2020 TOYOTA CANADA CORPORATE DINNER

SPEAKING NOTES

FEBRUARY 11, 2020 – LARRY HUTCHINSON

(CHECK AGAINST DELIVERY)

Good evening, everyone.

I know we're all busy preparing for this year's Canadian International Auto Show, so thank you for joining us and allowing me to share some of my thoughts with you.

It's an exciting time to be in automotive, isn't it?

2019 was the *fourth best year on record* for the Canadian auto industry. We sold *one point nine million vehicles*. And that's great news for our sector.

As you saw in the video earlier, Toyota Canada finished the decade by celebrating its best year ever, with sales of more than 237-thousand vehicles.

Overall, our sales were up about two and a half percent. Any year where we can increase sales, gain a little market share and exceed your plan… makes us happy.
But I'm here because, as a company - and as an industry - we're facing a critical challenge.

Two years ago, I spoke about climate change at this same dinner.

Over that short timeframe, it seems almost everyone – governments, businesses and consumers – has thankfully strengthened their resolve to save the planet.

Collectively, we're working to slow – and hopefully stop – climate change by reducing our carbon emissions. And, as an industry, we're making some progress.

But frankly, we're still not on track. This is becoming a bigger issue every day and we need to do more.

Over the past few years, battery electric vehicles or "BEVs" seem to have grabbed the majority of the electrification spotlight.

As zero-emission vehicles available to purchase *now*, they're an enticing proposition to policy-makers looking for a potential solution to carbon emissions.

So, it would be easy for governments to develop zero-emissions vehicle or "ZEV" mandates that simply tell automakers to build more BEVs and then try to convince drivers to buy them.

And, if the objective is just to *sell more battery electric vehicles*, that approach might work…

But, if *overall carbon reduction* is our true goal – and we think it should be – public policy needs to embrace, not discourage, potentially larger, lower cost solutions using already available and in-demand technology.

And here's why: Carbon reduction can only be achieved by consumers deciding to spend *their own money* in ways that deliver a *practical* return for themselves and their families.

Right now, zero-emissions vehicles account for less than *three percent* of new vehicle sales in Canada.

With the recent end of Ontario's BEV incentives, we saw ZEV sales drop sharply in this province last year.

In the U.S., we're also seeing a decline in ZEV sales.

This at a time when there seems to be widespread consensus that we have to do something about our emissions.

Even in *California* – perhaps the market most emotionally and intellectually committed to the environment – sales of zero-emission vehicles were down.

Why is this happening?

Because government rebates or tax incentives for purchasers of electric vehicles are being capped or rolled back.

Here's the reality: In order to achieve carbon reduction with a costly single technology, you have to *incentivize* that technology into the marketplace.

No matter how motivated the consumer, there is a price point or premium beyond which people will *not* opt for the cleaner product… because the payback is intangible and often requires compromises in comfort and convenience.

BEVs are expensive. So, to encourage their adoption, governments have to offer *significant* financial incentives to would-be buyers.

We'd also need to build expensive infrastructure to support that technology.

So, there are enormous up-front capital costs that have to be paid by somebody. And, so far, we've seen consumers alone are not prepared to pay those costs.

The bottom line is this: To have any impact with a zero-emission vehicle mandate, the cost to government would be *extremely* high. And, sadly, we'd *still* miss our overall carbon reduction targets.

We also need to consider resource efficiencies. There's a *finite* global supply of in-the-ground materials required to produce battery cells.

And a rising demand for batteries … not just from the transportation sector, but from all of the sectors building the mobile and connected devices we find so essential to modern living.

It's *vital*, therefore, that we use these resources as *efficiently* as possible – both to lighten the environmental impact of extracting battery materials and to ensure that we can cost-effectively produce low or zero emission vehicles.

Here's something most people don't know:

The average battery capacity in a BEV is about *sixty kilowatt hours* … and that number is growing as companies increase vehicle size and range.

The average battery capacity in a Toyota *hybrid* is *one-point-four kilowatt hours*.

Let me put this in practical terms: You could build *42 Priuses* in place of the 60 kwh battery in one BEV.

And 42 Priuses… reducing greenhouse gas emissions by 30% each… have the impact of *twelve* ZEVs.

So, for the same resources… same battery cells … do you want the GHG reduction of *one* car… or *twelve*?

And that's twelve vehicles without range anxiety, unaffordability, government incentives or infrastructure investment.

Please don't misunderstand me: I have a lot of respect for the work that Tesla and others have done in creating an aspirational market for zero emission vehicles.

But the current approach to building EVs is *not* a silver bullet that will solve the environmental impact of the transportation sector.

The problem just gets *bigger* as the industry chases zero emission alternatives to the types of vehicles that people are buying in the largest numbers today: crossovers, SUVs and trucks.

The bigger the vehicle, the more energy it takes to move. And we know, on average, larger vehicles travel longer distances.

Not surprisingly, manufacturers of electric vehicles are obsessed with how far their vehicles can travel between charges. So, the electric pickup truck has attracted a lot of attention.

One start-up company has committed to bringing a pickup to market that will feature a range of battery options ranging from 105 kwh to 180 kwh.

The truck will have no tailpipe emissions. That's good… assuming the buyer will be trading in a conventionally powered truck and not switching up from another type of vehicle, that will result in a 100% reduction in emissions … from *one* driver and *one* truck.

So, let's see… *One* vehicle with a *105 kWh battery* or … *75 vehicles* with *1.4 kWh battery packs*…

The greenhouse gas reduction of *one* ZEV… or 23...

And if you're concerned about where Toyota is headed with trucks, let me put it this way: By 2025, we'll have electrified options for all our vehicles.

We all want to replace those high emission vehicles. But the reality is that, with *current* battery technologies, it's an extremely costly and slow way to attack carbon emissions.

Oh, and in case a hybrid is not enough for you, the Prius also has a plug-in hybrid version.

The Prius Prime PHEV comes with an 8.8 kwh battery and offers up to 40 kilometres of electric range, meaning that the average Canadian commute of 15.4 kilometres round trip can *easily* be achieved with all-electric driving…

And one 60 kwh BEV could power *six* Prius Primes.

Close your eyes for a minute. Imagine its now the year 2030. I'm happy to report that Toyota Canada has sold 300,000 vehicles.

(I can dream right?! Both about the 300K and that I'm still here as President talking about it!)

There was a time the government wanted to attain a 30% reduction in carbon by getting me to sell ninety thousand ZEVs.

Fortunately, saner heads prevailed. Maybe it happened when they ran out of incentive money.

Instead, I sold 300,000 hybrids and reduced emissions by the *equivalent* of 90,000 ZEVs.

And we actually went *way* beyond that because of our plug-in hybrid and fuel cell electric vehicle sales.

But let’s keep this dream simple: I used 90% fewer finite raw materials for batteries, didn’t inconvenience any consumers and saved the government deficits as no government incentives were needed.

My point is, if Canada truly wants to achieve meaningful carbon emission reductions from this sector by 2030, a single-minded focus on zero emission vehicles is likely to cause us to *miss* that objective.

It’s too expensive, too consuming of finite resources and it entirely misses the point that carbon emissions are the result of the *total* number of carbon-powered kilometres travelled by the *entire on-road fleet* each year.

I believe that the best approach for Canada is to continue to focus on regulatory strategies that aim to produce *overall carbon reductions*.

Done properly, policies that aim to achieve year-over-year improvements in carbon emissions *from the entire new car fleet* will yield much bigger results than the ZEV mandates and incentives currently being pursued.

Governments have their environmental goals. So does Toyota.

The government has a carbon reduction objective: 30% by 2030.

Toyota wants to get there, too. We want to go further. And we have a solid, practical plan to achieve it.

In fact, it's a core goal for our overall business operations. It's called the *Toyota Environmental Challenge 2050* and we've outlined it publicly.

For example, we're just finishing our new Eastern Canada Parts Distribution Centre… a seven-acre building that'll be net zero carbon when it opens.

There was no government requirement or incentive to do this. It's just the right thing to do. We have to reduce our carbon use.

In our global plan, we commit to a *90 percent reduction* in vehicle emissions.

In Canada, we've already reduced the emissions of the cars we sell by *19 percent* over the past ten model years. We've reduced the emissions of our *trucks* by 20 percent over that same timeframe.

Having said that, over the past decade, more and more Canadians have opted for larger, more powerful vehicles.

And, of course, these bigger vehicles typically mean higher emissions…

So, while our overall emissions are down, they aren't down as much as they could be.

In a few moments, I'll share a few examples of how Toyota plans to tackle this changing reality.

The reason we were able to reduce the emissions of the vehicles we sold over the past decade has everything to do with offering our customers the right vehicle, at the right price, at the right time.

In some cases, this has meant more fuel-efficient gasoline engines.

Or vehicle design and engineering that reduces weight and improves aerodynamic performance.

But the real gains have been made with *our hybrid electric vehicles*.

Twenty years ago, when we introduced Canadians to hybrids, we sold 225 of them in the first year.

Last year, we sold more than *thirty four thousand* of them across the country.

Hybrid vehicles represented almost *15 percent* of our overall sales in 2019, up 45% from 2018.

We project electrified vehicles will make up *18 percent* of our Canadian sales this year – and, by 2025, they'll be *43 percent*.

That's an *exponential* increase – and that's important because every one of those hybrids can deliver up to a 30 percent reduction in carbon emissions.

Frankly, we're selling a lot of hybrids and plug-in hybrids because they're *good investments*.

They're more economical with no compromises. A better product and a better driving experience.

And we're planning to offer Canadians *even more* exciting hybrids and plug-in hybrids, including *better*, lower-emission SUVs.

Let me give you a few examples.

In early 2019, we introduced the Lexus UX compact luxury crossover. Of all the units we sold, *94 percent* were hybrid. Compared to its gas-powered cousin, the UX hybrid delivers more power and all-wheel-drive. The fuel economy and lower emissions of the hybrid powertrain are an additional bonus!

The new 2020 Toyota Highlander Hybrid SUV has the space and all-wheel-drive capability many Canadian families are looking for.

Now, thanks to its hybrid powertrain, it's more fuel-efficient than our *2019 Yaris Hatchback*.

Think about that for a second: A three-row SUV with better fuel efficiency than a *sub-compact car*.

The made-in-Canada Toyota RAV4 – including the popular RAV4 hybrid - is now the best-selling passenger vehicle in Canada.

For the 2021 model year, we're introducing the RAV4 Prime plug-in hybrid.

With more than 300 horsepower, this will be the most powerful and fun-to-drive RAV4 ever.

Most importantly, the RAV4 Prime will run for *60 kilometers on battery power alone*, so it can easily handle the daily driving needs of most Canadians *without ever using a drop of gas* … or generating a tailpipe emission.

Right now, hybrids and plug-in hybrids are playing the biggest role in helping Canada achieve its emissions targets. They're practical, realistic solutions that:

- Make the most efficient use of the world's finite battery resources…
- Make a lower-emissions choice an easy one for Canadians…
- Don't require costly government incentives…
- And are collectively reducing emissions significantly.

For more than twenty years now, Toyota has been telling anyone who will listen that that the future of the automobile is *electrified*.

Today, we've sold *thirteen million* hybrids globally and we're the *number one* seller of electrified vehicles in Canada.

As I mentioned earlier, we're committed to offering an electrified version of *every model* in our line-up by 2025… and we plan to have *annual* global sales of more than *five point five million* electrified vehicles, including more than one million zero-emission vehicles per year.

We're working on longer-term solutions like hydrogen fuel cell electric vehicles. And, like everyone, we're working on building a better battery.

But, at the moment, the vast majority of Canadian drivers are simply *not* ready to make the compromises required to purchase a battery electric vehicle.

Or pay the price.

The average Canadian doesn't buy sixty thousand dollar plus vehicles.

BEVs just don't meet the needs – or fit the lifestyles – of most Canadians. Not yet.

So how do we popularize electrified technologies at a rate that consumers are prepared to pay for while the rest of the work goes on to prepare for the *next* generation of advanced technology?

If governments want to speed up the adoption of electrified vehicles, we need a comprehensive, long-term strategy geared toward *overall carbon reduction*.

One that includes a *variety* of technology options and encourages consumers to make choices that drive meaningful reductions in carbon emissions… across the *entire* fleet of vehicles on Canadian roads – not just a few niche vehicles.

If you think about it, it's something we've already been doing for a long time in North America with regulatory requirements to improve fuel economy and lower emissions.

If we want to move sales of advanced technology vehicles beyond their natural demand curve, there is definitely a role for government incentives… but they should be *technology neutral*.

In other words, they should incentivize *emissions reduction* – not specific technologies.

Done properly, zero emissions vehicles will naturally enter the market … but they will be joining a much larger fleet of low and *near* zero emissions vehicles... each of which is doing its share of the heavy lifting.

In short, our message to government is: Set the goal posts – but don't call the play.

Because we, as automakers, know best how to drive down costs, and get competitive vehicles into the market.

Every automaker has their own game plan.

And each one is slightly different.

Some include hydrogen fuel cells. Some prefer battery electric. Others like hybrids and plug-ins.

In the end, it's Canadian drivers who will tell us who has won.

And I have a further modest proposal.

There are currently about two million vehicles on Canadian roads that are over 20 years old.

And I don't mean classic cars. I mean vehicles used regularly.

Not only are those vehicles grossly less fuel efficient, they also have much higher emissions of pollutants.

If we are intent on dealing with overall fleet emissions, we have to address not only the 8% of the fleet that is comprised of *new* car sales, but we need to get the *older, worst emitters* off the road.

If we *all* focus on the true challenge - *overall carbon reduction* - I know we'll *all* win.

I look forward to connecting with all of you again in 2030 to share how we've all surpassed our goals - and the government's goals - and how we're well on our way to reducing our carbon emissions by 90%.

Thank you.