Global Trends in Market Pulp

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Presentation outline

• Global pulp market profile
• Demand/supply and pricing outlook through 2019
• Important issues and trends
  • Continued ascendance of China
  • Decline but not the fall of print
  • Surging tissue consumption
  • Specialty papers solid growth
  • Peak recovered paper
  • Micro-plastics water pollution good for pulp
Ninety percent of it is exported and I have been told and I have done some quick calculations that 60 percent has to cross an ocean to get to its final destination.

The business is growing. Market pulp is gaining share of the overall world fiber furnished. You have quite a bit of it in Maine – Rumford is here, Old Town, Sappi, Verso, Woodlands. So it’s 16 percent of the total fiber furnished but it’s growing was only 14 percent in 2003. Doesn’t sound like a big deal but that’s 17 million tons, in today’s terms about 10 huge eucalyptus mills.

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As an analyst, it’s the most interesting thing to cover because it’s so volatile. If you look at that right-hand side, you might not be able to see it, but as I said, it’s a 65 million ton business when you include the paper pulp, which is 59 and 6 for of dissolving pulp.

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It’s a very fragmented business the top 10 companies count for less than 40 percent, much more fragmented on the softwood side. Lot of small single mill companies. It’s priced at U.S. dollars around the world so foreign exchange currency rates are a key driver, unbelievably important driver as to who wins and who loses. Like the European countries when the Euro goes lower they are paying a lot more in local currency terms.

It’s also a supply shock driven business. I think we have about 15 percent of the global capacity that is based in earthquake zones, like Indonesia, Japan, Chile and we have had earthquakes in the past 5 years that are really disruptive to supply.

But also weather is important. In the U.S. south -- still a big producer -- if you have too warm a fall it reduces harvesting and so wood supplies becomes short and by the time the year turns, typically, they have to start buying pulp rather than making it.

Not just for the U.S., but a lot of places the weather is important. If it’s too warm in Russia, they won’t log or too cold they won’t log. And supply shocks are almost never more supply; it’s always less supply.

So it’s an interesting business to follow, because my job is basically following current events, watching the news every day to find out what happens. If there’s a strike in Argentina at a mill it will have implications for the supply demand balance in the world.
As I said, the market pulp gaining its supply and most of important reason, like a lot of other things in the world today, is China. This chart shows the difference in production of paper and paperboard for the last 10 years in various species in the world and obviously what is bleakly obvious here is the rise of China.

Versus 10 years ago, they were making 65 million more tons last year than 10 year ago, incredible, Massive mills along the coast of China that have been built to optimize the world's flow of fiber.

It’s not just China, there are other areas, too, like Asia and the Middle East. Places like Indonesia, Turkey, and the Middle East believe it or not is a huge growth area for tissue.

Then we have the traditional market, Japan, North America, Western Europe that have been declining in production and probably in Maine as much as anywhere. Especially recently with the closures that you going through now.

The key thing about the Chinese growth is that it has been paper and board capacity, not really pulp capacity. It’s been nonintegrated -- they have been built to use other people’s pulp. So that is why more and more of the pulp that is used is purchased and it’s being purchased by China.
China accounted for 26% of world paper and board output in 2012, up from around 12% in 2002. In the big picture, the good news is if you look globally at the paper and paperboard is still a growth business. It’s still growing even though various sections of it are not. Like any kind of advertising-related paper obviously has struggled over the past 10 years and will continue to struggle, I think.

But on an overall basis the world has been growing at 1.7 percent a year, including all the grades we are talking about packaging tissue and graphic papers. Then you can see that, like a lot of other industries, the driving force has been China.

The blue line that is swooping up for the past 10 years now accounts for 26 percent of total, over 100 million tons to 110 million tons a year that China make in paperboard, the biggest producer by far. And it accounts for 26 percent of the world’s consumption and production of paper and paperboard, which sounds really impressive, and it’s double what it was 8 years ago. But compared to a lot of other industries like the metals zinc, aluminum, lead -- China accounts for half of the world’s consumption of those.

So my view is that this line will continue to grow. This is essentially the end of the beginning of China’s ascendency. It’s going to continue to grow and it’s going to continue to gain share of the world’s paper and paperboard consumption and this is good for everybody, I think.
Another big change as you can see here and I have mentioned a little has been the shift from printing and writing paper as a driver for our business to tissue and other grades. In this state you lost a lot capacity for printing and writing newsprint, especially in mechanical printing grade.

It’s a little convoluted but it shows you that NBSK (Northern Bleached Softwood Kraft) in North America printing and writing only accounts for 20 percent of total demand. In 2007, it was 42 percent, so a huge shift in a very short period of time.

Tissue is now 40 percent of total demand for NBSK. It was under 30 percent only seven years ago. And specialties, which people including me don’t know enough about. There are all kinds of things around the world -- the labels you see on apples, popcorn bags, which are growing very rapidly. They’re becoming a bigger end use for all grades of pulp and we can talk about that a little bit later.

So we’ve had a big shift. I think It’s mostly over and luckily enough we tissue going around the world that will continue to drive the demand for market pulp, including in this state. Woodland is putting in two tissue lines, this year and next.
This is world market pulp shipments by grades and you can see that the ascendency of Brazil and eucalyptus as BEK (Bleached Eucalyptus Kraft). Back in the early 1990s, it was a very small player. Today it’s dominant in the world.

It’s not just from Brazil, also other South American countries, too, and also Asian countries. It’s now the gorilla in the room and I don’t think that is going to change very much in the future.
On the market side, similarly to the blue line that went up for the eucalyptus, you have the red line for China. It was a huge driving force. It was almost nothing in 1995 -- really tiny -- and then became the biggest single market of the world. Even though Europe is bigger as a group, it’s by far the biggest single market.

It’s a huge provider of volatility to our business. It’s very different to other markets in China, especially for softwood buying. They have a whole layer of middlemen in that chain of distribution that are Chinese traders, all kinds of them, big ones, small ones, state owned, private. They buy most of the pulp from softwood producers in Canada and elsewhere. The volatility is they hold stock, they build stock and they draw stock down. Sometimes they win and sometimes they lose big. Sometimes they act like a buyer, they have an agenda like a buyer and sometimes they have an agenda like a seller -- they want prices to go up.

It’s added a lot of volatility to the market and today it’s the China price that really drives the prices in the United States and in Europe.
One on the only places where we’ve had a lot growth and demand and a lot of investment in growth and capacity is in the pulp business globally.

This is the hardwood capacity. You can see that they’re clustered in Brazil mostly, but in Chile, as well in Uruguay, these are huge mills.

Mills in Canada and probably in Maine are 200,000 and 300,000 tons. These were at 1.7 million tons, now they’re 3.2 million tons, 2.8 million tons. The one in Indonesia, which is starting up at the end of 2016, is 2.8 million tons at one site. This probably almost double what the previous record was.

The one in Tennessee is Calhoun, it’s Resolute Forest Products. They are putting in a new boiler and adding in 100,000 tons of southern mixed hardwood. It’s really the only one on the hardwood side. Everyone wants to stay out of the way of these guys. These are very low cost producers they really run the world of hardwood pulp and the reason they do is …
It’s really impressive, but ecologically it’s not impressive because they are like deserts. They’re very dry, very little wildlife in it. They use a lot of water.

Of course, it’s not all just about trees. You need ports and infrastructure and other things and Brazil got a real problem there, today they are in a real mess. Their president’s popularity rating is less than U.S. Congress does at 8 percent and that’s saying something. You know they’re talking about impeachment of her and they are in deep recession and their currency now is worth about a third of what it was 18 months ago. They have a lot of issues. The word revolution is being thrown around, lots of angst in that country. It’s not all about trees, but this will get you a long way.
I took this probably eight years ago; they’ve improved since that time. Now they’re looking at five-year rotations — unbelievable — and they have a lot of them.

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When I would talk 10 years ago I would always say, “But there’s going to be a shortage of software around. Because no one is really building softwood capacity.” But all that has changed. This is the same kind of slide, but for softwood.

There’s a lot of it coming on stream. Unprecedented, I’ve never seen it in my career, this much softwood capacity coming on stream everywhere. Even in North America, we have two, Domtar in Ashdown, Arkansas and International Paper in Riegelwood, North Carolina. The model is simple. They’re closing paper capacity and converting those facilities into pulp manufacturing, fluff pulp especially. (Fluff pulp is a chemical pulp made from long fiber softwoods).

Fluff pulp is growing 4 percent a year globally. The best fiber in the world to make fluff pulp is U.S. Southern pine; actually coastal slash pine is the absolute best.

In the next 20 years, you’re going to see paper capacity closing and being converted into pulp capacity. Not just in the U.S. – everywhere. The biggest change has been in Europe. I mean there was no action at all for a decade or two and now everybody’s building pulp mills.

In Finland they have a couple of big pulp mills because Finland is really close to a recession, too, and the forest business, like in Maine, is a big part of their economy. So they’re building a world-scale pulp mill, at least one of them and probably two. And there’s one that has been announced just recently, it’s not even on this. It’s another 900,000 tons a year NBSK mill, but STA the big tissue producer.

I don’t think you’re going to see very much capacity added in Russia. Even though they have so much land, most of it is poorest land in the world. It’s really not as good as people think it is. When you look at Siberia, it’s not a very dense forest and there’s a lot of larch. Very expensive to log, no infrastructure. The infrastructure, essentially bridges, railways, doesn’t exist. And who’s going to pay for that? Again, they’re in their own recession now and there’s a huge country risk associated with Russia, obviously.

Nothing is happening in Canada. Except for Irving is spending a half a billion dollars to rebuild their facility, to get very little new capacity up, but it will be much more efficient capacity. Even though we have lots of wood, it’s in places where it’s not economically accessible or they’ve been put in parks or protected. So I don’t think you’re going to see much new capacity coming out of Canada.
The gold lines there are hardwood capacity, again mostly eucalyptus. It’s soaring way above demand. I’ll talk about my price forecast in a minute, but it’s a huge increase. Now that these mills are 2 million tons a pop, they add up pretty quickly. And even softwood now, as you can see at the end, the last four years, there’s a big increase in capacity.

Of course, what’s important is: What is it relative to demand? Is demand growing? And of course, demand is growing for pulp in the world with China and other places, but not enough to do that.
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It’s just the scale of the blue lines, which is new capacity versus the yellow, which is demand. So we are going to overwhelm demand in 2017, 2018 and 2019. I mean by a long shot. It’s not even a question.

So we’re going to have a very hard time in 2017 and 2018 and it’s the same situation for softwood. If you look at the scale, in 2017, the amount of new capacity coming on-stream just overwhelms what I think is pretty good demand and I’m probably the most positive analyst out there when it comes to demand growth. But still this is way, way too much.
Here’s where we are now with prices. I mean the business today is OK, most Canadian mills are making money at today’s prices and you can’t say that for the paper side almost anywhere. China, Europe, U.S., nobody in the paper business is making money.

The pulp business is making money. The Brazilians have about a 50 percent EBITDA margin (A measurement of a company's operating profitability. It’s equal to earnings before interest, tax, depreciation and amortization (EBITDA) divided by total revenue), which I don’t remember that number being in North America ever.

Even Canadian mills are probably breaking even; most mills are making money where we are today. 2015, I think will be a pretty good year. Again, I’m probably the most optimistic analyst on that front. I think 2016 is going to be a very good year economically. I think the U.S. is going to be very strong. I think China, with so much stimulus being put into play, will finally have some juice and will start picking up the economy.

It’s a presidential election year, an Olympics year, it’s also a leap year, so we get one extra day just to start with. Don’t waste it.

But then in 2017 and 2018, something is going to hit the fan and a lot of it. Prices are going to go down to wherever they have to go to get mills out of the business. That’s the only way this thing is going to turn around is that mills will have to close or idle temporarily for a long time. And eventually we’ll come out the other side of that, I think, a bigger sector with purer players in it.
That idea that 2017 and 2018 will be a tough period – I’m no different than any other analyst on that -- the arithmetic is just so a blunt and obvious. Unless people start pulling back from these capacities, which doesn’t seem to be the way they do things.

Looking now to the longer term, you know I mentioned how much China has driven the business. That’s going to continue to happen. This is the line – I remember when I started back in the late 1970s and people were talking about how China is going to be a 100 million ton market. People couldn’t believe it. It would look like that. That’s what’s happened.

Last year they made 114 million tons of paper and paperboard. And now with the growth rate, which is now the official growth rate, of 4.7 percent, they’re going to grow another 65 million tons over the next10 years. Huge.

Where are they going to get the fiber from? They’re almost maxed on their own recovery of recycled paper. They don’t have any wood resource to talk of. There’s not a lot of industrial plantations for pulp production.

Are they going to import recovered paper like they do now from the U.S. and Europe and Japan? Although there will be less of that around.

Are they going to import pulp? I mean they’d like to import wood chips to make pulp but Vietnam is their biggest supplier and Vietnam is saying, sorry, we’ll make the pulp. You buy the pulp. So it’s going to continue to be a very, very important buying market for pulp in China, for the foreseeable future.

And part of that is because they’re changing, too. In the past China’s growth has been obviously unbelievable – between 1978 and 2011, the average growth rate GDP wise was 10 percent. Huge.

Thirty years ago, the economy was the size of the Netherlands. Now, the next 10 years it will grow the size of two Germanys. I mean it’s massive. It’s not as big as the U.S., but it’s a 10 trillion dollar economy.

Now they’re making this very painful transition from investment to consumption. I mean the plan is to live more like us, to consume more. Forget about the exports, let’s drive domestic production up.

Let’s drive services up. Which is happening. And services and domestic consumption are much more paper centric than building things. It’s the reason why China accounts for 50 percent of aluminum and zinc and lead. It’s because they’re using that to build stuff. Now they’re going to switch to consuming stuff.
China is obviously very important, but there are a lot of other places, too. Turkey is a million ton a year pulp market. Lots of fluff pulp, about half and half 50 percent hardwood and 50 percent softwood. A big customer of the United States. It buys pulp from the U.S. and then trans ships to Iran essentially for diapers. Iran is a huge tissue market, too. Brazil itself is a consumer (and) Russia, the Middle East, Indonesia, India. Nigeria is going to add 100 million people over the next 20 years. These are all places now that are at the very low end of per capita use of paper that are going to continue to grow.

In the developed world, obviously we’re slowing down, but we’re still huge. There’s still a very, very big base. So the outlook for paper growth, I think, is positive.
The idea here is that obviously print has declined – it’s not dead. The blue line is the activity index in the United States. More than anywhere else in the world, the online media has impacted the U.S., for sure. And you can see how much that’s dropped. Every recession – the first one in 2001 when the Internet was really not of a nature to encourage more online advertising and stuff like that, it lost share.

The last recession here took a real big plunge, but it stabilized over the last six or seven years on the print sector. Print is not going to go to zero. I mean there are certain things -- I read the paper every day. I have to. I read 8 or 9 papers every day, one of them in real fashion, the other eight online. It’s not going to go to zero.
When I look at the outlook for printing and writing paper, which is still important for pulp, there are some grades that are going to continue to do well. Uncoated wood free paper – copy paper essentially – is growing probably about 1 percent on a global basis and it stills uses a lot of pulp.

Coated wood free, the stuff that SAPPI makes here, is going to do very well. You look at the fashion magazines and they’re still around. Vogue just had its biggest September issue ever this year – 688 pages of advertising, 820 pages of high-end coated paper.

Obviously newsprint has done poorly and the news magazines. These grades here -- the ones in Bucksport, Jay and Rumford – mills making these grades are struggling and will continue to struggle, just because it’s the nature of the beast. News now is more of an online phenomenon than it’s on paper.
The biggest driver and the biggest positive we have in our business has been the surge in tissue consumption around the world. Tissue paper – driven mostly by market pulp. The United States is the biggest tissue consumer in the world by far, 25 kilograms per person. But these other countries are trying to be that way.

Think about consumption in India. It’s tiny, 100,000 tons a year for such a big population. They’ve got nowhere to go but up. It’s not just about wealth, it’s about sophistication. It’s about health. It’s about hygiene, which has become more important to people. Not just tissue but all the other kinds – diapers, pads and wipes, which are all market pulp based, which are all growing rapidly.

To me, it’s not just that we’re going to have more tissue, the key for me – being Canadian and obviously we have a lot of softwood pulp – is the toweling sector. In the U.S., 37 percent of the tissue you use is kitchen towels, as they call it in Europe. We couldn’t live without it at home. We go through them like crazy.

They don’t in other places. In China, it’s less than one percent and the current generation of people my age in China won’t go to paper. They’re going to use the cloth rag and wash it and dry it. But the head of the Chinese tissue association says the next wants to be like you. They want to be sophisticated people and they’re more and more urbanizing, living in condos. They’re going to use a whole lot more toweling.

Toweling is generally speaking 50/50 hardwood/softwood. Virtually all of it market pulp. Bathroom tissue is typically 70 percent hardwood and 30 percent softwood.

So this idea is that as we go along and people get richer and more sophisticated, toweling becomes a bigger play, I think that’s something that people aren’t really considering yet in their numbers looking
The specialty papers market, Expera who bought the Old Town mill, is obviously one of the world’s leaders in specialty papers and it’s fascinating how many different kinds of grades that are in there that I’m finding out about every week. The blades for windmills are made using a special kind of paper, interlinking papers. The demand isn’t huge, but there are all kinds of things. Label papers, candy wraps, single service papers.

I was in a mill in Austria in the summer, Puls Austria, and they’d just built an 80,000 ton a year kraft paper machine that makes really nice paper to put warm bread in and sandwiches from Subway and stuff like that. It’s beautiful stuff. They’re sold out. They’re going to put another one in. They’re growing very rapidly. The idea of single service food items – I’m thinking of China and India here when they live lives more like us – is going to grow very rapidly.

Also the filtration side, the medical side. A lot of pharmaceutical packaging is this kind of thing. And what’s really important to me is the millennials, the people born from 1980 to 2000. They really believe that their packaging of a product is part of that product and needs to be sustainable and 88 percent of them think that fiber-based packaging is the best. These are now the new consumers growing up and they like our stuff, which is really, really important and I think you’re going to see these parts grow rapidly.

I visited 3M in February of this year. They’re obviously a huge company that makes a lot more than post it notes. They make all kinds of things, all based on market pulp.

These are going to grow. This is kind of a sleeper, it’s pretty small now, just 25 million tons around the world, but it’s growing about 12 percent a year and it’s virtually all purchased pulp.

So this is, to me, positive. And there’s something – I’m not sure if anybody in this state does, maybe...
This is something that I call another big driving force for the business. We are at the point now that we are getting to be like peak oil, peak cotton peak — peak recovered paper.

The idea is that you have to consume paper before you can recover it. You think about the newsprint and the graphic paper that we’re using less of. Well, that automatically means the amount that you recover is less.

So we have graphic paper use in the US, Europe and Japan is falling and they’re the biggest exporters to China and India and other places for recovered paper. We already have very high higher recovery rates in US, Europe and Japan -- 70 percent plus. We’re never going to go to other places in the world and raise the recovery rates enough to offset that loss.

And now we have more of the specialty papers that I have just mentioned. Food grades, which are contaminated, so you don’t recover them. And composites like Tetra Pak. You recover some of them but not all of them; they are not as recoverable.

The marginal cost of collection of recovered paper is rising, you have to go deeper into the waste stream now to get it and that’s more expensive and the quality of the paper is less.

In the U.S. especially and in Canada, too, we have gone single stream recycling. We used to be able to put paper here and glass there and now it’s all one thing and that results in low quality of recovered paper and obviously people want to use less of it. Also we shred a lot of office paper and that right away cuts the fiber and makes it less strong and less valuable.

Tissue demand is growing around the world 4.5 percent and you don’t recover that, so just the arithmetic says that our recovery rate is going to go down.
So we are at the peak if you look at this black line here this is the percentage of total fiber that is recovered fiber in the world, we are at about 55 percent now and to me we are peaking out at that level.

You know market pulp has basically lost share to the recovered paper since the 1960s. That’s done now and we’re going to be on equal footing. So if you look at the world still growing at 1.7 percent to 1.8 percent for paper and paperboard, where is the fiber going to come from? This is not going to increase share.

It’s going to be pulp, pulp fillers, other things, but a lot of pulp, that’s going to have to do it. To that to me is a positive, fundamental, driving factor for pulp growth in the future.
Dissolving pulp is my favorite. The clothing that folks were playing golf, if you at the labels may see Tencel or Lyocell. It’s dissolving pulp; made out of wood pulp. It’s soft, silky beautiful material, lies great, and hangs terrific. It’s great growing market.

Here you see the commodity pulp grades, hardwood and soft going into paper, fluff pulp which is going into hygiene, diapers, pads, wipes, and commodity viscose, which goes into rayon which goes into clothing and all kinds of other textiles. Then you have the top end here, which goes into you name it, ice cream, ketchup, the screens on your telephones, nitrocellulose, bombs, paints, lacquers. I mean it’s endless it goes into so many things.

That is growing pretty well, but it’s this part here, commodity Viscose that goes into textiles, where I think we have huge opportunity
You can see it was very big in the 1970s. That’s when we had the Hawaiian shirts, those wild shirts were all Viscose. Then it went away, it slowed down and cotton and polyester took over. Polyester the great Satan for the textile business.

The viscose side is growing very rapidly. Back in 2010, there was a cotton shortage in the world for a variety of reasons. Cotton in the U.S. had the highest price since the Civil War and it drove the price of dissolving pulp up. Today it’s $900 and then it was $2,700 per ton and everybody said, ‘Hey we can make a lot of money at this.’ And, of course, they all said it at the same time and so they didn’t make a lot of money at that
I look at the longer-term future and it has huge potential for the pulp business, especially for the existing mills in the pulp business. We talk about the surging consumer classes in China in India using more clothing and in hot temperatures lightweight clothing, which is perfect for rayon.

The idea of peak cotton -- I read the other day that China is a big producer and it uses so much water. China is very water poor, so they were saying they should stop making cotton and grow food. But it’s not just in China, it’s everywhere.

The world is going to be 9 billion people in 2050. How are we going to feed them? Are people going to use the arable land in the world to grow cotton or grow food? I would say they will grow food and less cotton. So cotton I think has peaked.

We look at the sustainability issue, which is think is critical for the paper business, we have more potential to be sustainable in any other material. I wouldn’t say we are today but we have the potential to do that.

It’s certainly important to millennials, the big shopping cohort in the world. When it comes to land and water use, we have the virtuous forest products loop that no other material can boast.

World demand for textile fibers is growing about 3 percent a year and dissolving pulp is only 4 percent of that, so we have huge leverage to market share gains. If dissolving pulp got all the textile growth today, we’d need 2.7 million tons a year, which means we have to convert 10 existing small mills to make dissolving pulp. Which has been done for sure and will be done again.
Already between 2011 and 2015, there have been more than 20 mills converted from paper-grade pulp (hardwood/softwood) to making dissolving pulp. SAPPI’s Cloquet, Minnesota has done it. Two mills in New Brunswick, owned by a India viscose company, Aditya Birla, that used to make market pulp, but now is making dissolving pulp. The Fortress Mill in Thurso, Quebec, makes dissolving pulp. Places in Europe have converted. There will be more, South America soon.

Unfortunately it’s been a good and bad thing. It’s good for the paper pulp business because we have less capacity but it has killed the dissolving pulp business, because it was just too much too soon. The prices went down to the bottom, although now they are peaking back up again in China. We are going to see more of this, this is the first round of conversions to dissolving pulp. There will be more for sure.
There’s a lot of plastic pollution in the world – you know plastic is a gift that lasts forever. It takes 12,000 years for this stuff to degrade. There’s a lot of research now in the world; there’s a professor at Stanford, Dr. Brown, who’s leading the pack, but it’s increasing for sure in Europe, Germany. The Germans are very interested in this. It’s about micro plastic pollution of the oceans and the waterways.

There’s 9 million tons of plastic that goes into the ocean every year. Most people just think about the water bottles and coke bottles and all that stuff, which is true. I mean there are places in the ocean that you can walk across, that are five miles wide and just thick with plastic. But Dr. Mark Anthony Brown started researching a while back and he was finding that the biggest problem was that 85 percent of ocean solid waste pollution is micro-plastics, tiny, tiny little pieces. He called it ocean smog. You can’t screen it out, it’s too small.

And what they found – and there’s been a lot of research and a lot of interest since that time – is that a lot of these are polyester fibers from clothes. Every time you wash a garment, 1900 micro fibrils are released through your washing machine, down the sewer and into the water stream. They’re not biodegradable. The latest research is finding that it’s piling up in the fish organs. And of course we eat fish. It’s also killing the coral reefs in Australia. So this is a growing problem. Probably not at top of minds here, although micro beads are becoming more of a topic here. You know, the stuff they use in soaps and stuff. We’re going to ban it in Canada. I think New Jersey and Illinois have already banned it. It’s the same kind of idea. It’s plastics that are getting into the system.
Here’s the potential, this orange is basically cotton. Other things like wool are in there too. The blue line is polyester. This little green rectangle here is dissolving pulp, 4 percent of the total is dissolving pulp.

My idea – and it’s not just my idea – is that we should start gaining share of the polyester side of thing

For us, the first thing that would happen is that it would raise the asset value of most existing pulp mills, because the first thing that’s going to happen – like it’s already happened before – is producers will convert existing mills to making dissolving pulp. There are already a few around the area that would be prime candidates for that.
Question: Are 2-3 years enough to convert mills for other products with better markets?

Yes, two to three years is enough, but really that’s too short a time scale for those markets to be there. One of the big problems today is that China has duties on dissolving pulp from mills in the U.S., Canada and Brazil. I think the U.S. is probably 23 percent, so you’re not going to jump over that very easily. That will last for another four years. You could go elsewhere, but the dissolving pulp business – the viscose business -- is growing in China.

I would like to see Mexico develop a viscose business and then we’d have a market in North America as a hedge against China. That would be really good.

But no, we don’t have two or three years. It’s one year. We’re in the third quarter of 2015 and by this time next year, the market is going to get pretty rocky already for softwood and hardwood. And then we’ll be two years in the hinterland. So it’s going to be very difficult to do (convert mills).

I can foresee some mills closing in Canada, on the west coast where the pine beetle has decimated forests in B.C. and parts of Alberta. We’re probably going to lose two NSBK mills over the next five years to that.

I don’t see any new抄mills built in North America, not ours. Japan, Europe, may bear more of the brunt of closures that we will.

But to convert a paper pulp mill to a dissolving pulp mill – especially if you have a sulfite mill – would be a quick shift and not expensive. Again, it depends on what kind of asset you have right now. The time it would take is probably a year to actually convert something and less if it were a sulfite mill.
Question: You mentioned mills closing in China – at what point will growth plateau?

Between 2010 and now, they’ve closed 31 million tons of obsolete paper capacity. I mean tiny mills that would be hand fed. Bigger mills, too, which has led to some of the growth in demand for pulp because now some of these mills can run faster. They’re taking the share from these old mills. They’ve closed mills and they’re coming out with a new environmental policy right now that I think will restrict pulp production investment. But I don’t think paper is as damaging (environmentally) as pulp production.