

By Patrick Wood, Editor
March 2, 2010

Introduction

According to the [United Nations Governing Council of the UN Environmental Programme](#) (UNEP),

"our dominant economic model may thus be termed a 'brown economy."

UNEP's clearly stated goal

is to overturn the "brown economy" and replace it with a "green economy":

"A green economy implies the decoupling of resource use and environmental impacts from economic growth... These investments, both public and private, provide the mechanism for the reconfiguration of businesses, infrastructure and institutions, and for the adoption of sustainable consumption and production processes." [p. 2]

Sustainable consumption? Reconfiguring businesses, infrastructure and institutions? What do these words mean? They do not mean merely reshuffling the existing order, but rather replacing it with a completely new economic system, one that has never before been seen or used in the history of the world.

This paper will demonstrate that the current crisis of capitalism is being used to implement a radical new economic system that will completely supplant it. This is not some new idea created in the bowels of the United Nations: It is a revitalized implementation of Technocracy that was thoroughly repudiated by the American public in 1933, in the middle of the Great Depression.

The Technocrats have resurfaced, and they do not intend to fail a second time. Whether they succeed this time will depend upon the intended servants of Technocracy, the citizens of the world.

Indeed, the dark horse of the New World Order is not Communism, Socialism or Fascism. It is Technocracy.

Background

Founded by Howard Scott and M. King Hubbert in 1932 during the Great Depression, Technocracy proposed a radical new solution for the world's economic ills. In 1932, Harry A. Porter wrote in *Roosevelt and Technocracy*,

"Just as the Reformation established Religious Freedom, just as the Declaration of Independence brought about our Political Freedom, Technocracy promises Economic Freedom." [Foreward, iii]

Porter's plan included abandoning the gold standard, suspending the stock exchanges and nationalizing railroads and public utilities. Freedom notwithstanding, Porter then called for President-elect Franklin D. Roosevelt to be sworn in as Dictator rather than President so that he could overturn the existing economic system in favor of Technocracy:

"Drastic as these changes from the present order of things may be, they will serve their purpose if only to pave the way for the Economic Revolution - and Technocracy." (p. 63)

If Technocracy had truly been extinguished before the onset of WWII, we would not be concerned about it today. However, when Zbigniew Brzezinski wrote *Between Two Ages: America's Role in the Technetronic Era* in 1968, it was essentially a Neo-Technocratic treatise calling for a fourth and final stage of world history, or the Technetronic Era.

When David Rockefeller picked Brzezinski to co-found the Trilateral Commission in 1973, it was with the specific goal to create a "New International Economic Order." Without some knowledge of historic Technocracy, exactly what the Trilateral Commission ultimately had in mind with such a goal could not possibly have been understood.

Today, it is necessary to rethink these issues in order to determine a) if this radical movement is still operating, b) what are their goals and c) how do they plan to achieve their goals.

In [Carbon Currency: A New Beginning for Technocracy?](#), the subject of historic

Technocracy was introduced in the context of creating a new economic system based on energy accounting rather than price accounting. An energy-based accounting system uses "energy certificates," or Carbon Currency, instead of dollars or other fiat currencies. Periodic and equal allocations of available energy are made to citizens, but they must be used within the defined time period before they reach an expiration date. Furthermore, the ability to own private property and accumulate wealth would be deemed unnecessary.

The pressing and unanswered question is how would such a Technocratic system actually be implemented?

This paper will now address the strategy, tactical requirements and progress of establishing an energy-based Technate in North America. ["Technate" is the term used to describe the geographic region operated according to Technocracy. Thus, a North American Technate would include Canada, Mexico and the U.S. and they would all be under common control.]

Requirements

The [Technocracy Study Course](#), written by Howard Scott and M. King Hubbert in 1932, established a detailed framework for Technocracy in terms of energy production, distribution and usage.

According to Scott and Hubbert, the distribution of energy resources must be monitored and measured in order for the system to work -- and this is the key: *monitoring* and *measuring*.

They wrote that the system must do the following things:

1. "Register on a continuous 24 hour-per-day basis the total net conversion of energy.
 2. "By means of the registration of energy converted and consumed, make possible a balanced load.
 3. "Provide a continuous inventory of all production and consumption
 4. "Provide a specific registration of the type, kind, etc., of all goods and services, where produced and where used
 5. "Provide specific registration of the consumption of each individual, plus a record and description of the individual."
- [Scott, Howard et al, *Technocracy Study Source*,

p. 232]

In 1932, such technology did not exist. Time was on the Technocrat's side, however, because this technology *does* exist today, and it is being rapidly implemented to do exactly what Scott and Hubbert specified: Namely, to exhaustively monitor, measure and control every ampere of energy delivered to consumers and businesses on a system-wide basis.

It's called: *Smart Grid*.

What is Smart Grid?

Smart Grid is a broad technical term that encompasses the generation, distribution and consumption of electrical power, with an inclusion for gas and water as well. America's aging power grid is increasingly fragile and inefficient. Smart Grid is an initiative that seeks to completely redesign the power grid using advanced digital technology, including the installation of new, digital meters on every home and business in the U.S.

These digital meters provide around-the-clock monitoring of a consumer's energy consumption using continuous 2-way communication between the utility and the consumer's property. Furthermore, meters will be able to communicate with electrical devices *within* the residence to gather consumption data and to control certain devices directly without consumer intervention.

According to a U.S. Department of Energy publication,

"The Department of Energy has been charged with orchestrating the wholesale modernization of our nation's electrical grid... Heading this effort is the Office of Electricity Delivery and Energy Reliability. In concert with its cutting edge research and energy policy programs, the office's newly formed, multi-agency Smart Grid Task Force is responsible for coordinating standards development, guiding research and development projects, and reconciling the agendas of a wide range of stakeholders." (See [The Smart Grid: An Introduction](#))

This is a relatively new initiative, but it is racing forward at breakneck speed. The Office of

Electricity Delivery was created in 2003 under President George W. Bush, and elevated in stature in 2007 by creating the position of Assistant Secretary of Electricity Delivery and Energy Reliability to head it.

It is not clearly stated who "charged" the Department of Energy to this task, but since the Secretary of Energy answers directly to the President, it is assumed that it was a directive from the President. There certainly was no Congressional directive or mandate.

Implementation

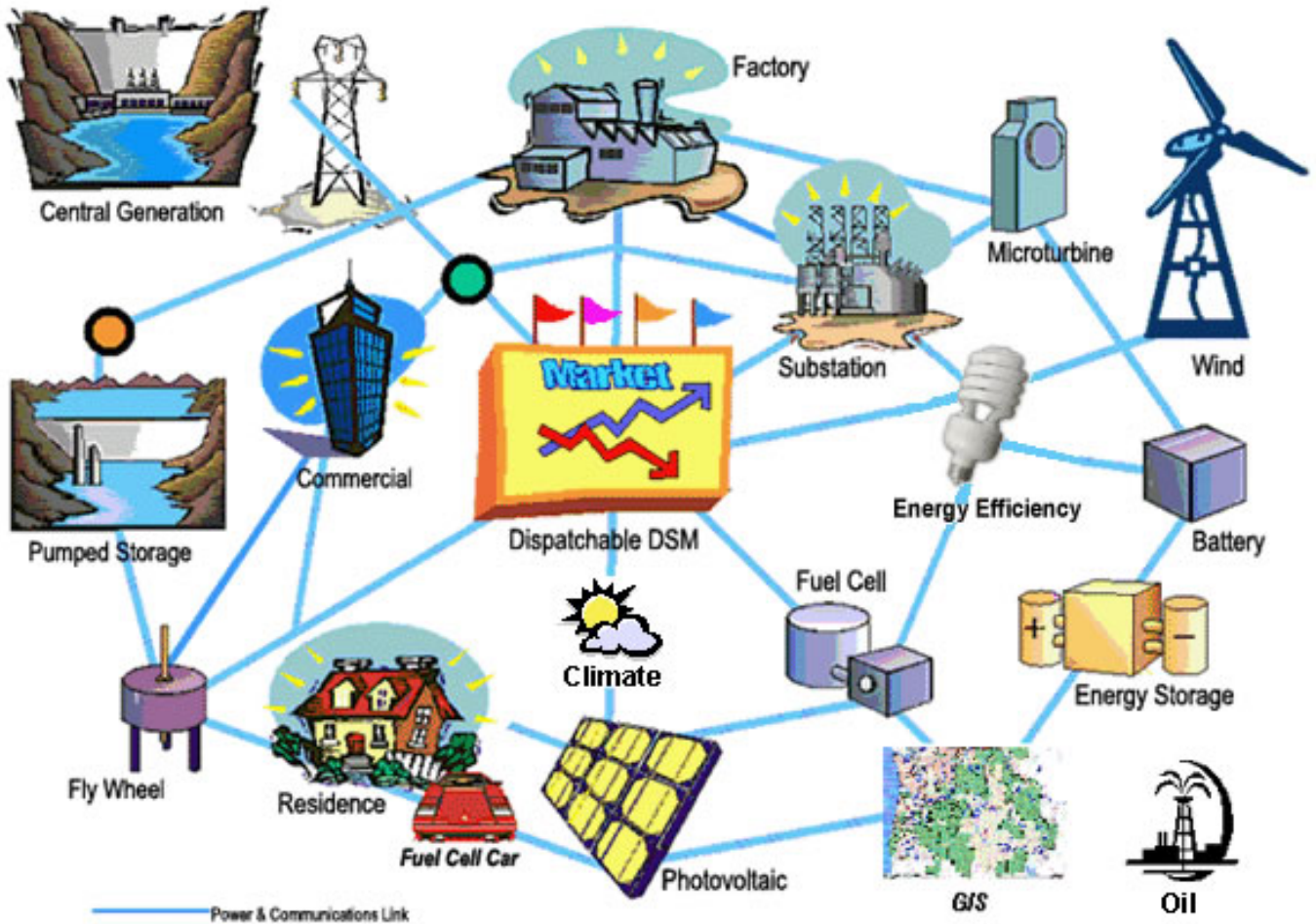
On October 27, 2009, the Obama administration unveiled its Smart Grid plan by awarding \$3.4 billion awarded to [100 Smart Grid projects](#) . According to the [Department of Energy's press release](#) , these awards will result in the installation of:

- more than 850 sensors called 'Phasor Measurement Units' to monitor the overall power grid nationwide
- 200,000 smart transformers
- 700 automated substations (about 5 percent of the nation's total)
- 1,000,000 in-home displays
- 345,000 load control devices in homes

This is the "kick-start" of Smart Grid in the U.S. On January 8, 2010, President Obama unveiled an additional \$2.3 billion Federal funding program for the "energy manufacturing sector" as part of the \$787 billion American Reinvestment and Recovery Act. Funding had already been awarded to 183 projects in 43 states, pending Obama's announcement.

One such project in the northwest is headed by Battelle Memorial Institute, covering five states and targeting 60,000 customers. The project was actually developed by the Bonneville Power Administration (BPA), a federal agency underneath the Department of Energy. Since it is pointedly illegal for a federal agency to apply for federal funds, BPA passed the project off to Battelle, a non-profit and non-governmental organization (NGO), which was promptly awarded \$178 million.

It is interesting to note that BPA takes credit for originating the Smart Grid concept in the early 1990's, which it termed "Energy Web." You can see from BPA's graphic depiction that it is comprehensive in scope from production to consumption.



A Network of Things

As the World Wide Web (WWW) is to people, the Network of Things (NOT) is to appliances. This brand new technology creates a wireless network between a broad range of inanimate objects from shoes to refrigerators. This concept is "shovel ready" for Smart Grid implementation because appliances, meters and substations are all inanimate items that technocrats would have communicating with each other.



For instance, In 2008 the Pacific Northwest National Laboratory (PNNL) developed this small

circuit board called a "Grid Friendly Appliance Controller." According to a Department of Energy brochure,

"The GFA Controller developed by Pacific Northwest National Laboratory is a small circuit board built into household appliances that reduces stress on the power grid by continually monitoring fluctuations in available power. During times of high demand, appliances equipped with the controller automatically shut down for a short period of time, resulting in a cumulative reduction that can maintain stability on the grid."

According to PNNL's website,

"The controller is essentially a simple computer chip that can be installed in regular household appliances like dishwashers, clothes washers, dryers, refrigerators, air conditioners, and water heaters. The chip senses when there is a disruption in the grid and turns the appliances off for a few seconds or minutes to allow the grid to stabilize. The controllers also can be programmed to delay the restart of the appliances. The delay allows the appliances to be turned on one at a time rather than all at once to ease power restoration following an outage."

You can see how automatic actions are intended to be triggered by direct interaction between objects, without human intervention. The rules will be written by programmers under the direction of technocrats who understand the system, and then downloaded to the controllers as necessary. Thus, changes to the rules can be made on the fly, at any time and without the homeowner's knowledge.

PNNL is not a private enterprise, however. It is "owned" by the U.S. Department of Energy and operated by Battelle Memorial Institute!

All of this technology will be enabled with Wi-Fi circuitry that is identical to the Wi-Fi-enabled network modems and routers commonly used in homes and businesses throughout the world. Wi-Fi is a trademark of the Wi-Fi Alliance that refers to wireless network systems used in devices from personal computers to mobile phones, connecting them together and/or to the Internet.

According to the Wi-Fi Alliance, "the need for Smart Grid solutions is being driven by the emergence of distributed power generation and management/monitoring of consumption ." In their white paper,

[Wi-Fi for the Smart Grid](#)

, they list the specific requirements for interoperability posted by the Department of Energy:

1. Provide two-way communication among grid users, e.g. regional market operators, utilities, service providers and consumers
2. Allow power system operators to monitor their own systems as well as neighboring systems that affect them so as to facilitate more reliable energy distribution and delivery
3. Coordinate the integration into the power system of emerging technologies such as renewable resources, demand response resources, electricity storage facilities and electric transportation systems
4. Ensure the cyber security of the grid.

Thus, the bi-directional and real time Smart Grid communications network will depend on Wi-Fi from end to end. This is easily understood from the two figures included in the Wi-Fi Alliance white paper:

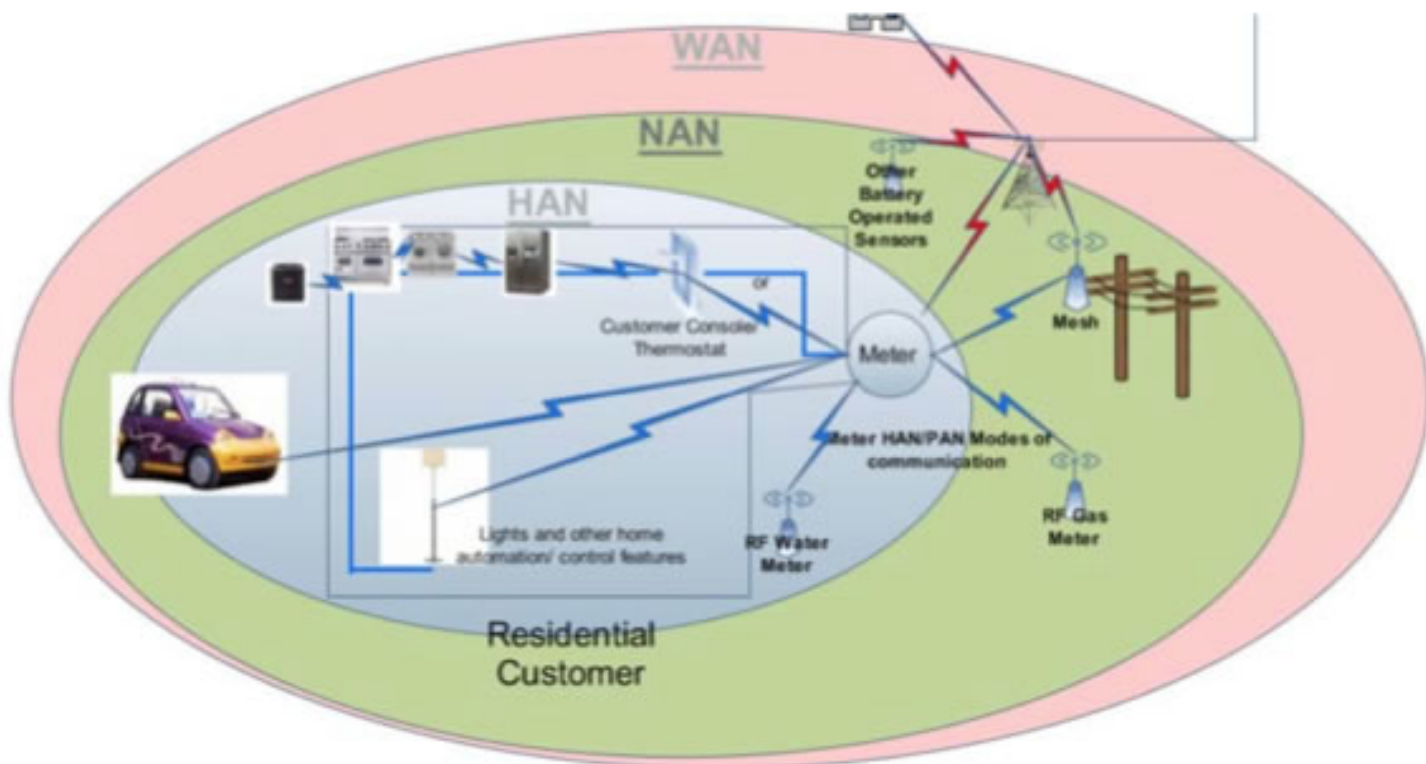


Figure 1: Three Smart Grid Segments

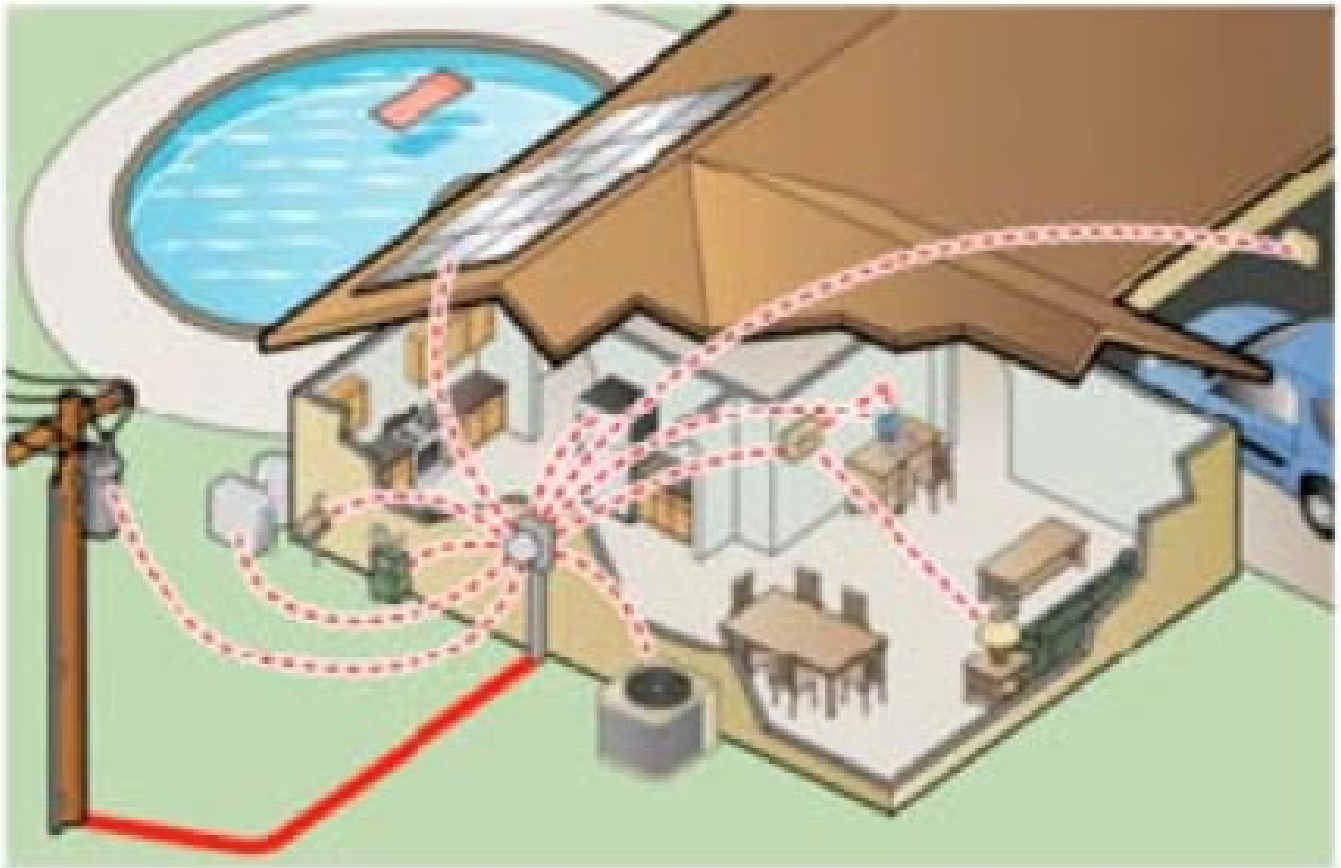


Figure 2: The Home Area Network

While the consumer is pacified with the promise of lower utility costs, it is the utility company who will enforce the policies set at the regional, national and global regulators. Thus, if a neighboring system has a shortage of electricity, your thermostat might automatically be turned down to compensate; if you have exceeded your monthly daytime quota of electricity, energy-consuming tasks like washing and drying clothes, could be limited to overnight hours.

Smart Grid and the utility's control extends beyond electricity. Notice in Figure 1 above that there is a Wi-Fi linkage to gas and water meters as well!

Consumer Blowback?

Wall Street Journal reported " [What Utilities Have Learned From Smart-Meter Tests...](#) " on February 22, 2010, and revealed several important early aspects of smart grid implementation.

- A principal goal is to enable utilities to restructure rate plans
- A principal goal is to force consumer behavior to change
- Some utility executives anticipate and fear a consumer rebellion

Nevertheless, the big carrot for utility companies to go along with the government's Smart Grid is to balance electrical demand, cut back on new power generation facilities and enhance their profit picture.

Before the dust settles on Smart Grid, both consumers and utilities may learn some sharp lessons about government intervention: When the government shows up on your doorstep and offers to help you save money, everyone knows that is an oxymoron. Government does not function to help people or companies to save money or to be more efficient; rather, it functions to maintain and increase its own power and control over its citizens.

Going Global

The UNEP report mentioned above reveals that *"15 percent of the fiscal stimulus funds committed for 2009-2010, which exceed \$3.1 trillion, can be regarded as green in nature... most green components are oriented towards energy efficiency and renewable energies in a variety of sectors.* "

A BusinessWeek article, *"[How Italy Beat the World to a Smarter Grid](#)"* stated on November 16, 2009 that *"After several false starts, 2010 finally could be the year when smart meters go global."*

Indeed, it is:

- Italy has already implemented Smart Grid technology in 85 percent of its homes nationwide
- earth2tech.com reports that Smart Grid will generate \$200 billion of global investment in the next few years
- The [International Electrotechnical Commission](#) (IEC) has laid out a global roadmap to insure interoperability of Smart Grid systems between nations
- Global companies are rushing to gain their share of the global Smart Grid market: IBM, Siemens, GE, Cisco, Panasonic, Kyocera, Toshiba, Mitsubishi, etc.
- China is spending \$7.32 billion to build out Smart Grid in Asia

Other countries with Smart Grid pilot projects already launched include Germany, France, England, Russia, Japan, India, Australia, South Africa and a host of others. Regional organizations such as [SMARTGRIDS Africa](#) have been set up to promote Smart Grid in smaller countries.

Thus, the global rush is on. In every case, Smart Grid is being accelerated by government stimulus spending. The global vendors are merely lining up their money buckets to be filled up with taxpayer funds.

As is the case in the U.S., there was little, if any, preexisting or latent demand for Smart Grid technology. Demand has been artificially created by the respective governments of each country.

Conclusion

Smart Grid meets 100 percent of the Technocracy's original requirements as described above. In other words, it will monitor and control both delivery and consumption of energy and other green resources such as water and gas.

The Smart Grid initiative was developed and funded by government agencies and NGO's. It was the Energy Department's Bonneville Power Authority that invented the concept in the 1990's. It was the Department of Energy's Pacific Northwest National Laboratory that invented the Grid Friendly Appliance Controller. It was the Federal Administration that showered billions of dollars over the private sector to jump-start the nationwide initiative to implement Smart Grid in every community.

If the Federal government had not been the initial and persistent driver, would Smart Grid exist at all? It is highly doubtful.

Following the same pattern as the U.S., many other industrialized nations are implementing Smart Grid at the same time, using their own stimulus money. This synchronized implementation is certainly by design, and as such, it implies that there must be a designer. *Who*

might be providing such top-down coordination on a global basis must be saved for another paper. One thing is certain: The technology being purchased world-wide all originated in the United States and is being marketed by the same global corporations as mentioned above.

Lastly, there is an assumption throughout Smart Grid literature that the Federal Administration will have full visibility of all data within the Smart Grid, even down to the individual household. They will also be in a position to set national, regional and local distribution and consumption policies, such as your "fair share" of available energy, gas and water.

International standards created for Smart Grid will also enable the U.S. Smart Grid to be connected seamlessly with Canada and Mexico, thus providing a comprehensive North American energy management and distribution system.

Is Smart Grid destined to be a global phenomenon? Yes. Is it designed to support a new global Technocratic, resource-based economic system? Yes.

Technocracy must be seen for what it is: An attempt to impose a totalitarian, scientific dictatorship. In 1933, it called for the inauguration of Franklin Delano Roosevelt as dictator in order to "pave the way for economic revolution." Fortunately at the time, they failed in their attempted coup.

If today's Smart Grid is successfully completed, it will enable the conversion of our existing economic system into something far different and far worse. This is why the American people repudiated Technocracy in 1933, and this is exactly why we (and citizens around the world) should thoroughly repudiate it today.

Resources

Scott & Hubbert, [Technocracy Study Course](#), Technocracy, Inc., 1934

[Background paper for the ministerial consultations](#), Governing Council of the United Nations Environmental Programme, December 14,

2009

[The Smart Grid: An Introduction](#) , U.S. Department of Energy

[Pacific Northwest National Laboratory](#) , web site

[2010 Strategic Plan](#) , Office of Electricity Delivery & Energy Reliability

[The Networked Grid 100: Movers and Shakers of the Smart Grid](#)

Meloan, Steve, "[Toward a Global 'Internet of Things'](#)";, Oracle Software, November 11, 2003

[Wi-Fi for the Smart Grid](#) , Wi-Fi Alliance, 2009

[Obama Announces \\$3.4 Billion Investment to Spur Transition to Smart Energy Grid](#) ,
Department of Energy Press Release

Note: In preparing for this report, the editor would like to give special thanks to Dr. Martin Erdmann, Carl Teichrib and Dr. Michael Coffman, for their encouragement, testing of ideas and additional supporting research.