

Green self-driving cars take center stage at Tokyo auto show

October 28 2015, by Yuri Kageyama



Carlos Ghosn, president and CEO of Nissan Motor Co., unveils the Nissan IDS Concept vehicle in the media preview for the Tokyo Motor Show in Tokyo, Wednesday, Oct. 28, 2015. The biennial exhibition of vehicles in Japan runs for the public from Friday, Oct. 30. (AP Photo/Shuji Kajiyama)

Visions of cars that drive themselves without emitting a bit of pollution while entertaining passengers with online movies and social media are what's taking center stage at the Tokyo Motor Show.

Japan, home to the world's top-selling automaker, has a younger generation disinterested in owning or driving cars. The show is about wooing them back. It's also about pushing an ambitious government-backed plan that paints Japan as a leader in automated driving technology.

Reporters got a preview look at the exhibition Wednesday, ahead of its opening to the public Oct. 30.

Nissan Motor Co. showed a concept vehicle loaded with laser scanners, a 360 degree camera setup, a radar and computer chips so the car can "think" to deliver autonomous driving. The Japanese automaker called it IDS, which stands for "intelligent driving system."

Nissan, based in Yokohama, Japan, said it will offer some autonomous driving features by the end of next year in Japan. By 2018, it said vehicles with the technology will be able to conduct lane changes on highways. By 2020, such vehicles will be able to make their way through intersections on regular urban roads.

Nissan officials said they were working hard to make the car smart enough to recognize the difference between a red traffic light and a tail light, learn how to turn on intersections where white lane indicators might be missing and anticipate from body language when a pedestrian might cross a street.

Nissan's IDS vehicle is also electric, with a new battery that's more powerful than the one currently in the automaker's Leaf electric vehicle. Although production and sales plans were still undecided, it can travel a longer distance on a single charge and recharge more quickly.

A major challenge for cars that drive themselves is winning social acceptance. They would have to share the roads with normal cars with

drivers as well as with pedestrians, animals and unexpected objects.



Carlos Ghosn, president and CEO of Nissan Motor Co., unveils the Nissan IDS Concept vehicle, which features self-driving and zero emission, in the media preview for the Tokyo Motor Show in Tokyo, Wednesday, Oct. 28, 2015. The biennial exhibition of vehicles in Japan runs for the public from Friday, Oct. 30. (AP Photo/Shuji Kajiyama)

That's why some automakers at the show are packing the technology into what looks more like a golf cart or scooter than a car, such as Honda Motor Co.'s cubicle-like Wander Stand and Wander Walker scooter.

Instead of trying to venture on freeways and other public roads, these are designed for controlled environments, restricted to shuttling people to pre-determined destinations.

At a special section of the show, visitors can try out some of the so-called "smart mobility" devices such as Honda's seat on a single-wheel as well as small electric vehicles.

Regardless of how zany futuristic and even dangerous such machines might feel, especially the idea of sharing roads with driverless cars, that era is inevitable simply because artificial intelligence is far better at avoiding accidents than human drivers, said HIS analyst Egil Juliussen. It just might take some time, such as until the 2030s, he said.

Such technology will offer mobility to people who can't drive or who don't have cars, and it can also reduce pollution and global warming by delivering efficient driving, he said.

Other automakers, including General Motors, BMW, Mercedes, Toyota and Tesla are working on self-driving technology, as are companies outside the industry, such as Google and Uber.

Cars already can connect to the Internet. Automakers envision a future in which cars would work much like smartphones today, to have passengers checking email, watching movies or checking out social media and leaving the driving to the car.



Carlos Ghosn, president and CEO of Nissan Motor Co., unveils the Nissan IDS Concept vehicle in the media preview for the Tokyo Motor Show in Tokyo, Wednesday, Oct. 28, 2015. The biennial exhibition of vehicles in Japan runs for the public from Friday, Oct. 30. (AP Photo/Shuji Kajiyama)

Honda Chairman Fumihiko Ike, who is also head of Japan Automobile Manufacturers Association which is organizing the show, said the Japanese government was putting tremendous pressure on Japan's automakers to perfect self-driving features.

Japan is eager to showcase such technology in time for the 2020 Tokyo Olympics, such as having driverless cars pick up athletes from airports and taking them to Olympic Village.

But Ike acknowledged he had doubts. Unexpected things could happen on roads, like a package falling out of a van, and the human brain has

better powers of the imagination than the best artificial intelligence, he said.



Honda Motor CEO Takahiro Hachigo speaks next to a Honda Cub motorcycle at Honda press conference in the media preview of the Tokyo Motor show in Tokyo, Wednesday, Oct. 28, 2015. (AP Photo/Eugene Hoshiko)

"We have to see," Ike said on when self-driving cars might become common. "The final answer will be from the whole society."

Toyota President Akio Toyoda said the technology has clear benefits but also shared Ike's reservations.

"It's not that easy," he told reporters on the sidelines of the show. "We are pursuing the technology, but we are also just being realistic."



Honda Motor CEO Takahiro Hachigo speaks at Honda press conference in the media preview of the Tokyo Motor show in Tokyo, Wednesday, Oct. 28, 2015. (AP Photo/Eugene Hoshiko)



Honda Motor CEO Takahiro Hachigo poses for photographers at Honda press conference in the media preview of the Tokyo Motor show in Tokyo, Wednesday, Oct. 28, 2015. (AP Photo/Eugene Hoshiko)



Honda Motor CEO Takahiro Hachigo speaks next to Honda FCX Clarity at Honda press conference in the media preview of the Tokyo Motor show in Tokyo, Wednesday, Oct. 28, 2015. (AP Photo/Eugene Hoshiko)



Herbert Diess, CEO of the Volkswagen Passenger Cars brand apologizes at the beginning of Volkswagen press conference in the media preview of the Tokyo Motor show in Tokyo, Wednesday, Oct. 28, 2015. Scandal-embattled Volkswagen's new chief executive has apologized at the Tokyo auto show and promises to win back customer trust. Diess, a recent hire from BMW, said Wednesday that the priority is to fix the problem, uncover what happened and make sure the scandal never happens again. (AP Photo/Eugene Hoshiko)



Toyota Motor Corp. President Akio Toyoda speaks at Toyota press conference during the media preview of the Tokyo Motor Show in Tokyo, Wednesday, Oct. 28, 2015. (AP Photo/Eugene Hoshiko)



Toyota Motor Corp. President Akio Toyoda, right, accompanied by special guest Miami Marlins' Ichiro Suzuki, speaks at Toyota press conference during the media preview of the Tokyo Motor Show in Tokyo, Wednesday, Oct. 28, 2015. (AP Photo/Eugene Hoshiko)

© 2015 The Associated Press. All rights reserved.

Citation: Green self-driving cars take center stage at Tokyo auto show (2015, October 28) retrieved 25 April 2024 from <https://phys.org/news/2015-10-green-self-driving-cars-center-stage.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.