

## Preface

When Elizabeth Kolbert was interviewing energy analyst Amory Lovins for a profile piece in the *New Yorker*, she asked him about thinking outside the box. Lovins responded, "There is no box." There is no box. That is the spirit embodied in Plan B.

Perhaps the most revealing difference between *Plan B 2.0* and *Plan B 3.0* is the change of the subtitle from "Rescuing a Planet Under Stress and a Civilization in Trouble" to simply "Mobilizing to Save Civilization." The new subtitle better reflects both the scale of the challenge we face and the wartime speed of the response it calls for.

Our world is changing fast. When *Plan B 2.0* went to press two years ago, the data on ice melting were worrying. Now they are scary.

Two years ago, we knew there were a number of failing states. Now we know that number is increasing each year. Failing states are an early sign of a failing civilization.

Two years ago there was early evidence that the potential for expanding oil production was much less than officially projected. Now, we know that peak oil could be on our doorstep. Two years ago oil was \$50 a barrel. As of this writing in late 2007, it is over \$90 a barrel.

In Plan B 2.0, we speculated that if we continued to build ethanol distilleries to convert grain into fuel for cars, the price of grain would move up toward its oil-equivalent value. Now that the United States has enough distilleries to convert one fifth grain crop into fuel for cars, this is exactly what is hap-

pening. Corn prices have nearly doubled. Wheat prices have more than doubled.

Two years ago, we reported that in five of the last six years world grain production had fallen short of consumption. Now, it has done so in seven of the past eight years, and world grain stocks are dropping toward all-time lows.

As the backlog of unresolved problems grows, including continuing rapid population growth, spreading water shortages, shrinking forests, eroding soils, and grasslands turning to desert, weaker governments are breaking down under the mounting stress. If we cannot reverse the trends that are driving states to failure, we will not be able to stop the growth in their numbers.

Some of the newly emerging trends—such as the coming decline in world oil production, the new stresses from global warming, and rising food prices—could push even some of the stronger states to the breaking point.

On the economic front, China has now overtaken the United States in consumption of most basic resources. By 2030, when its income per person is projected to match that in the United States today, China will be consuming twice as much paper as the world currently produces. If in 2030 the country's 1.46 billion people have three cars for every four people, U.S. style, China will have 1.1 billion cars. And it will be consuming 98 million barrels of oil per day, well above current world production.

The western economic model—the fossil-fuel-based, automobile-centered, throwaway economy—is not going to work for China. If it doesn't work for China, it won't work for India or the other 3 billion people in developing countries who are also dreaming the American dream. And in an increasingly integrated world economy, where we all depend on the same grain, oil, and steel, it will not work for industrial countries either.

The challenge for our generation is to build a new economy, one that is powered largely by renewable sources of energy, that has a highly diversified transport system, and that reuses and recycles everything. And to do it with unprecedented speed.

Continuing with business as usual (Plan A), which is destroying the economy's eco-supports and setting the stage for dangerous climate change, is no longer a viable option. It is time for Plan B.

the earth's ecosystems. At the heart of the climate-stabilizing initiative is a detailed plan to cut carbon dioxide emissions 80 percent by 2020 in order to hold the global temperature rise to a minimum. The climate initiative has three components: raising energy efficiency, developing renewable sources of energy, and expanding the earth's forest cover both by banning deforestation and by planting billions of trees to sequester carbon.

We are in a race between tipping points in nature and our political systems. Can we phase out coal-fired power plants before the melting of the Greenland ice sheet becomes irreversible? Can we gather the political will to halt deforestation in the Amazon before its growing vulnerability to fire takes it to the point of no return? Can we help countries stabilize population before they become failing states?

The United States appears to be approaching a political tipping point as opposition builds to the construction of new coalfired power plants. A fast-spreading nationwide campaign has led several states, including California, Texas, Florida, Kansas, and Minnesota, to refuse construction permits or otherwise restrict construction.

With this movement gaining momentum, it may be only a matter of time before it expands to embrace the phasing out of existing coal-fired power plants. The question is, Will this happen soon enough to avoid dangerous climate change?

In Plan B 2.0, we talked about the enormous potential of renewable sources of energy, especially wind power. Since then we've seen proposed projects to generate electricity from such resources on a scale never seen with fossil fuel power plants. For example, the state of Texas is coordinating a vast expansion of wind farms that will yield up to 23,000 megawatts of new electrical generating capacity, an amount equal to 23 coal-fired power plants.

Two years ago, the notion of plug-in gas-electric hybrid cars was little more than a concept. Today five leading automobile manufacturers are moving to market with plug-in hybrids, with the first ones expected in 2010.

We have the technologies to restructure the world energy conomy and stabilize climate. The challenge now is to build the political will to do so. Saving civilization is not a spectator play.

When we published the original *Plan B* four years ago, we noticed that some 600 individuals ordered a copy of the book and then came back and ordered 5, 10, 20 or 50 copies for distribution to friends, colleagues, and political and opinion leaders. With *Plan B 2.0*, this number jumped to more than 1,500 individuals and organizations that were bulk buying and distributing the book.

We call these distributors our Plan B Team. Ted Turner, who distributed some 3,600 copies to heads of state, cabinet members, Fortune 500 CEOs, the U.S. Congress, and the world's 672 other billionaires, was designated Plan B team captain.

This book can be downloaded without charge from our Website. Permission for reprinting or excerpting portions of the manuscript can be obtained from Reah Janise Kauffman at Earth Policy Institute.

And finally, there is not anything sacred about Plan B. It is our best effort to lay out an alternative to business as usual, one that we hope will help save our civilization. If anyone can come up with a better plan, we will welcome it. The world needs the best plan possible.

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For additional information on the topics discussed in this book, see www.earthpolicy.org.

## PLAN B 3.0