

Semi-automated Dismantling System for EV Battery Metal Recovery and Recycling

Project leader

Henric Berner/Eduard Marti Bigorra, Northvolt Revolt AB

Partners

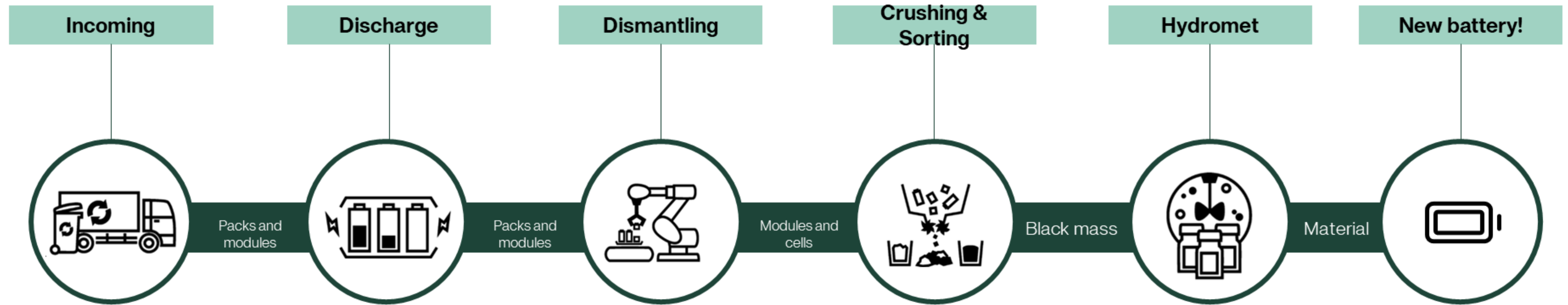
Northvolt Revolt AB, Mabema AB,
Mälardalens Universitet

Project duration

March 2022 – February 2024



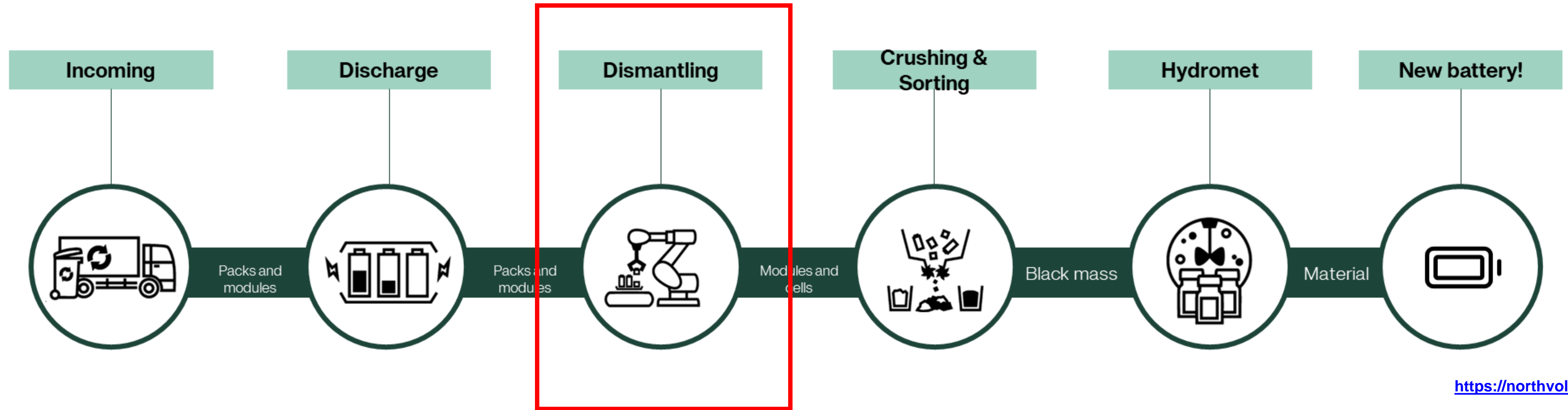
Goals of the project:



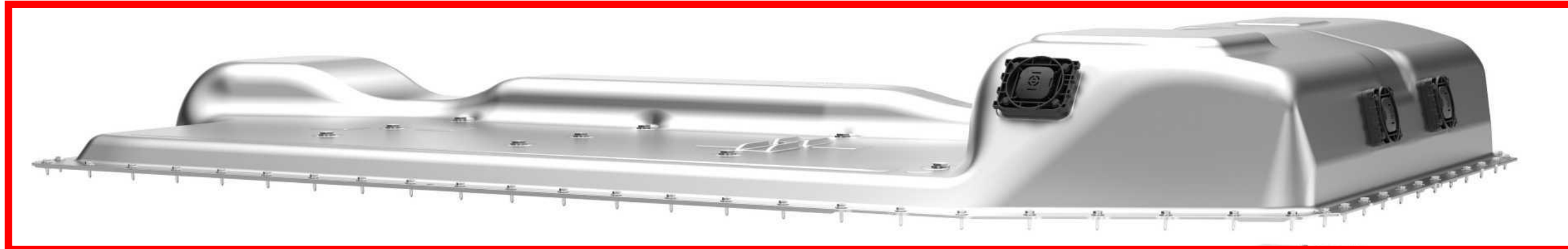
<https://northvolt.com/recycling/>



Goals of the project:



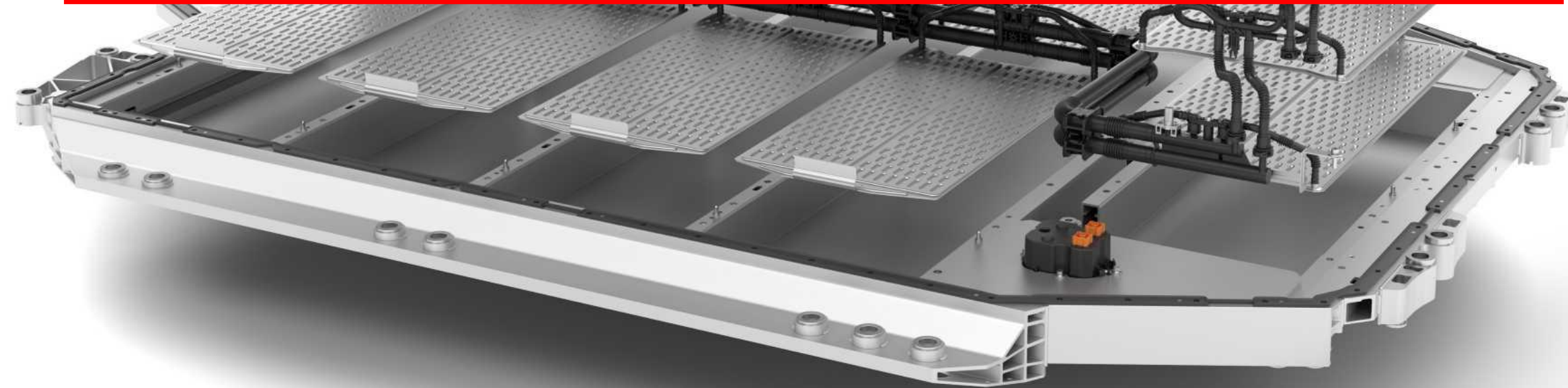
Goals of the project



Lid opening



Module extraction



Develop an automated system for pack dismantling focusing on lid opening, and module extraction

Results so far

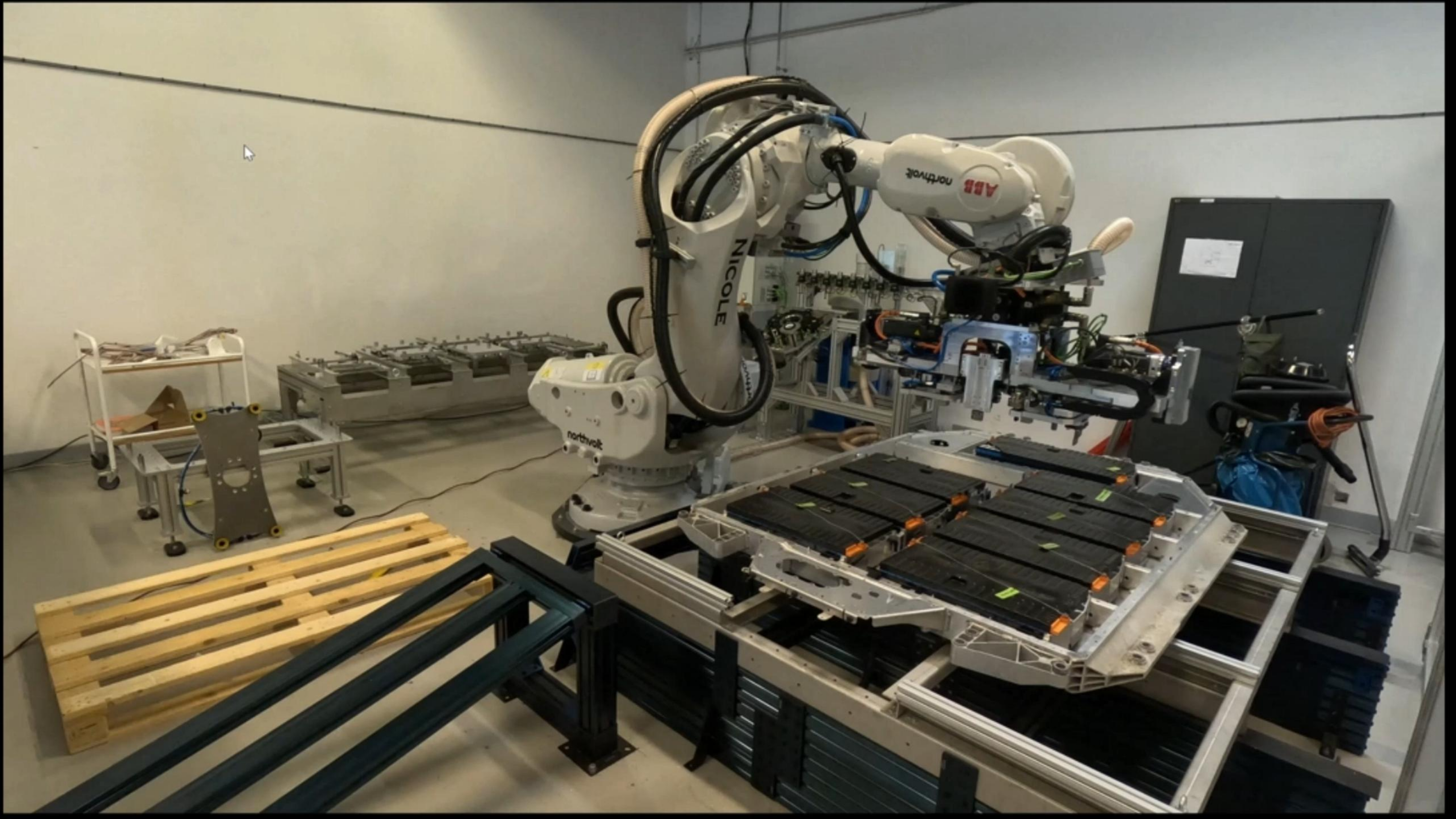
Installed and commissioned robot cell for test and development of advanced dismantling concepts in Västerås

Module extraction fully developed - technology now in use at Revolt Hamburg

Lid opening concept fully developed and ready for industrialization

Cloud concept for distribution of dismantling "recipes" in place





Upcoming activities and next step

Industrialization of the concepts at a larger scale

Further technology steps include tools and algorithms for:

Bottom enclosure gripping

Cable removal



Mining innovation for a sustainable future