



## Les innovations électroniques dans l'automobile du futur



11 mars 2020 – 12h30/13h30





**Stephanie Schliffski**

Consultant and Expert Leader for Inovev



**Jamel Taganza**

Vice-President and an associate of Inovev

**Michel Costes**  
President

[michel.costes@inovev.com](mailto:michel.costes@inovev.com)

**Jamel Taganza**  
Vice-President

[Jamel.taganza@inovev.com](mailto:Jamel.taganza@inovev.com)

<http://www.inovev.com>





# Inovev tools to power your business

Inovev supports their customers with

- A better **KNOWLEDGE** of their targeted markets
- A better **PROMOTION** of their **INNOVATIONS**

Last update: 04/02/2020

<http://www.inovev.com>

**Michel Costes**  
President

[michel.costes@inovev.com](mailto:michel.costes@inovev.com)

**Jamel Taganza**  
Vice-President

[Jamel.taganza@inovev.com](mailto:Jamel.taganza@inovev.com)



- ◎ Specialist of the **automotive** industry, wherever in the **world**.
  
- ◎ Supports its customers **to develop successfully their business in the automotive industry**
  - Carmakers
  - Tier 1
  - All Small and Medium Enterprises

The company Inovev is a global service company fully dedicated to the automotive industry.

It supports automotive professionals who design and engineer vehicles and automotive systems: professionals from carmakers and their supply chain.



**Data  
&  
Analyses**

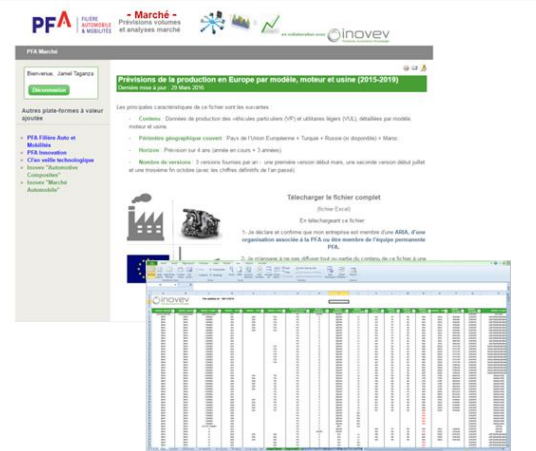
Inovev collects, processes and analyses data related to market and technologies



**Promotion  
of  
Innovations**

Inovev supports companies by promoting their innovations online and in Worldwide professional events

## Accès aux données de production en Europe par modèle, moteur et usine (2020-2023)



Accès gratuit pour les entreprises membres d'un Pôle de compétitivité, d'une ARIA ou d'une organisation associée à la PFA

## Analyse du marché automobile mondial



Accès à 800 Euros par an et par personne pour les entreprises membres d'un Pôle de compétitivité, d'une ARIA ou d'une organisation associée à la PFA

# Pour accéder aux produits/services

• Connectez-vous sur :  
<http://www.inovev.com/index.php/fr/pfa-market>

• ou par QR Code





## Sur la Plateforme **PFA** FILIÈRE AUTOMOBILE & MOBILITÉS **Innovations**

Consulter en accès libre les besoins de la filière automobile.

Répondre en-ligne à un ou plusieurs de ces besoins.

Proposer des innovations libres

The screenshot shows the 'PFA Innovation' website interface. At the top, it says 'PFA FILIÈRE AUTOMOBILE & MOBILITÉS - Innovations -' and 'en collaboration avec inovev'. The main content area is titled 'Besoins de la filière automobile' and contains the following sections:

- Sécurité, ADAS, Véhicule autonome**
  - Capteurs
  - Véhicule et sécurité
  - Gestion des données et sécurité
  - Fusion des données et IA
  - Le véhicule autonome, environnement et infrastructure
- Électrification et hybridation**
  - Systèmes de stockage d'énergie (batteries)
  - Systèmes de stockage d'énergie (H2)
  - Châssis de traction hybrides et électriques
  - Nouvelles architectures véhiculaires
  - Infrastructures de recharge
  - Actionneurs et machines électriques
  - Composants électroniques actifs et passifs
- Groupe motopropulseur à combustion interne**
  - Moteur à combustion interne
  - Conversion et gestion de l'énergie
  - Auxiliaires et transmissions
  - Post-traitement
  - Carburants
- Connectivité et mobilité intelligente**
  - Interfaces homme-machine (IHM)
  - Communication et données
  - Objets de mobilité pour tous
  - Usage et intermodalité
- Développement véhicule**
  - Allègement
  - Aérodynamique, frottements et acoustique
  - Réduction matière, empreinte environnementale
- Bien être à bord**
  - Acoustique
  - Qualité de l'air
  - Chauffage et climatisation
- Procédés et assemblage**
  - Nouveaux matériaux
  - Assemblages multi matériaux
  - Fabrication additive
  - Usine numérique / Industrie 4.0



Une adresse: [www.inovev.com/index.php/fr/pfa-auto](http://www.inovev.com/index.php/fr/pfa-auto)

# 2020 Automotive Electronics Innovation Report

An Inovev report based on the visit and analysis by Inovev experts of the CES Las Vegas

January 7 – 10, 2020 | Las Vegas, Nevada

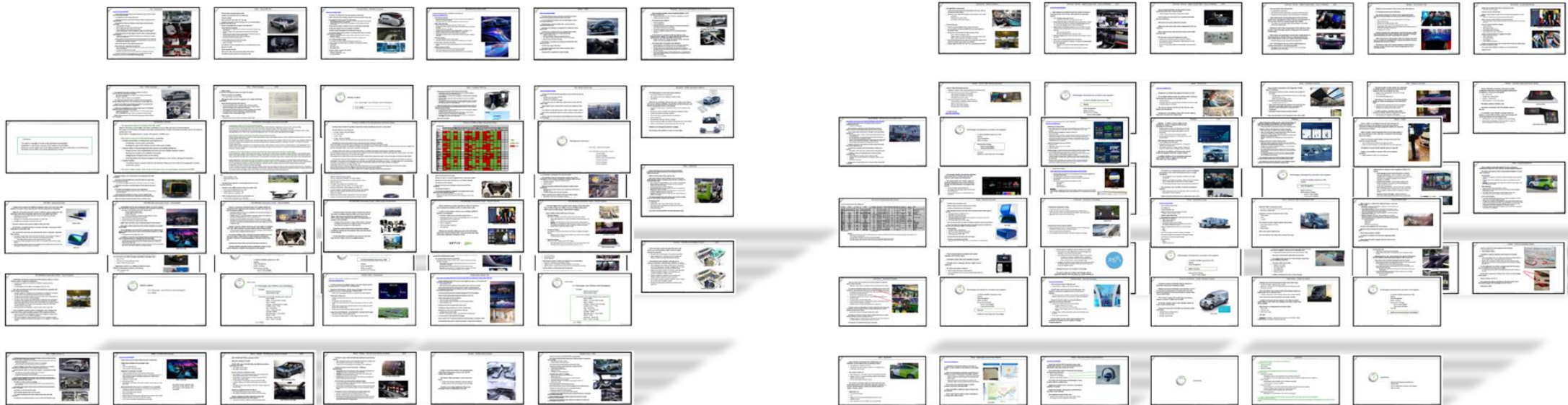


2020 & 2019 Automotive Electronics Innovation Reports for 2 000 Euros  
immediately downloadable upon payment



# An Automotive Electronics Innovation Report of 105 pages

More than  
**20** vehicles manufacturers and  
**80** automotive suppliers analysed



## ○ Preamble

- Contents
- Disclaimer
- Introduction
- Presence of OEMs at Major Automotive Shows

## ○ I. Management Summary

- General overview
- Main Automotive Trends

## ○ II. Vehicle makers

- Passenger cars
- PODs

## ○ III Technologies developed by carmakers and suppliers

- In-Vehicle Mobility Experience/HMI
- Display
- Voice Recognition
- ADAS Functions
- Autonomous Driving
- Fuel Cell
- Additional Interesting New Technologies

## ○ Conclusion

## ○ Appendix

- Acronym/Professional wording dictionary
- Video links
- List of companies quoted in this report
- About Inovev
- Inovev's analysts for this study

inovev  
Powering Your Automotive Business

Powering Your Automotive Business - Promotion of innovations & Market Research

Home-T Electronic Innovations

Already registered on this platform or an Inovev platform? Please sign-in.

User Name  
Password

Remember me

Log in

Forgot Password

Not yet registered? Please sign-up.

Inovev platforms

- Portal
- Market
- Technologies
- Automotive electronics
- Automotive composites
- PFA innovations
- CCE-China Composites Expo
- PFA Market

### 2020 Automotive Electronics Innovation Report

A specific report constructed from on-spot visit of CES-2020 and analyses of Inovev's experts

More information and free previous report available upon registration on the left menu (free of charge)

**2020 & 2019 Automotive Electronics Innovation Reports for 2 000 Euros immediately downloadable upon payment**

You want to order the report?

Download the order form and send it back to [info@inovev.com](mailto:info@inovev.com)

271.58 KB

Conditions:  
2020 and 2019 Automotive Electronics Innovation Reports are downloadable :  
- immediately after the payment is received by Inovev;  
- in pdf and powerpoint format

Want to get a precise idea of the content?

2 000 Euros

2020 and 2019 reports  
(more than 200 pages totally)

[www.inovev.com/index.php/en/electronic-innovations](http://www.inovev.com/index.php/en/electronic-innovations)

# Automotive Electronics Innovation Report

An Inovev report based on the visit and analysis by Inovev experts of the CES Las Vegas

January 7 – 10, 2020 | Las Vegas, Nevada



Stephanie Schlifski  
Jean-Michel Prillieux  
Jamel Taganza  
Michel Costes



[Info@inovev.com](mailto:Info@inovev.com)

Last update: 7/2/2020



### ◎ **The automotive industry is moving at very high speed.**

Never in the history technologies have been developed at such a high pace than in the last decade.

And never in in the history innovation have been transferred from a spot in the world to another spot in the world so quickly than now.

Automobile is changing towards a cosyer, safer, greener mobility room.

### ◎ **Electronics is a key core of this transformation**, supporting:

#### ➤ **A better preservation of environment and resources** by:

- Developing a neutral carbon production.
- Enabling the share of the vehicles and the multi-modal mobility

#### ➤ **A better safety of the passengers but also persons surrounding vehicles** by:

- Using more and more sophisticated and more and more reliable detection systems.
- Reacting very quickly to the available information.
- Delegating key driving functions to the vehicle.
- Detecting before they become dangerous bad behaviours of the drivers: dozing off, inattention, ...

#### ➤ **A better comfort**

- The vehicle interior is aimed to become the extended living room that invites for lounging with seamless multimedia content.

### ◎ **This report analyses deeply these trends on the basis of the new technologies presented at CES 2020.**





- **Presentation of pre-series vehicles:**
  - Byton, Fisker, Chrysler electric, Nissa Ariya, Faraday Future
- **Presentation of concept cars**
- **Main subjects in automotive:**
  - Sustainability
  - Sensors – many Lidar sensor suppliers
  - Autonomous driving and L2+ driving
  - New trends in the interior



Daimler Keynote Speech – Ola Källenius

- ◎ Carbon neutral production and carbon neutral passenger car fleet by 2030.
- ◎ By 2030 car production plants are set to reduce their total water consumption per vehicle by >30%.
- ◎ By 2030 car production plants are set to reduce their energy consumption per vehicle >40%.
- ◎ By 2030 production plants will reduce waste per vehicle by >40%.
- ◎ Today every Mercedes is recyclable by 95%.
- ◎ Mercedes is aiming for 100% recyclable batteries





**Toyota's Woven City at Mount Fuji**



**Baraja Lidar**

- ◎ **Baraja – Australian company with promising new technology**
- ◎ **Technology comes from the telecom industry**



**Hyundai M Vision Concept**

- **Can drive manually or autonomously**
- **Equipped with fuel cells and a range of 300 miles per charge**





**Nexus 4 EX all-electric concept**

- ◎ **Bell all electric drone and with AerOS a full MaaS platform**
- ◎ **Hyundai presented drone for first time ever**
- ◎ **Both partner with Uber Elevate**



- ◎ **Voice recognition systems**
- ◎ **Able to detect where are persons in vehicle, to identify them and to adapt content**



**Visteon microZone Display**

- **New display technologies**
- **Transparent displays**
- **Real black displays**



**Continental Ac2ated Sound**

- **New sound systems**
- **Partly without use of loudspeakers but by vibrating surfaces**
- **Sound bubble**
- **Enforcement of speaker (driver does not need to turn around)**



**Aisin Occupant Detection**

- Driver and Occupant monitoring and detection
- To support L2+ driving
- Recognition of babies/children left behind (sound, cameras, other sensors)





2 000 Euros

2020 and 2019 reports  
(more than 200 pages totally)

[www.inovev.com/index.php/en/electronic-innovations](http://www.inovev.com/index.php/en/electronic-innovations)

Home-T Electronic Innovations

Already registered on this platform or an Inovev platform? Please sign-in.

User Name  
Password

Remember me

Log in

Forgot Password

Not yet registered? Please sign-up.

Inovev platforms

- Portal
- Market
- Technologies
- Automotive electronics
- Automotive composites
- PFA innovations
- CCE-China Composites Expo
- PFA Market

### 2020 Automotive Electronics Innovation Report

A specific report constructed from on-spot visit of CES-2020 and analyses of Inovev's experts  
More information and free previous report available upon registration on the left menu (free of charge)

**2020 & 2019 Automotive Electronics Innovation Reports for 2 000 Euros immediately downloadable upon payment**

You want to order the report?

Download the order form and send it back to [info@inovev.com](mailto:info@inovev.com)

271.58 KB

Conditions:  
2020 and 2019 Automotive Electronics Innovation Reports are downloadable :  
- immediately after the payment is received by Inovev;  
- in pdf and powerpoint format

Want to get a precise idea of the content?



© **Postal address:**

34 rue Camille Pelletan  
92300 Levallois-Perret  
France

© **Stationary telephone:** + 33-952 96 06 68

© **Contacts:**

- **Managing director**  
Michel Costes  
michel.costes@inovev.com
- **Sales and marketing**  
Jamel Taganza  
jamel.taganza@inovev.com