MotoE™ helping Michelin to shape the future of electric mobility

- MotoE dovetails perfectly with the Michelin Group's strategy
- The use of sustainable materials sees Michelin innovate and break new ground in
 MotoE
 - Michelin and Enviro: new, regenerated materials
 - A new range of Michelin MotoE tyres

Michelin believes that racing and sustainable mobility are inextricably linked. The Group effectively sees motorsport as an exacting, high-tech lab for its work on new technologies and is accordingly involved in a variety of disciplines that dovetail with its Everything Sustainable plan, thereby playing a part in shaping the future of mobility.

"The technologies Michelin develops in motorsport contribute to taking sustainable mobility and respect for the environment forward, and this a prerequisite with regard to our strategy regarding our sports and sponsorship programmes", says Michelin Motorsport Director Matthieu Bonardel. "Motorsport provides us with an opportunity to test new technologies in extremely exacting conditions and, by analysing the feedback it generates, Michelin is able to distinguish avenues of work for its research and development department. It is in this way that motorsport serves as an incubator where new ideas can mature to become innovations that are ultimately of benefit to all our customers."

An eloquent illustration of this approach is Michelin's involvement in MotoE which fits particularly well with the company's strategic vision. From the outset, this all-electric motorcycle racing series, which is about to embark on its second season at Jerez, Spain, succeeded in combining exciting action with high technological value.

The motorcycle it features was designed by Energica Ego Corsa and the bespoke tyres Michelin has developed for it address the demands made by its specific technical characteristics. Indeed, the MotoE bike is heavier than its MotoGP counterparts, while its torque curve is typical of electric vehicles, with maximum power available instantly. As a result, it has enabled Michelin to make real progress in terms of both its understanding of tyre constructions and the properties of the materials it employs.

In addition to MotoE's technological relevance, the series has attracted a field of experienced and talented riders, which means fans are treated to a competitive, fiercely-contested championship. Organised by Dorna Sports as part of its motorcycle grand prix package, MotoE has lost no time in building up an enthusiastic, receptive following.

"MotoGP's audience sees MotoE as an exciting, innovative series," notes Matthieu Bonardel. "The quality of the show it delivers illustrates how the notions of performance and ecology can go hand-in-hand thanks to innovation."



As both a pertinent high-tech lab and an effective sounding board, MotoE has a bright future ahead of it and Michelin is further contributing to its growth this season with the introduction of a new range of even more innovative tyres.

Sustainable materials see Michelin innovate and break new ground in MotoE

Michelin's latest innovative work in MotoE marks an even more sustainable step forward with the introduction of new tyres that incorporate natural materials, regenerated materials and/or biomaterials.

By gradually increasing the proportion of regenerated materials and biomaterials used in the production of its MotoE tyres, Michelin sees the series as a high-tech lab that is beneficial to road-tyre development. The Michelin Group is committed to an Everything Sustainable plan which is geared to providing its customers with products that are increasingly efficient, ecological and sustainable.

Michelin's work on regenerated materials and biomaterials in the competitive arena of MotoE will feed the development of new-generation road tyres and, by doing so, ensure a positive return on its investment in motorsport. At the same time, the series stands out as an effective communication platform for showcasing the benefits of the Group's technological breakthroughs, not only to its manufacturer partners but also to the wider public.

"Michelin's involvement in MotoE fits with our Everything Sustainable plan", confirms Michelin Motorsport's Director Matthieu Bonardel. "This all-electric bike racing championship achieved a great deal in the course of its inaugural season and Michelin is delighted to be playing its part again as the process continues this year. After introducing specific tyres in 2019, we have now taken our range forward with the incorporation of regenerated materials and biomaterials. This evolution marks a fundamental step as we continue to use motorsport as a high-tech lab for our work on sustainable mobility. We are delighted to be contributing to MotoE's growth through our hand-in-hand efforts in conjunction with Dorna Sport and all the parties involved."

Michelin and Enviro: new, regenerated materials

Every year, around one billion tyres reach the end of their working life, so there is much at stake for the tyre industry and consumers alike when it comes to recycling.

Michelin's partnership with Enviro – a Swedish start-up founded in 2011 which employs a staff of 20 – is founded on an innovative recycling technology that enables new, high-quality raw materials to be made from scrap tyres. This low-energy-consumption process uses pyrolysis* to modify the chemical composition and physical state of the original materials.

The result is a variety of high-quality products, including regenerated carbon black, pyrolysis oil, steel and gas that can all subsequently be employed for production purposes by companies in the manufacturing sector.



Michelin and Enviro recently signed a partnership agreement founded on using the two companies' complementary expertise to foster the emergence of new materials. And MotoE stands out as the perfect platform to endorse the resulting technologies and demonstrate how sustainable materials are perfectly compatible with the exacting levels of safety and performance demanded by a topflight racing series.

(*) Pyrolysis involves the chemical decomposition of organic matter by subjecting it to very high temperatures in order to extract new products that weren't contained in its original form.

Michelin's new MotoE tyres

Michelin launches its new range of tyres for MotoE at Jerez in Spain. It consists of tyres with a symmetrical design, available in soft for the rear and medium for the front, as well as soft rain tyres for the front and extra-soft for the rear. All the tyres are manufactured using bio-sourced and regenerated materials.

The new range of tyres increases the level of performance and therefore accompanies the riders during what promises to be a highly competitive season. The consistency and versatility of Michelin's tyres are an asset that will enable all teams and drivers to be competitive.

In more detail, the structure of the rear tyres has evolved considerably, while the use of durable materials in the rubber compounds has enabled the balances established with the former range to be pushed even further.

At each event, Michelin will provide the teams with a single type of front and rear slick tyre for the entire weekend. The allocation that each rider will have at their disposal consists of four slicks for the front and five for the rear. In the event of rain, the rider will be able to count on three front and four rear tyres.

The superior performance, consistency and versatility of these new tyres are poised to make an active contribution to what promises to be a fiercely-contested championship. The construction of the rears has evolved significantly, while the use of sustainable materials for the compounds delivers an even more competitive performance balance compared with season one.

"In the course of the development of our latest MotoE tyres, Michelin broke new R&D ground which, thanks to sustainable materials, has produced a significant improvement in terms not only of their performance but also their respect for the environment. With regard to our Everything Sustainable bid, it marks a fundamental step forward that is beneficial to both the Group as a whole and all our customers. Michelin is delighted to be making an active contribution to the success of MotoE which is an adventure where passion, exciting action and innovation can coexist." concludes Matthieu Bonardel.

