

ELECTRIC MACHINES ON THE DISTANT HORIZON

Looking ahead 30 years, “we believe many of the machines in the future will be fully electrified and not have any combustion engine,” says Elfsberg. There are already isolated cases where this is happening, such as in the Korean re-handling industry, where excavators connected to the electric grid with cables are becoming more common.

The mobility of the machine helps determine the type of power. “There are a lot of stationary machines,” says Elfsberg. “It is obvious these machines could be grid connected. They don’t need to move far. A cable would work well there.”

Electric vehicles could evolve based on machine size. “Definitely, smaller machines can be battery driven in the near future,” says Elfsberg. Consider battery driven forklift trucks. “It is a bit strange we haven’t been moving faster to that with compact machines, but the demand has not really been there.”

Battery technology has been one of the fastest evolving technologies. “For medium and smaller machines, I don’t think we should worry about the battery technology. It will be ready when the industry is ready for it,” says Elfsberg. “But the grid connection — I think we underestimate how obvious that solution is to the customer. A lot of customers have electricity installed already.”

