



## WORLD MATERIALS FORUM BY JOHN MILLER, US WRITER AND COLUMNIST.



### How to mine, manage and recycle resources and waste in a world that makes 80 million cars, a billion cell phones and 500 billion plastic bottles a year?

Figuring out practical solutions to those questions, and coming up with recommendations for materials companies are the challenges set by the World Materials Forum, an annual summer gathering of business leaders in the northeastern French city of Nancy.

The WMF is the brainchild of Victoire de Margerie, a prominent French businesswoman, and André Rossinot, former mayor of the host city and the current president of the administrative region that includes Nancy and surrounding villages. It's chaired by Philippe Varin, former CEO of Peugeot, current chair of Orano and vice-chair of the French Industry Council.

The three-day conference in an ornate 18th century town hall is built around panel discussions featuring a few hundred players from up and down the supply chain, and the people who watch, study and regulate them.

The guest list this year included the CEO of Solvay, the chief procurement officer for Airbus, French secretary of state for the environment Brune Poirson, and the prominent French philosopher Jacques Attali. Even copper tycoon Robert Friedland showed up. There are steelmakers and scientists, cabinet-level politicians, tycoons and NGO types bent on saving the planet.

The conference creed is doing good, but it's also about doing well: Goldman Sachs sent a scout to prowl for investments.

The meeting, which heading into fourth edition, grew out of a conversation de Margerie and Rossinot had about the future of industry. Like other French leaders, they were concerned about the future of formerly industrialized regions.

"We realized we needed to help figure out smarter ways of using existing resources," says de Margerie.

Nancy, in the heart of the French rust belt, offered an illustrative example. After steel and mining crumbled in the 1980s, the city of 100,000 and the region around it retooled on high-tech research and training engineers. The Jean Lamour institute became one of the world's top material research universities, specializing in so-called nanomaterials,

named after their spectacularly small size. Composite maker Safran and chemicals giant Solvay invested in the region.

De Margerie's idea was to use Nancy as a model and bring together the people who manage the world's top mining and materials companies, and get them to think about being more sustainable.

"We decided we'd go after the best researchers, and the best and most qualified experts."

They'd recruit a third of French, a third of European and a third of non-Europeans, get them talking about how to "use less, use longer and use smarter", and come up with lists of specific recommendations for companies.

That would help respond to what de Margerie called the three trends shaping materials consumption: "Urbanization, electrification of vehicles and the middle class boom." Materials consumption has doubled in the past ten years," she says. "It's a problem, and the advantage of the forum is that for three days we sit around a table and think about it."

The goal is to carve out a firm, reasonable, middle ground.

"You have some industrial bosses who exhaust the earth's resources with child labor, and at the other extreme, you have neo-Stalinist environmentalists trying to bring us back to the stone age," says de Margerie. "We'd like to reject both those extremes and figure out a middle ground and some pragmatic solutions."

The topic list of this year's edition spanned wide, from 3D printing, big data and electric cars, to using steel, copper and other essential materials more efficiently, managing e-waste in Africa (a problem because the continent imports so much technology but doesn't have the manufacturing capacity to make anything out of the waste) to conquering the world's addiction to plastic bottles.

There were conversations about better ways of recycling cell phones, and prolonging the life of refrigerators. The WMF, says de Margerie, "is a place where CEOs, political leaders, entrepreneurs and NGOs know they can go once a year to think about the problems faced by producers and recyclers of materials."