about diesel technology. The Forum’s media operation utilizes the most advanced monitoring and engagement technology platforms available. In 2015 DTF further enhanced the ability to reach the large platforms available. In 2015 DTF further monitoring and engagement technology media operation utilizes the most advanced about diesel technology. The Forum’s Media relations is a core competency of

IN 2015, DTF:

- Initiated or was included in more than 4,700 news hits (Meltwater Analysis)
- Had more than 765,200 online views and web hits of DTF press releases.
- An average of 74,400 per press release (Meltwater Analysis)
- Had more than 9,250 online media postings of DTF press releases. An average of 171 per press release (Meltwater Analysis)
- Posted more than 60 Online blog statements and Letters to the Editor
- Generated more than 9,250 online media postings of DTF press releases. An average of 171 per press release (Meltwater Analysis)

DIGITAL OUTREACH: WELCOME TO THE NEW WWW.DIESELFORUM.ORG

Last year over 224,000 people sought out information, news and insights from the Diesel Technology Forum’s website.

As the centerpieces of the Forum’s digital communications strategy, in 2015 DTF overhauled the website with new functionality, features and content to ensure that DTF remains the top resource for diesel information. The new site is fully mobile-optimized with responsive design to accommodate an increasingly mobile audience. With enhanced International and policy content, including a new policy-focused section that looks at diesel’s role in the three E’s – Energy, Environment and Economy - along with updated and enriched state data, the new website ensures that DTF has state of the art online digital communication capabilities. The website also features expanded and higher-profile positioning to highlight member companies, along with an expanded “Members Only” section.

The effectiveness of the new site as a resource for policymakers is evident with the rising number of “gov” visitors coming to the site searching for information. Website traffic was up over 19 percent and the site had over 1,640 visits by Congress and more than 170 government agencies in 2015.

GOOGLE CHOOSES THE DIESEL TECHNOLOGY FORUM AS TOP RESOURCE

In 2015, the Forum expanded investments in infographics to enhance delivery of information in the social and online environments and maximize exposure and sharing capabilities. This digital strategy and new website content resulted in a highly coveted top ranking from Google, the number one search engine in the world. Behind these accolades is well-written, organized and meaningful content. Updating of basic messaging (Diesel 101), with new infographics along with a new URL www.dieselforum.org/cleandiesel helped achieve the designation. Likewise, DTF’s explanation of complex emissions control systems (What is SCR?) and the development of a new infographic proved to be a timely resource highly sought after during the VW diesel emissions crisis.

The “What is Clean Diesel” page now not only consistently ranks in the #1 spot on Google for the term “Clean Diesel” but also the two pages were chosen by Google as the top resource on the internet for information on clean diesel and SCR. While Google’s knowledge graph doesn’t always show up in every browser for every user for every search, Google’s recognition of www.dieselforum.org as a trusted source of information adds great credibility to DTF as the authoritative resource on clean diesel.
NEW WEB LEARNING SERIES

The Diesel Technology Forum hosted a series of online web-based sessions as part of a Web Learning Series to educate policymakers, researchers, media, consumers, students and others seeking the latest insight from leading experts in technology, policy and research and development.

The 60-minute interactive sessions included the presentation of new research, important insights and useful information on key policy issues including energy, environmental, climate, and economic choices in each of the topical areas.

Want to Save Money? Buy a Diesel Car, discussed findings from the University of Michigan Transportation Institute (UMTRI) study: “Total Cost of Ownership: A Diesel Versus Gasoline Comparison (2012-2013)” and featured the lead UMTRI researcher. Comparative data evaluating TCO for diesel and gasoline vehicles considered depreciation, fuel costs, repairs, fees and taxes, insurance, and maintenance, and found that clean diesel can save consumers money.

Diesel Cars, Trucks and SUVs in the U.S.: Customer and Societal Benefits, Challenges and Opportunities, featured Martec research findings that quantified the benefits to the consumer in owning and operating a diesel car, pickup truck or SUV, and societal benefits in fuel savings and emissions reductions.

Power Up: State Initiatives to Enhance Readiness and Resiliency for Ensuring Continuous Electrical Operation for Key Businesses and Facilities during Grid Outages, coincided with National Preparedness Month and provided attendees with an update on state plans to keep the lights on during severe weather events. Officials with the National Association of State Energy Officials and the Maryland Energy Administration joined DTF staff in the program.
The Diesel Technology Forum invested heavily in technical and social research to drive the 2015 program message about the societal and customer benefits of new technology diesel engines. To promote the growing market acceptance of new technology clean diesel engines DTF commissioned analysis of 50 state vehicle registration trends from IHS Insight for both clean diesel passenger cars as well as heavy-duty trucks. This provided a localizable media angle and highly marketable “Top Ten Lists” showing which states were leaders in clean diesel. This also provided an important foundation for educating policymakers about the adoption of new clean technology in their state.

To understand more fully the impacts of the VW emissions crisis, DTF commissioned public opinion and policymaker research, which provided qualitative and quantitative data about perceptions along with message testing.

A new infographic was developed to help tell story of clean diesel’s dominance in the trucking industry and the population of 2007 and 2010 technology into the fleet. The infographic was released with DTF’s press release for the Phase 2 rule to improve fuel economy and reduce greenhouse gas emissions from Class 3-8 vehicles and highlighted the benefits of the technology that is already achieving results and was featured in many of the trade publication stories and continues to see activity in social media. A supplemental infographic on the top 10 states for the new technology tied into the theme of Clean Diesel Powers America’s Trucking Fleet.

The 2014 light-duty sales data compiled by IHS Automotive was analyzed to determine the Top 10 states of diesel drives broken down all types of passenger vehicles categories — cars, SUVs, pickup trucks and vans – in all 50 states and the District of Columbia. Registrations for clean diesel cars and SUVs have increased 47.6 percent since 2010 while the overall car and SUV market increased only 6.4 percent during the same period. See all the data and Top 10 lists at www.dieselforum.org/Top10.

MEMBERS

The members of the Diesel Technology Forum are leaders of the diesel industry and include a diverse membership of OEMs, suppliers, fuel refiners and device manufacturers who are leading the fight for clean diesel.