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On Tuesday, President Obama laid out his plan for America: one million electric cars by 2015 and 80% of energy from renewable sources by 2035. "At stake is whether new jobs and industries take root in this country, or somewhere else," he said. Clearly, these industries must be based in America.

Yet there is a problem. We are dependent on China for many of the raw materials that allow us to build electric car motors, low-energy light bulbs, solar photovoltaics, and wind turbines – like rare earth metals.

China needs those resources for itself. President Obama told us that "Just recently, China became the home to the world's largest private solar research facility, and the world's fastest computer." China has also surpassed us in terms of wind-generated electricity with 41.8 GW installed, compared with 40.2 GW in the US.

China's control of rare earth metals is so important that it is taking steps to protect it. Over the past few months, news has broken that the Chinese government is reducing production, shutting down companies, raising export tariffs, lowering export quotas, de facto export bans, and, as leaked on Tuesday, starting a rare earth stockpile.

For good reason, nearly every report on rare earths and China contains Deng XiaoPing's visionary quote, "The middle east has oil, China has rare earths." He went on to say, "it is of extremely important strategic significance; we must be sure to handle the rare earth issue properly and make the fullest use of our country's advantage in rare earth resources."

The world is reacting. According to a new draft paper, the European Union "will continue to pursue barriers hampering the sustainable supply of raw materials to the EU economy." Their strategy proposals include stockpiling as well.

The UK House of Commons Science & Technology Committee is also starting to investigate. "This inquiry has the potential to be wide-ranging, from concerns about the availability of rare earth elements to how metals are recycled from discarded technological devices," commented Andrew Miller MP, who chairs the committee. Japan is developing relationships with potential alternate suppliers in Australia, Vietnam and Mongolia, and has been providing loan guarantees to acquire foreign resources.

Here in the US, our government agencies have been meeting and writing reports at a furious pace. Over the past few months, reports have been circulated by the Department of Energy, Department of Defense, Government Accountability Office, Congressional Research Service, and the USGS. Meetings and international discussions have involved the White House Office of Science & Technology Policy and the International Trade Representative.

Reports are just paper, not metals. Words are not enough. The fact remains that renewable energy begins with resources at the mine, and continues on through chemical industries and manufacturing.

Congress must act decisively, not divisively, to support a diverse supply chain for technology metals. This means improving the regulatory environment for domestic mining, refining and manufacturing initiatives. It also means fostering relationships with our international partners to facilitate trade, and eliminating import tariffs for scarce resources. It may even mean providing financial guarantees to important defense and energy companies to acquire resources abroad. Finally, it demands a sustained and concerted investment into research and development to increase efficiency, reduce waste, improve technology, and create a vibrant job market.

President Obama is right when he says, "None of this will be easy. All of it will take time. And it will be harder because we will argue about everything. The costs. The details. The letter of every law."

In order to avert a full-fledged resource crisis, it is essential for various branches of the US Administration and Congress to work together with industry and international governments, including China, to formulate rational, intelligent policies and share important information.

Yaron Vorona heads the Technology & Rare Earth Metals (TREM) Center at the Institute for the Analysis of Global Security.

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