



of key technologies by 40–90%, notably in land-based wind power, rooftop and utility solar, electric car batteries, and light-emitting diodes.

“Over the last decade, the UAE [United Arab Emirates] has led the growth of clean energy in the region and established solid foundations upon which to build a green economy for future generations,” says UAE Undersecretary of Energy Matar Hamed Al Neyadi.

Collectively, these 21 partners represent well over 80% of global public investment

in clean energy R&D, currently totaling approximately \$15 billion per year. These efforts represent an unprecedented acceleration of R&D efforts for innovative clean energy technologies.

Under Mission Innovation, each partner independently determines a strategy for clean energy innovation funding based on individual national resources, needs, and circumstances. MI partners also encourage mutually beneficial engagement with other partner countries in international collaborations.

“The clean energy R&D investment by MI members represents a transformative public investment to support clean energy development and provides a clear direction of the areas in which each country has decided to move forward, including areas of high technological risk and uncertainty,” says Mexican Secretary of Energy Pedro Joaquín Coldwell. “Patient and long-term investment from [the] private sector will be key to complement public investment to accelerate these technologies to the market.”

National Research Council spearheads research on aluminum products

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A newly formed alliance called ALTec Industrial Research R&D Group is consolidating research efforts in the Canadian aluminum sector to develop innovative aluminum products for ground transportation vehicles. As a cost-effective and sustainable material, aluminum is increasingly being used to manufacture components for lightweight vehicles that reduce greenhouse gas emissions, and meet increasingly stringent fuel consumption requirements.

“By 2020, the world aluminum market in the transportation sector alone is forecasted to represent more than 65 billion US dollars,” says Michel Dumoulin, General Manager of Automotive and Surface Transportation at the National

Research Council of Canada. “Canadian businesses include aluminum in the design of their vehicles, but we saw a gap in knowledge transfer and this is where ALTec comes in.”

ALTec already has 23 members and partners who will have access to state-of-the-art facilities and Canada’s most advanced expertise in aluminum forming, assembling, corrosion control, and performance validation. A major partner, the Ministère de l’Économie, de la Science et de l’Innovation du Québec, has contributed \$450,000 through the Advanced Materials Research and Innovation Hub known as PRIMA.

“This alliance helps strengthen collaborative innovation in the field of advanced materials to enrich Quebec’s

research expertise and increase the competitiveness of companies,” says Benoit Balmana, General Director of the Advanced Materials Research and Innovation Hub.

“Rio Tinto is proud to contribute \$125,000 to this partnership. Our commitment to research and development for innovative applications in the automotive sector ensures that the low-carbon footprint aluminum produced in Canada continues to be the material of choice for world-class automakers,” adds Frédéric Laroche, Director of the Arvida Research and Development Center at Rio Tinto Aluminium. “ALTec generates positive results and contributes to the economic development of the Saguenay-Lac-Saint-Jean region [in Quebec].” □



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