

## BUSINESSBC

MONDAY, JANUARY 10 | 2011 | EDITOR FIONA ANDERSON 604.605.2520 | SUNBUSINESS@VANCOUVERSUN.COM

## BRIEFINGS

## Analysts expect recovery to slow

OTTAWA — Analysts are expecting the week ahead to deliver a picture of tepid growth as housing starts soften, the trade deficit rises and the Bank of Canada's closely watched quarterly outlook shows a tempering in business expectations. "We're coming more in line with the true nature of the recovery, which will be slow and grinding," said David Tulk, senior macro strategist at TD Securities. The labour market, which added 22,000 jobs in December, is a perfect example of that, he said, in that much of the gains were front-loaded into the first half of 2010, as was the case in other key sectors, such as the housing market.

## NUMBERS

37.1 %

Car registrations in recession-hit Greece dropped 37.1 per cent in 2010, state statistics showed, as millions of motorists faced rising fuel prices and taxes.

## BLOG WATCH

## Check out that job before you switch

Job seekers out there considering a new career might want to check out [www.careercast.com](http://www.careercast.com) before mailing out any resumé. CareerCast has published its 'Jobs Rated' list of the best and worst jobs of 2011, based on a survey of 200 occupations across a wide variety of industries. According to the website, researchers use five criteria to determine their rankings: work environment, physical demands of the job, employment outlook, income and stress levels.

From Darah Hansen's Workplace blog. Read more at [vancouver.sun.com/workplace](http://vancouver.sun.com/workplace)

## MINING | China warns of further cuts in rare earth exports

Potential shortfall of vital manufacturing elements triggers global anxiety

BY SCOTT SIMPSON  
VANCOUVER SUN

They bear unfamiliar names with interesting genealogies and important practical applications, and for decades they quietly and efficiently filled a vital array of manufacturing niches.

Now, rare earth elements are political footballs too.

Last Friday, *China Daily* reported on its website that the Chinese government will crack down on pollution at mines that produce rare earth elements — with officials suggesting the move will affect production costs and that some mines could be forced to close.

That's potentially bad news for North America, Europe, Japan, the rest of Asia and anywhere else outside of China. That nation holds 30 per cent of the world's estimated rare earth element resource — and is responsible at present for 97 per cent of global production.

The United States had a major domestic rare earth mine operating for decades but it was closed in the early part of the last decade due to pollution concerns — as well as an inability to compete with low-priced production from China.

China's output of elements such as promethium, holmium and ytterbium pretty much extinguished the appetite of both miners and investors to develop new resources. In many cases, Chinese production involves nothing more sophisticated than recovering the elements from the tailings of more commonplace mining operations. But as China begins to absorb more of its own production — allegedly in defiance of global trade agreements, according to Europe and the United States — other nations are recognizing that they need to cover the shortfall.

"Strategic, environmental and economic considerations mean that the country can't afford to continue shouldering the burden of supplying the world," *China Daily* quoted a Ministry of Commerce official as saying on Friday, with the *Daily* stating that "over-exploitation" has damaged the environment.

Molycorp Minerals, based in Colorado, recently restarted a 59-year-old rare earths mine in Mountain Pass, Calif., and has seen its share price quadruple since an initial public offering last July.

The elements are tied to important applications.



Jim Cambon and Rune Keiler of Hudson Resources discuss the core samples obtained from drilling the Vancouver-based company's exploration property in Greenland.

Scandium, for example, is named for Scandinavia where it was first discovered. It is used in mercury-vapour lights and in aerospace components, according to Wikipedia.

Promethium, used in nuclear batteries, is named for Prometheus, a Titan of Greek myth who gave fire to mortals.

Neodymium, meaning new twin, is considered vital to advances in wind turbine development.

"Neodymium oxide we think is the key barometer for all the rare earth space," said Jamie Tuer of Hudson Resources, a Vancouver-based junior mineral exploration company that last week released a National Instrument 43-101-compliant estimate of rare earth concentrations at its Sarfartoq project in Greenland.

The company expects to release by mid-2011 the results of metallurgical test work to complement 18 months' worth

of drilling results at Sarfartoq. Permanent magnets, he said, have "taken off" since they were first invented for automotive applications in the early 1980s.

"It has miniaturized all of our electronics," Tuer said in an interview. "You can't have a cellphone with a vibrate function on it without having a permanent magnet in it. The amount per cellphone is measured in grams, but they are critical."

"Permanent magnets go into things like wind turbines. So if all the countries of the world want to see their wind power ambitions come to fruition they will probably invest in a permanent magnet wind turbine. It's gearless. You can put it offshore. You don't have to perform as much maintenance. And yet, you can drive the same amount of megawatts."

"China will use all of the

neodymium they produce in their country if they go through with the wind farms they are talking about."

Nearly as critical to industry are so-called platinum group metals including platinum, palladium and rhodium.

One in four manufactured goods — including catalytic converters in vehicle exhaust systems — use metals from this group, which is also considered by the EU to be in a state of high supply risk because global production is essentially the responsibility of South Africa and Russia.

Vancouver-based Platinum Group Metals is taking a position in that market — it recently announced a \$100 million outlay to commence construction of a \$443 million platinum group mine in the Bushveld region of South Africa.

"The reason I got into this space, and the reason my partner Frank Hallam and

## Rare earth examined

There are 17 rare earths metals. Here are their names and some of their applications.

**Scandium** — aerospace components, mercury-vapour lamps

**Yttrium** — laser, superconductors, microwave filters

**Lanthanum** — glass, flint, hydrogen storage, battery-electrodes, camera lenses, cracking catalyst for oil refineries

**Cerium** — oxidizing agent, polishing powder, yellow colours in glass and ceramics, self-cleaning ovens, cracking catalyst for oil refineries

**Praseodymium** — rare-earth magnets, lasers, carbon arc lighting, colourant in glasses and enamels, welding goggles, flint

**Neodymium** — rare-earth magnets, lasers, violet colours in glass and ceramics, ceramic capacitors

**Promethium** — nuclear batteries

**Samarium** — rare-earth magnets, lasers, neutron capture

**Europium** — red and blue phosphors, lasers, mercury-vapour lamps

**Gadolinium** — rare-earth magnets, high refractive index glass or garnets, lasers, X-ray tubes, computer memories, neutron capture

**Terbium** — green phosphors, lasers, fluorescent lamps

**Dysprosium** — rare-earth magnets, lasers

**Holmium** — lasers

**Erbium** — vanadium steel

**Thulium** — portable X-ray machines

**Ytterbium** — infrared lasers, chemical reducing agent

**Lutetium** — PET scan detectors, high refractive index glass

Scott Simpson, Vancouver Sun  
Source: Wikipedia

I founded this company in 2000, is that we both identified the essential nature of the element and its restricted supply," PGM president and CEO Mike Jones said in a phone interview.

One of the company's primary investors, with a 9.78 per cent share of PGM, is billionaire investor George Soros.

[ssimpson@vancouver.sun.com](mailto:ssimpson@vancouver.sun.com)

## ONLINE

## Top business news

Read business editor Fiona Anderson's take on what's new and noteworthy in From the Desk of the Editor at [vancouver.sun.com/business](http://vancouver.sun.com/business).

## INSIDE | C3

## Jonathan Manthorpe's Asia Pacific Report

The next generation of China's leaders is looking to the teachings of Mao Zedong to combat the country's corruption.



## TUESDAY

## Tragedy remembered

Friday marked the 30th anniversary of the Bentall Four accident that took the lives of four workers in 1981. The construction industry is safer, but still has high injury and fatality rates.



## INVESTMENT LOSSES

Have all your savings disappeared or plummeted because your funds were placed in high-risk investments that were unsuitable given your *investment objectives and risk tolerance*?

Visit our Website at [www.investorlossrecovery.com](http://www.investorlossrecovery.com) to find out how we can assist you in recovering your lost savings. For a free consultation and initial assessment by our Group call Robert Breivik at 604. 633. 3804



INVESTOR LOSS RECOVERY GROUP