2020 GM Tech Day Q&A Transcript
August 19, 2020

Q1. COVID-19 and the highly fluid global environment have severely challenged the world. Does GM plan to rebalance its global resources? Will the macro-environment impact GM's EV and AV plans?

Mary Barra: Obviously there has been a tremendous impact as it relates to COVID around the world. What we've done and what we have been doing for several years is focusing on our strengths. When you look at full-size trucks and midsize SUVs in the United States, when you look at luxury and you look at small, mid- and crossover SUVs and MPVs, those are areas where we have significant focus and will continue that.

In addition, through the pandemic, we have actually in some cases accelerated our work from an EV and an AV perspective. We have committed to over a $20 billion investment in EVs and AVs, and we're continuing to do that because its very important for us to achieve our vision of creating a world with zero crashes, zero emissions and zero congestion.

Q2. Facing 2030, what are the frontier technologies or latest technologies that you are going to introduce to China first? What is China's role for GM to realize its vision of three zeros?

Mark Reuss: I think if you look at our strategy from a technology standpoint, the technology you've seen today with the Ultium battery pack and our EV platform that we've been developing at the same time in China as the United States, from day one our R&D and our research and development for the cells themselves have been with suppliers both in Shanghai and China and in the United States. This is a very global approach for China in particular. I'm not going to reveal all of our new technologies that will be first in China, but look to Cadillac and Buick first from a model standpoint. If you think about Super Cruise, today in China that's a good example of pioneering technology that we introduced both in China and the United States pretty close together. We'll take that same approach. The volume markets in China and North America provide an incredible opportunity for us from a scale standpoint to do things in cell chemistry that haven't been done before. So, if you look at the cell cost and the range for instance, those will be really important for us in China and North America. And China, frankly, when you look at where we've introduced the first Cadillacs off of our BEV 3 architecture, the first one will be in China. So, the technologies that you see on LYRIQ, and we've touched on some of those today but not all of them, but you saw the interior and you saw the vehicle itself from a design standpoint. We will pioneer and introduce that first in China.

Q3. When will LYRIQ come to China? In terms of EVs and NEVs, what are the products that will be launched in China and the United States?

Doug Parks: As Mark just said, the LYRIQ will be launched in China soon as well as the United States. So, as we develop this global technology, you will see an aggressive launch cadence both here in the U.S. and in China. I would love to tell you what the next launches are. I will tell you we have product behind it. You see some of them around you and we've got some of them here in the dome. And as soon as we start rolling out our new Ultium architecture with the LYRIQ, we have several more exciting products to go right behind it.

Q4. Cruise delayed the commercial launch of its autonomous vehicles. What is the biggest challenge for Cruise and what is the next step for Cruise?
Doug Parks: It's a very exciting technology. As you can imagine, we get this question frequently. The most important thing I believe about this technology is that we will launch it with safety as our gating metric. So, since day one in this space, it's been very exciting; a lot of buzz about it. People working on it are terrifically excited. But the most important thing is that we will launch it when it is ready. I will tell you we've been making steady and continuous progress in our safety metrics and our safety performance. We are getting closer and closer, and we have not plateaued. The system we believe is fully capable, so we just have to keep working. And we are making continuous progress. Please be assured you can trust us. When we launch, we will be fully compliant and validated from a safety standpoint. Interestingly, through the crisis, we used the opportunity to keep working on our products. For instance, in the San Francisco area, we delivered over 50,000 meals to needy people through the autonomous driving program. So, there are AVs navigating through the very difficult streets of San Francisco. We kept developing through the crisis and we will continue to do that. You probably also heard that earlier this year, we announced the Cruise Origin, which has no steering wheel, no driver's seat and no driver. That vehicle is developing off the Ultium system, another great example of technology ready for EV and AV. We are very excited about all these moving forward.

Q5. We can see the Chinese market is different from the global market. For example, Tesla and other companies are doing a lot of localization for Chinese customers. They better understand Chinese customers. GM has a global presence, but do you have more localized measures to deal with competition?
Julian Blissett: Thank you for the question. First of all, when we develop technology globally, we develop it for rollout and application globally. So, the first thing is to understand that we don't develop in isolation in Detroit. We are in all regions, especially China. China is obviously an extremely important market to General Motors. And for ourselves, General Motors in China, we have the SGM leadership and PATAC. We are intimately involved in the planning of and the specification of technologies for global rollout. That includes technology around electrification, connectivity and intelligent driving. We are intimately involved in the planning, the early engineering and let's call it the execution phases. The second thing I would say is through PATAC and through SGM and through our supply base, we have a lot of detailed collaboration with a lot of local suppliers. Be it hardware suppliers or Chinese internet companies, we are proactively and collaboratively working with those suppliers and partners to develop solutions that are variants and in some cases local specific needs unique to Chinese customers to ensure we create the right solutions, the right products, and the right future content for our consumers here in China. So, it's a combination, inputting global solutions but also developing specific solutions that are unique here for our Chinese consumers.

Q6. The battery is the most important factor in EVs and in the early half of this year, GM launched the Ultium battery. During your presentation, you mentioned the advantages as well as the safety features of the Ultium battery. What does the name "Ultium" mean and will it be produced by a local supplier?
Mark Reuss: With the Ultium battery we really started the development around the world. We looked at the requirements, we looked at the different cell constructions – whether it will be prismatic or pouch – and we designed the platform to handle all of those. The Ultium battery and the name itself signify power, positiveness and a bright future. It really is the core of what this company will represent in the future. The Ultium name has been used and widely accepted for all those reasons. But it really means the basis of what General Motors has and the opportunity that we have in the transformation of the company to all-electric vehicles for the future. That's a little bit of a history around the name. It is the ultimate power source for the company and our products for the future.

From a localization standpoint, as we talked about a little bit through the day around the batteries themselves, we have from day one worked with local Chinese suppliers for the packs themselves we build in our SAIC-GM factory right in Shanghai. So, it will obviously be localized in relatively high volume. That plan has been in place. Again, the volume of the markets in China and North America are really the basis of economy of scale and energy density advantages. And the chemistry itself has been a joint development between GM China R&D here in Warren and our suppliers. That's a little bit of history of what has been done over the last couple of years.

Q7. We see that GM's Q2 earnings were negatively impacted by COVID-19. Facing the headwinds, how will you balance your core business and the investment in emerging technologies in the future?
Mary Barra: Yes, it was a difficult situation but actually what we were able to do in the second quarter is demonstrate the resiliency of General Motors. And all the steps we have been taking to transform the business over the last several years really came into play. We were able to respond quickly and well in a difficult environment. And that has allowed us to continue investment in key franchise programs. We have many new products coming in China from a traditional sense, but we also have very important investments that I mentioned before. We actually are accelerating in the EV space, so we are showing you just a little bit of the exciting electric products and vehicles that we will be launching in both the United States and China and in the not-too-distant future. There is much more to come behind it. We really used this time to accelerate and we remain incredibly committed to both EV and AV technology.

Q8. We can see that GM wants to invest $20 billion and China is the largest market of GM. Do you plan to increase your investment in the Chinese market?
Julian Blissett: The investment in China will come in various portions. The first thing GM is investing very heavily in is product – common product globally that will be deployed here in China. We talked about the products that will be made locally here in China – both the vehicles to be sold and the parts, including the battery and drive units. So, there will be a big investment from that point of view. Secondly, and maybe President

Wang and Sam can talk to this in a minute as well, our joint venture will also invest very heavily from an engineering point of view in terms of some of the unique products and feature content that will be developed, also from a supply base and a manufacturing point of view. I think the simplest way I can put it to you is the vast majority of cars that will be sold here in China will be made here and will cross the entire value chain. So, there will be a significant amount of investment here in China.

Q9. You just addressed the investment of $20 billion in EVs and AVs, and you may also launch 20 new NEV models earlier. In regard to the Chinese market, especially your joint venture, do you have any specific plans when you talk about the launch of 20 new products? In your global electrification strategy, how will SAIC-GM play a role?

Wang Yongqing: I will answer this question together with my partner. As electrification and connectivity continue their development, with the strong support of our parent companies – GM and SAIC Motor – we have consolidated our global resources and we have come up with very detailed implementation plans. And we have achieved good results in terms of electrification. Just now you saw on the screen that in the near future by leveraging the third-generation global EV platform as well as the Ultium battery system, we are going to launch a deep portfolio of different cars covering all kinds of segments and provide user experiences to our customers. Now I'd like to give the floor to Sam.

Sam Basile: In addition to the EVs, we should also talk a little bit about ADAS. Of course, we also want to expand in the intelligent driving area. In April of this year, as many of you know, we launched our flagship Buick GL8 Avenir. The Avenir features up to 20 of these ADAS features, including Lane Centering Control and Traffic Jam Assist. And all of these features met our highest safety standards and are upgradable over the air. Also, just last month in conjunction with the Chengdu Motor Show, we made available Super Cruise, which Doug Parks talked about earlier, on two models of our flagship Cadillac CT6 sedan. As Doug mentioned earlier, that technology continues to be improved and enhanced over time. And we will bring those improvements here to China. President Wang, anything else?

Wang Yongqing: You can see that our three brands all have connectivity available, for example smart voice recognition as well as connection with the external ecosystem. This has provided a very good user experience to our customers. We also have OTA update, which provides a very new experience to our users. As connectivity continues to develop, for our next generation of cars we are going to provide even better experiences.