Join other engineering professionals in critical conversations about CO₂ emissions, efficiencies and electrification in the commercial vehicle industry.
Your #1 Source for Industry Collaboration and Knowledge

As the only North American forum that addresses vehicles and equipment spanning the on-highway, off-highway, agricultural, construction, industrial, military and mining sectors, COMVEC provides unmatched networking and learning opportunities that empower you to deliver on consumer expectations, overcome common challenges and navigate the changing regulatory landscape.

Who Will You See at COMVEC?

This esteemed event draws today’s leading subject matter experts, OEMs, academics, suppliers, government regulators and engineering practitioners from across the industry — and all over the world.
# Event at a Glance

**TUESDAY** September 20

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 - 9:00 a.m.</td>
<td>Young Professionals Meet &amp; Greet</td>
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<tr>
<td>8:30 - 9:00 a.m.</td>
<td>Networking with Coffee Coffee Sponsored by: Horiba</td>
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<tr>
<td>9:00 - 10:00 a.m.</td>
<td>Opening Keynote: David Graziosi, Chairman &amp; CEO, &amp; Dana J.H. Pittard, VP Defense Programs, Allison Transmission</td>
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<tr>
<td>10:30 a.m. - 12:00 p.m.</td>
<td>Connected Digital Engineering Executive Track: Capturing Value from Connected Vehicles Sponsored by: John Deere</td>
<td></td>
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<tr>
<td>10:30 a.m. - 12:00 p.m.</td>
<td>Lithium-ion Battery Failure Physics, Current Countermeasures and Opportunities for Improved Outcome in Heavy-duty Off-highway Applications Sponsored by: Volvo CE</td>
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<tr>
<td>10:30 a.m. - 12:00 p.m.</td>
<td>Simulation Validation / Verification Sponsored by: Ricardo</td>
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<tr>
<td>10:30 a.m. - 12:00 p.m.</td>
<td>Onboard Diagnostics</td>
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<tr>
<td>12:00 - 1:30 p.m.</td>
<td>Networking Lunch in Exhibit Hall Sponsored by: CNH</td>
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<tr>
<td>12:15 - 12:45 p.m.</td>
<td>Young Professionals Speed Mentoring - Sign up required</td>
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<tr>
<td>1:30 - 3:00 p.m.</td>
<td>Connected Digital Engineering Executive Track: Talent Sponsored by: John Deere</td>
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<tr>
<td>3:30 - 5:00 p.m.</td>
<td>Charging Strategies for Commercial EV’s Sponsored by: Volvo CE</td>
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<tr>
<td>3:30 - 5:00 p.m.</td>
<td>Operational Opportunities and Gaps in Autonomous Trucking</td>
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<tr>
<td>5:00 - 6:00 p.m.</td>
<td>Networking Reception in Exhibit Hall Sponsored by: Torc Robotics</td>
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**WEDNESDAY** September 21

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Sponsor</th>
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</thead>
<tbody>
<tr>
<td>7:30 - 8:45 a.m.</td>
<td>Buckendale Breakfast &amp; Lecture</td>
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<tr>
<td>8:30 - 9:00 a.m.</td>
<td>Networking with Coffee Coffee Sponsored by: Corning</td>
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<tr>
<td>9:00 - 10:30 a.m.</td>
<td>Powertrain Diversification Executive Track: High Voltage Electrification Sponsored by: KPIT</td>
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<tr>
<td>9:00 - 10:30 a.m.</td>
<td>Technologies Supporting the Path to Zero by 2040 Sponsored by: Volvo CE</td>
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<tr>
<td>9:00 - 10:30 a.m.</td>
<td>Impact of Autonomous Vehicles and Electrification</td>
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</tr>
<tr>
<td>11:00 a.m. - 12:30 p.m.</td>
<td>Powertrain Diversification Executive Track: Alternative and Net Zero Carbon Fuels Sponsored by: KPIT</td>
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<tr>
<td>11:00 a.m. - 12:30 p.m.</td>
<td>IC Engines, Aftertreatment and Hybrids Sponsored by: Volvo CE</td>
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<tr>
<td>11:00 a.m. - 12:30 p.m.</td>
<td>How Electrical and Automated Vehicle Technologies Impact Regulations Sponsored by: Volvo CE</td>
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<tr>
<td>11:00 a.m. - 12:30 p.m.</td>
<td>Cybersecurity in EVs and Power Grid Attacks</td>
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<tr>
<td>12:30 - 1:30 p.m.</td>
<td>Networking Lunch in Exhibit Hall Sponsored by: Lubbock</td>
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<tr>
<td>12:30 - 1:00 p.m.</td>
<td>Mini Buckendale Lecture for High School Students</td>
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<tr>
<td>12:45 - 1:15 p.m.</td>
<td>Young Professionals Speed Mentoring - Sign up required</td>
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</tr>
<tr>
<td>1:30 - 3:00 p.m.</td>
<td>Powertrain Diversification Executive Track: 2024 / 2027 Low NOx &amp; Emission Regulation Challenges for On- and Off-highway Applications Sponsored by: KPIT</td>
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<tr>
<td>1:30 - 3:00 p.m.</td>
<td>Simulation-based Powertrain Product Development Sponsored by: Volvo CE</td>
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<tr>
<td>1:30 - 3:00 p.m.</td>
<td>Truck Trailer Bridge and Subnetworks</td>
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<tr>
<td>3:30 - 5:00 p.m.</td>
<td>Thermal Management of Advanced Propulsion Systems for Commercial Vehicles</td>
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<tr>
<td>3:30 - 5:00 p.m.</td>
<td>Executive Panel: Energy Revolution: Powering the Future Panel Discussion Sponsored by: Cummins</td>
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<tr>
<td>5:00 - 6:00 p.m.</td>
<td>Networking Reception in Exhibit Hall Sponsored by: Navistar</td>
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**THURSDAY** September 22

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Sponsor</th>
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<tbody>
<tr>
<td>7:00 - 7:30 a.m.</td>
<td>Powertrain Student Research Panel Breakfast (Sponsored by: Caterpillar &amp; Eaton Cummins) &amp; YP Meet &amp; Greet</td>
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<tr>
<td>7:30 - 8:45 a.m.</td>
<td>Powertrain Student Research Panel</td>
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<tr>
<td>9:00 - 10:00 a.m.</td>
<td>Fleet Executive Roundtable Sponsored by: Liebherr</td>
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<tr>
<td>10:00 - 10:30 a.m.</td>
<td>Networking Break</td>
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<tr>
<td>10:30 a.m. - 12:00 p.m.</td>
<td>SuperTruck II Roundtable &amp; Run on Less Fleet Panel</td>
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<tr>
<td>12:30 p.m. - 3:30 p.m.</td>
<td>Ride-n-Drive Activities at Allison Transmission Sponsored by: Torc Robotics</td>
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</tbody>
</table>

**EXHIBIT HOURS**

- **Tuesday**: 10:00 a.m. – 6:00 p.m.
- **Wednesday**: 10:00 a.m. – 6:00 p.m.

**REGISTRATION HOURS**

- **Tuesday**: 7:30 a.m. – 4:00 p.m.
- **Wednesday**: 7:30 a.m. – 4:00 p.m.
- **Thursday**: 7:30 a.m. – 11:00 a.m.

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Event-At-A-Glance as of June 23, 2022
2022 Executive Chair
Ryan Milburn
Vice President, Product Engineering
Allison Transmission

2022 Executive Council

Mehdi Ahmadian
Virginia Tech
Craig Barnes
CAB Consulting LLC
Rod Beazley
Isuzu Technical Center of America Inc
Paul Behrens
CNH Industrial
Alan Berger
Consultant
Luis Bucio Mendoza
Continental Automotive Systems Inc
Darcy Bullock
Purdue University
Mike Clement
AVL
Michael Connolly
Robert Bosch GmbH
Robert Dolan
IAV Automotive Engineering Inc
Mihai Dorobantu
Eaton
Michael Doseck
DaVinci Technology Group Inc
Ash Dudding
Hendrickson Truck CV Systems
Kevin Duffy
Caterpillar Inc
John Fairbanks
PRUV Mobility Ecosystem
Lisa Farrell
Cummins Inc
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Jeremy Frenznick
Dana Inc
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Virginia Tech
Craig Henriksen
FEV North America Inc
Robb Janak
Jacobs Vehicle Systems
Peter Jarrus
Lydall Performance Materials
Mark Jensen
Vector North America
Wensi Jin
MathWorks Inc
Ameya Joshi
Corning Inc
Michele Kaiser
Deere & Company
Siddiq Khan
U.S. Department of Energy
Kevin Kluemper
Allison Transmission Inc
Nand Kochhar
Siemens Digital Industries Software
Satish Kumar
KPIT Technologies Ltd
Andrew Lund
Toyota Motor Corp
Barrie Masters
Lubrizol Corp
Chris Mays
BorgWarner
Philip McEwen
Continental Automotive Systems Inc
Jaclyn McQuaid
General Motors
Robert Merrion
Allison Transmission Inc
Rob Messina
Oshkosh Corporation
Ryan Milburn
Allison Transmission Inc
Charles Moritz
Cadillac Products Automotive Co
Seth Nail
Allison Transmission Inc
Giorgio Rizzoni
Ohio State University
Dave Rodgers
Red 11 Technologies, LLC
Brian Routhier
USDOT - FMCSA
Gary Schmiedel
Sareja LLC
Stephen Sears
Sears Seating
Ethan Seifer
Cummins Inc
Marc Semma
MathWorks Inc
Navtej Singh
Navistar Inc
Nishant Singh
MathWorks Inc
Srini Srinath
Caterpillar Inc
Philip Stephenson
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Daniel Styles
Ford Motor Company
Stephan Tarnutzer
AVL
James Turney
Daimler Trucks North America LLC
Prachi Vakharia
Amazon
Remy Villarreal
Aptiv
Peter Waeltermann
dSPACE Inc
Michael Weinert
SAE Commercial Vehicle Sector VP
Graham Weller
Horiba Instruments Inc
Kevin West
Volvo Trucks North America
Daniel Williams
ZF
Randolph Williams
AEye Inc.
Discover how those on the forefront of innovation are thinking about roadblocks and opportunities in the commercial vehicle space, with three captivating keynotes.

**Tuesday Keynote**

David S. Graziosi  
Chairman & Chief Executive Officer, Allison Transmission  
*Presentation Title: Powering Future Innovation: Perspectives*

Dana Pittard  
Vice President of Defense Programs, Allison Transmission  
*Presentation Title: Powering Future Innovation: In Defense, Why It Matters*

**Buckendale Lecture Keynote**

Transiting Commercial Vehicles to Zero Impact Emissions — Technologies, Challenges and Opportunities ahead

Ameya Joshi  
Director Emerging Technologies & Regulations, Corning Inc.
Panel Spotlight

Executive Panel
The Energy Revolution: Powering the Future

Wednesday: 3:30 – 5 p.m.
As the debate rages on regarding the best, most efficient, and most sustainable options for powering the future, this panel will share their insights from the fleet perspective. This group of fleet executives and managers will explore their perspective on the outlook, opportunities and challenges with respect to adopting future technology such as battery electric, hydrogen fuel cells and other low carbon fuels. Fleet adoption of these future technologies will be key in determining which one or all of these disruptive technologies will power the future commercial vehicle sector.

Moderator
Alan Berger

Panelists
Jordan Choby, Toyota Motor North America Inc.
Rob Messina, Oshkosh Corporation
Giordano G. Sordoni, Xos Trucks
Anthony Sutton, Navistar Inc.

The Energy Revolution: Powering the Future
Fleet Perspective

Thursday: 9 – 10 a.m.
As the debate rages on regarding the best, most efficient, and most sustainable options for powering the future, this panel will enter squarely into that debate. This group of industry leading executives will explore the merits of battery electric, hydrogen fuel cells and other low carbon fuels and whether there is a space for all or a clear path to one. Whether you’re in Big Trucking, Big Agriculture, Big Construction, Big Freight, or Energy, these are disruptive technologies that will change and evolve the landscape to power the future of the commercial vehicle sector.

Moderator
Avery Sheets, Allison Transmission Inc.

Panelists
Michael Roeth, NACFE
Craig Sieber, Penske Corp.
Jake Vandelloo, Schneider National Inc.

Executive Roundtable
SuperTruck II

Thursday: 10:30 – 11:15 a.m.
Join SuperTruck 2 participants from Cummins, Daimler, Paccar, Navistar, Volvo and hear the companies provide updates on their projects and results. SuperTruck II was launched in 2016 with the goal to double the fuel efficiency for 18-wheel tractor-trailer trucks compared to a 2010 baseline. SuperTruck II teams are using array of technologies including high efficiency engines, advanced aerodynamics, and lightweighting in order to meet the fuel efficiency goal. They are also using 48V mild-hybrid systems that will facilitate a transition to electrification, improve fuel efficiency and reduce cold start NOx emissions.

Moderator
Siddiq Khan, US Department of Energy

Panelists
Eric Bond, Volvo Group
Jon Dickson, Cummins Inc.
Maarten Meijer, PACCAR Inc.
Darek Villeneuve, Daimler Trucks North America LLC
Jim Yan, Navistar Inc.

Executive Roundtable
Fleet Run on Less

Thursday: 11:15 a.m. – Noon
Join the NACFE Run on Less - Electric participants as they provide updates on their experiences and results. This joint effort between the North American Council for Freight Efficiency (NACFE) and RMI, Run on Less is a best-of-the-best, freight efficiency demonstration. Run on Less - Electric was the third in NACFE’s series and included 13 fleets operating battery electric trucks using 13 different truck OEMs. Data and video storytelling to explain the detailed situation for how these trucks are being used hauling real freight, with real drivers and routes. Panelists will share how these trucks are performing today, what the drivers and operations people say about them and the opportunities for the near and longer term.

Moderator
Chris Baillie, Allison Transmission Inc.

Panelists
Arun Chickmenahalli, Ryder System Inc.
Richard Mihelic, NACFE
James O’Leary, NFI
Timothy Rivera, DHL

University Student Powertrain Research Breakfast and Panel

Thursday, 7:00 – 8:45 a.m.
Hear students from Michigan Tech, Ohio State, Clemson and Purdue Universities highlight their research.
Commercial vehicle engineers count on COMVEC for technical insights into advancing technology and the industry’s most critical topics. Tailored with input from past attendees, this year’s exceptional content tracks include:

**Executive Tracks**
- Connected/Digital Engineering
- Powertrain Diversification

**Technical Tracks**
- Aerodynamics
- Chassis Design & Vehicle Dynamics
- Powertrain
- Total Vehicle Mechatronics & Integration

**HIGH SCHOOL STEM STUDENTS**
Welcome the next generation of engineers! Approximately one hundred high school STEM students will attend COMVEC on Wednesday, September 21. Students will have the opportunity to be matched with mentors, attend educational sessions, interact with exhibiting companies, and participate in the days networking functions.

- George Washington Community
- Shortridge
- Lawrence Central
- Lawrence North
- Pike
- Ben Davis
- Providence Cristo Re
- Carmel
- Center Grove
- Purdue Polytechnic
- Perry Meridian
The special events at COMVEC bring you together with your peers in ways that drive collaboration, problem-solving and, ultimately, new partnerships.

**Daily Networking Breaks**
Whether it’s morning coffee or cocktails at the end of the day, you’ll have plenty of chances to meet your colleagues at COMVEC.

**Ride-n-Drive Event**
*Thursday, September 22 | 12:30 - 3:30 p.m.*

Experience new technologies and infrastructure from forward-thinking companies, at this highly anticipated event. Registration required ($25). Includes transportation and lunch. Participation from:

- Allison Transmission
- Cummins
- FEV
- Jacobs Vehicle Systems
- ClearFlame
- DANNAR
- EATON
- Navistar
- Continental
- ZE Group

**SPECIAL EVENTS FOR YOUNG PROFESSIONALS**

Join other early-career engineers for an evening at the Punchbowl Social for a fun night out with your peers for just $25! Be sure to secure your spot early, registration is required and there are a limited spots available.

You can also obtain the guidance you need to take your place in a competitive field with dedicated Meet & Greets, Speed Mentoring and High School Mentoring events. Registration is required if you plan to participate!
At COMVEC, you’ll see the latest advancements in internal combustion engines, autonomous vehicles, powertrain options and more firsthand — all on one technology-driven exhibit floor. This is your opportunity to talk shop with top OEMs, suppliers and technical experts; form new business relationships; and learn how development in the electrification, off-highway, functional safety, cybersecurity, connectivity, autonomous and digital engineering categories can help you solve the challenges of tomorrow.

A Leading Line-Up of Exhibitors Awaits

- Accurate Technologies Inc
- Allison Transmission Inc
- AMETEK Dynamic Fluid Solutions
- ANSYS
- BAA Information Engineering
- Continental Automotive Systems
- DD Dannar LLC
- DIStek Integration Inc
- Drive System Design Inc
- dSPACE Inc
- FEV North America Inc
- Forvia/Faurecia
- Liebherr USA C
- Ouster Inc
- Purdue University
- Sigma powertrain
- Sonceboz SA
- Synergeering Group LLC
- TLX Technologies
- Torc Robotics
- TraceTronic, Inc
- Univ of Wisconsin
- Virginia Tech
- Wurth Electronics ICS, Inc.

Thank You to Our Sponsors

Discover the companies that help make COMVEC 2022 possible.

Commercial vehicles are evolving — don’t get left behind! Race to Indianapolis to find the information and connections you need to balance technology costs, development efforts and capital expenditures in a rapidly changing industry.

Register Today!