Hi everyone! So it's time to welcome in Tom Boney, who is Chairman, The Aluminum Association’s Aluminum Transportation Group (ATG) as well as Vice President and General Manager, Automotive Value Stream, Novelis North America for our chat about aluminium and cars.

Hi, Melanie. It's great to be here.

As usual, we'll have time for a question or two at the end (most likely!) but for now let's get cracking.

Hi Tom, thanks for joining us so early!

It's my pleasure.

So, obviously, since the Ford F-150 pickup truck was announced, everyone seems to be very excited about alii and its potential in the auto market. When can we expect to see aluminum-bodied car/sedan for the mass market?

Depending on your definition of “mass market,” we’ve all already have seen them – there are several aluminum-intensive vehicles already on the road, like Jaguar’s XJ and XK, Land Rover’s Range Rover and Audi A8. Aluminum is starting to move into higher volume models, such as the Mercedes-Benz C-Class and the Jaguar XE (soon to be launched)....

The most recent Ducker Worldwide Survey of North American automakers indicates that high-volume penetration will occur first in larger vehicles, the pickups and full-size SUVs, and will migrate from there into the rest of the fleet.

The survey confirms that by 2025, over 75% of pickup trucks, and 20% of SUVs and large sedans produced in NA will be aluminum-bodied. And, that’s just the beginning of aluminum’s explosive growth in mass market cars and trucks. We call this the hockey stick effect… exciting stuff!

Before we get too carried away with aluminium demand growth... what are the threats to this scenario ? Steel is obviously well entrenched while carbon fiber is making new inroads... ?
I think it’s clear that vehicles of the future will be multi-material... no longer dominated by a single material. We know that aluminum, steel, carbon fiber and plastics will all find applications, and more and more will come together in the same vehicle. Automakers will choose the right material for the right application... without question, increasing amounts of aluminum will enter the mix due to its efficiency, sustainability, safety and performance advantages.

Ok, so let’s talk about magnitude. What kind of volume of aluminum (in millions of tonnes if possible) do you imagine the auto sector will consume by 2025?

Well, there are many variables in the transition to aluminum – automotive production volumes, vehicle segment sales trends, etc. Therefore, it’s difficult to forecast specific tonnes….

However, if we look at the recent Ducker study we can see that it forecasts that the number of vehicles with complete aluminum body structures will reach 18% of North American production by 2025 (this is from less than 1% today).

This gives you a sense of where things are headed, as compared to today’s baseline – and the numbers certainly tell a very compelling story of what’s yet to come.

We are really excited about this.

Well it’s certainly a good look for ali product makers.

Changing tack slightly, to talk about other sources of supply.

What percentage of aluminum used in vehicles today is recycled? How will that number change in the next decade?

The awesome thing about aluminum is that it’s infinitely recyclable, with nearly 75% of all aluminum produced since 1888 (yes, you read that right) is still in use today.

As for autos, nearly 90% of current automotive aluminum is recovered and recycled – and we expect that figure will increase in the next decade.

I think the question that a lot of our traders are interested in is this one: Will the increased use of aluminum in autos impact cost as it penetrates high-volume vehicles?

Aka, the cost of aluminium look set to rise. Is that going to throw up any hurdles to your forecast?

before we answer this one.... i have a few more things to say about the last question... it's really good stuff.

The industry is making great progress on finding
innovative and cost-effective ways to collect, dismantle and separate auto scrap to bring more back into the system. We are doing trials with a number of automotive customers on products that maintain quality and performance but can be more easily recycled. These advancements will dramatically increase the recycled content of cars and further both the aluminum and automotive industries’ increasing sustainability goals.

What’s also cool is that recycled aluminum uses far less energy to produce than primary aluminum. That, along with the fact that aluminum overall generates the lowest total carbon footprint among competing automotive materials, confirms that increased use of recycled aluminum is not only good for the industry, it’s good for the planet, too.

The question of cost is put to rest with Ford’s confirmation that entry level models of the all-aluminum 2015 F-150 will be priced just $395 above the 2014 version, even with the array of new standard equipment now onboard. Studies have long shown that aluminum-intensive vehicle designs enable significant cost efficiencies.

When aluminum is applied holistically to a vehicle, the reduction in body weight allows for secondary weight savings in other areas that wouldn’t otherwise be attainable, such as a downsized engine and lighter suspension and brakes — all of which help reduce the total system cost.

The new F-150 demonstrates those savings in a real world, high-volume application, proving that aluminum is the most cost-effective way to achieve the mass reduction necessary to meet future fuel economy and emissions targets.

So then, if we must play devil’s advocate, what are the barriers that could potentially slow down aluminum’s accelerated growth into high-volume vehicles?

Well, actually it’s clear that there are fewer barriers to aluminum’s growth than ever before. Aluminum is proven to work in performance brands like Jaguar and Audi. It’s proven in rugged/durable vehicles like Land Rover’s Range Rover (which was the world’s first aluminum-bodied SUV)...

Tesla’s breakthrough and award-winning Model S demonstrates aluminum’s advantages in further
enhancing electric powertrains.

10:26:23 PM  Melanie Burton  thomsonreuters.com  Hang on -- are you saying there aren't any..! ~ hahah

10:26:37 PM  Tom Boney  novelis.com  you got it!

10:27:04 PM  Tom Boney  novelis.com  [insert pic of hockey stick here]

10:27:12 PM  Melanie Burton  thomsonreuters.com  Hahaha..

10:27:23 PM  Melanie Burton  thomsonreuters.com  Ok last question from me, then we'll open to the floor.

10:29:10 PM  Melanie Burton  thomsonreuters.com  Given that we're already seeing supply stress in record physical premiums and LME prices recovering, is it possible for the global supply chain sustain the forthcoming surge in auto aluminum demand?

10:29:51 PM  Tom Boney  novelis.com  Without question, yes. Aluminum use has grown steadily for the past forty years, and aluminum companies met supply needs every step of the way. Clearly today, we are in the midst of a faster, far reaching transition to aluminum and individual companies are investing significantly in North America to expand capacity to meet this increasing need.

10:30:34 PM  Tom Boney  novelis.com  Specific to Novelis, we are in the third phase of a $500 million expansion of our automotive aluminum facility in Oswego, NY – and we won’t hesitate to invest further as customer demand increases in the future. Other aluminum companies are making similar investments to expand their capacity. Given the typical design and production timeframes, we fully expect aluminum companies can bring even more capacity online ahead of new production needs as they arise.

10:31:01 PM  Melanie Burton  thomsonreuters.com  So thanks Tom

10:31:04 PM  Melanie Burton  thomsonreuters.com  We have room for just one question

10:31:20 PM  Melanie Burton  thomsonreuters.com  Any takers (please be quick!)

10:32:50 PM  Melanie Burton  thomsonreuters.com  Ok, we have run a little overtime, so I might wind things up here

10:33:06 PM  Melanie Burton  thomsonreuters.com  So Tom, let me thank you for coming in today.

10:33:39 PM  Tom Boney  novelis.com  Thank you, I appreciate the time and interest. This is an exciting time for the auto industry, the aluminum industry and the consumers of the aluminum intensive vehicles coming our way.

10:33:47 PM  Melanie Burton  thomsonreuters.com  I know there have been a lot of eyes peeled on this room. Aluminium and cars. One of the forum's favourite topics.

10:34:50 PM  Tom Boney  novelis.com  Until next time... have a great day!