Podcast On the Move #2

Hello! Welcome to “On the Move”, the BNP Paribas podcast on sustainable mobility topics. Throughout this series, we’ll be meeting experts to shed light on issues related to developing sustainable mobility, and to discover how, with the support of the finance sector, the players along the mobility chain – manufacturers, integrators, businesses, infrastructure experts, public authorities and, of course, users – are getting together to design and implement more ecological, responsible and inclusive mobility.
And the good thing about being “On the Move”, is that you have plenty of time to listen!

Let’s welcome Jean-Michel Mercier (J-MM), Head of the BNP Paribas Leasing Solutions Industrial Vehicle Observatory.

Hello Jean-Michel, how are you?
J-MM: Hello! Very well, very happy to be with you!

You head up the Industrial Vehicle Observatory. And this observatory presents, twice a year, for over 25 years now, summaries and forecasts focused on the industrial vehicle market. So, can you tell us about the origin of this observatory and its purpose?
J-MM: The Industrial Vehicle Observatory is now 25 years old. At its origin, the desire to create a link with our partners who were distributors of industrial vehicles. In the context of what we call ‘vendor programs’, that is, financing equipment through equipment sales networks. We rely on a panel of experts, all of whom are specialists in industrial vehicles, and we also gather information from trade unions and professional organisations, while at the same time keeping a constant watch on all aspects of this business.
So, our main targets are our customers, our prospects of course, and the industrial vehicle sector - that is the profession.

Can you explain what an industrial vehicle is?
J-MM: In these trades, the nature of the vehicle is defined by its tonnage, and so an industrial vehicle is simply a vehicle that carries a load of more than three and a half tons, that's how it is defined in the trade. Basically, it's what we call a truck.

It's a very, very large market …
J-MM: Yes, since between 45,000 and 50,000 vehicles are sold every year, while the European market, to give you an idea, represents 300,000 units. This makes France and Germany the two leading markets with nearly 40% of the total. This is an economic sector that carries a lot of weight, because if we add the transport and industrial vehicle trades, plus all the professions that revolve around them, the logistics trades, we get a very important economic weight.

Road transport has a rather negative image, yet it's still necessary …
J-MM: Yes, absolutely. Road transport is indispensable in the flow of goods. Today, 85% of goods in France are transported by road. Without any significant or realistic slowing down imaginable, since despite all the attempts that can be made, rail and river modes are relevant in certain cases, but cannot respond to all needs related to the flow of merchandise. What is indispensable on the other hand, is to make this mode of transport as efficient as possible to limit its carbon footprint. Also, to manage a kind of contradiction that arises, for example, from the development of e-commerce which, while we are trying to limit transport flows, is adding its share in the field. At the same time, what are known as ZFEs (low-emission zones) are being set up, which govern and will govern urban traffic rules in all cities with more than 150,000 inhabitants, representing some fifty cases, and whose objective is to reduce urban transport flows. Hence, a contradiction which must be managed.

It is true that we tend to think that trucks pollute more than cars.
Is the energy transition being taken into account by truck manufacturers today?
J-MM: Yes, of course. Since the road transport of goods and industrial vehicles have been governed for many years by a range of measures, which aim to reduce the weight of CO2 emissions. And it is also important to know that, although road transport is a major source of emissions, it only accounts for 25% of all transport flows, including the flow of personal vehicles, or all road transport flows. It should be mentioned that there are about 500,000 industrial vehicles on the road, but 32 million personal vehicles and 6 million light commercial vehicles. This means that the problem of CO2 emissions is a vast problem that involves everyone. So, a positive observation: thermal vehicles, those that are in use mostly today, pollute much less than the vehicles of the old generation, thanks to the implementation of what has been called the Euro standard. We are now at Euro 6, so the first response is to rejuvenate the fleet. Nevertheless, to really reduce the carbon footprint of transport and goods flows, we will have to change the energy mix. We need to use new energies for vehicles. And then, use all possible solutions so that transport flows are more efficient, and so that to transport the same thing, we emit less CO2.

So, where do we stand in terms of the energy transition?
J-MM: Many greener mobility solutions are being developed, including, in order of maturity, gas, with NGV, natural gas for vehicles, which has reached a threshold of maturity, but which unfortunately finds itself confronted by the explosion of fuel prices linked to the crisis in Ukraine, by a considerable increase in prices which is jeopardizing the evolution of this market. What seems especially important is the development of the biomethane sector, the ability to produce local gas in circular economy, which is biogas. And this is where the impacts in terms of

decarbonization are the strongest, so it is a mode that has a bright future.

Then there is the electric mode. Battery electric is a viable solution for light vehicles, provided that sufficient recharging networks are developed. For heavy-duty applications, there are numerous constraints to be met: range, vehicle payload, and therefore operational charging networks everywhere on the roads used by heavy vehicles. And all of this, of course, will have to be built within an economically sustainable framework, without losing sight of the fact that electricity will have to be produced on a massive scale, and of course from renewable sources. Otherwise, we will miss the original objective.

As for biofuels, they have their place today with a fuel called B100, which is of rapeseed origin. That is to say that we use rapeseed to produce this fuel. It is a fuel that provides a temporary solution because, as it is an agricultural material, it could compete with food consumption and uses. This is why we must now look at the production of biofuels or synthetic fuels, called second or third generation, which are currently being studied. In these fuels, there are some that are derived from wood waste, for example.

And what about hydrogen?

J-MM: Hydrogen is the ideal solution in the absolute, the ideal energy that is the object of all the attention, in France, in Europe and in the world. Considerable budgets will be allocated to this market, in order to produce green hydrogen. Because this is also the heart of the matter. We can use hydrogen today, but if it comes from coal-fired power plants, for example, we are also missing the objective of reducing CO2. We need green hydrogen with renewable energies. And that's the heart of the matter.

As I said, the political will is very strong in Europe and in France. Considerable budgets are going to be allocated. In France, a 2-billion-euro programme is already planned. Europe is planning to create a European hydrogen bank and some very large French operators are getting involved in this subject. I would mention Air Liquide, Engie and Michelin, which have massive investment projects to promote the development of this energy.

Nevertheless, we must be aware of one thing: all this must be developed at an economically compatible cost. This is what we call the business model, which means that the users of these vehicles will take on the cost of transport. We need to use hydrogen in an economically viable way. Which means that at its current stage, it's a model that's mostly viable and suitable for public services. And many public authorities, regions and operations have embarked on the subject. Particularly in two areas: passenger transport and waste transport.
Concerning passenger transport, 30 buses are already in operation in France, and I will mention the cities of Auxerre, Pau, Versailles and Le Mans. Dijon is very advanced on a project. Toulouse also, for the airport of Blagnac. And more than 800 units are announced at the horizon of 2030 and would concern 52 agglomerations. You have to see that behind all this, there is also something hidden, that is that public transport is obliged to buy 100% new energy vehicles as of 2025. In other words, if I buy a bus, it will necessarily be equipped with new energy.

So, what are your forecasts for the implementation of the energy transition?
J-MM: For me, we must be patient and pragmatic. Because although it is true that it is absolutely essential that the revolution happens and that we join and succeed in this energy transition, there are also many technological shifts that we must be able to integrate by 2030. There is a very high degree of complexity since the energy crisis, and the increase in gas prices, as I mentioned earlier, has completely disrupted a market that was in full development. And then, lastly, we have a fleet of industrial vehicles today consisting of about 600,000 units of which 50,000 are renewed every year. If we do a quick calculation, you can see the horizon, it takes at least ten years to completely renew a fleet. But knowing that in relation to that, when I talk about 50,000 vehicles per year that are registered, only a little less than 10% today are new energy vehicles, so what we call clean vehicles. This gives an idea of the magnitude of the task ahead of us to move towards a satisfactory evolution of the energy mix by 2030.

On a more personal note, in your opinion, what viable solutions are out there?
J-MM: Well, I was talking about pragmatism and economic issues. What seems to me to be an approach that could be implemented quickly and be economically viable, would be to start by replacing the oldest vehicles, to propose a measure that would consist of systematically taking all vehicles beyond a certain age out of the fleet and providing assistance, whether it be to professionals or to individuals, so that they start getting rid of their oldest vehicles. We could use a recycling circuit in this field because it is important to re-purpose the vehicles if they are taken out of the circuit. Another point, a method that could be put in place, is what we call "trucks as a service". This means letting large operators, with large financial means, offer end users service that would allow the use of a hydrogen vehicles. For example, which would be adapted by this large operator, and which would allow end users the use hydrogen vehicles in a framework that remains economically viable.

Agreed. Reducing our carbon footprint, especially from travel, is a challenge for everyone. What do you personally do in your daily life to reduce your carbon footprint?
J-MM: Here again, my approach is to keep it simple. When I say the approach, I mean walking. Develop walking, by setting myself objectives that are daily, monthly, annual. It's simple, you use a smartphone and you set regular goals. Then, not to adhere excessively to the e-commerce mode or accept that when we have a desire, we do not satisfy it within 24 hours or 48 hours or 72 hours. But accept that our need can be resolved in a week by allowing a carrier to group deliveries in the same area, thus avoiding the circulation of too many vehicles. It's a simple measure, just to be patient. And then, lastly, set a goal in terms of fuel consumption. I did the test, with 10km per hour less, and smoother driving - which makes some passengers sleep - we can improve fuel consumption and therefore CO2 emissions significanty.

To finish, would you recommend reading, a podcast, a video or even people to follow to learn more about this subject?
J-MM: I'd say, a site called *trm24*, which is dedicated to professionals, but which has an editorial style and a quality of information that deserves attention. A radio called Radio Supply Chain which is a daily radio station on topics related to transport, including obviously subjects related to energy transition. Then, the websites of associations dedicated to new energies, which are

very rich in content. The ones that deal with natural gas, electricity and hydrogen are called AVERE France, and H2 Mobile. Then, we can also use the IVO summaries, since twice a year, we try to give a snapshot of what is happening in the heavy duty vehicle market and in the energy transition.

Thank you very much Jean-Michel!
J-MM: You're welcome! With pleasure!

Stay tuned for the next "On the Move" podcast to continue our exploration on the topic of sustainable mobility.