Neometals and SMS group set up joint venture for recycling lithium-ion batteries

Primobius is the new name for advanced recycling

- Neometals and SMS group set up 'Primobius', a 50:50 joint venture for the recycling of lithium batteries as well as the sustainable recovery of valuable constituents from end-of-life batteries
- The objective is the commercialization of joint recycling technology for fast-growing volumes of end-of-life batteries
Primobius plans a demonstration plant in Germany based on the hub-and-spoke system

Project development company Neometals Ltd, based in West Perth, Australia, and SMS group GmbH in Germany have announced the creation of a 50:50 joint venture. The new company will be known as Primobius GmbH (www.primobius.com).

The object of this enterprise is the commercialization of joint recycling technology for lithium-ion batteries (LIBs). In this way, valuable materials can be recovered from vehicle batteries and storage batteries for electronic devices using a particularly sustainable process. To achieve this, SMS group is pooling its comprehensive experience in mechanical engineering and services with the process expertise of Neometals. With Primobius, SMS group is pursuing its consistent strategy of developing new business models as a systems supplier to enable sustainable value chains, among other objectives.

Intensive R&D efforts paved the way for the creation of this joint venture and have resulted in a patent-pending process, which was successfully tested recently in a pilot project. Neometals and SMS group had already signed a memorandum of understanding back in 2019, as part of which they not only completed the technical due diligence but also agreed a location in Europe for the future demonstration plant. Following positive appraisals, the MoU resulted in the creation of a joint venture company.

Neometals will lend its technical and commercial expertise, including in recycling technology, to the joint venture. SMS group's contribution will be the engineering and construction of the commercial recycling facilities. Moreover, SMS group intends to handle the operation and maintenance of the equipment.

The next steps planned by the joint venture are the construction and commissioning of the demonstration plant in Europe, the further development of the process technology, the financing (including from funding options for green technologies), and the
conclusion of long-term supply and offtake agreements. The demonstration plant will allow potential customers to assess the materials recovered from their own or external end-of-life batteries.

Herbert Weissenbaeck, Senior Vice President Strategic Project Development at SMS group, explains: “The SMS group looks forward to the next stage of its engagement with Neometals and to apply our metallurgical plant and engineering expertise to fast track commercialisation. SMS group sees compelling growth and opportunity in the sector. The timing is good to secure a foothold and build credibility with OEMs who value closing the loop in the battery value chain. There is a groundswell of global, and particularly European, support for sustainability and circular opportunities and this strengthens our commitment to Primobius“.

Neometals’ Managing Director Chris Reed on the newly founded joint venture: “Neometals is proud to partner with SMS group in the Primobius JV. We have a clear path to commercialise this Australian technology, developed by our technical team in Perth, to meet the needs of the burgeoning European lithium battery and EV makers. The entry of Primobius comes at a time marked by major confluence of regulatory initiatives to stimulate the electric vehicle sector to decarbonise transportation, secure battery material supply chains and support circular economies generally. Our recycling solution plays strongly to this theme by offering responsible recovery and ethical battery material supply to lower the carbon footprint of battery manufacturing and contribute generally to the sustainability of the lithium battery materials supply chain.”

*SMS group is a group of companies internationally active in plant construction and mechanical engineering for the steel and nonferrous metals industry. It has some 14,000 employees who generate worldwide sales of more than EUR 2.9 billion. The sole owner of the holding company SMS GmbH is the Familie Weiss Foundation.*