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P R E S S R E L E A S E

**France Can Phase Out Nuclear Power and Achieve Low Carbon Dioxide
Emissions**

**French Greenhouse Gas Emissions Rising Despite Nuclear Power, New Study
Finds**

***Subsidies for Plutonium and Pro-Nuclear Policies Inhibiting Secure, Low-Carbon
Future***

This [press release](#) and a [summary of the report](#) are also available in French.

Takoma Park, Maryland: A new report, [Low-Carbon Diet without Nukes in France](#), examines the feasibility of phasing out nuclear power in France while reducing carbon dioxide emissions by about 40 percent in the next few decades. France is considered as exemplary by advocates of nuclear power, which provides almost 80 percent of French electricity generation, because the use of that energy source has been crucial to its relatively low greenhouse gas emissions. The Institute for Energy and Environmental Research (IEER) report is the first to detail technologies and policies that could meet the same lifestyle and economic choices as a high-nuclear, high carbon emissions future without nuclear energy and significantly reduced carbon dioxide emissions.

"The nuclear industry has presented itself as part of the solution to global warming" said Annie Makhijani, a co-author of the report and Project Scientist at IEER. "But nuclear power creates serious long-term security issues in the form of risks of proliferation, severe nuclear accidents, and vulnerability to terrorism. It's not a desirable trade-off. The IEER analysis shows that nuclear power is not necessary even in France to achieve a low-carbon emissions future."

France obtains 75 to 80 percent of its electricity from nuclear power, making it one of the lowest carbon-emitter countries in Europe per unit of GDP (Gross Domestic Product). Because of that, France is not obligated to reduce its CO2 emissions relative to 1990 under the Kyoto protocol,

while other European countries have to reduce their emissions to 8 percent (collectively) below their 1990 levels sometime between 2008 and 2012.

Nuclear power has not been the solution to eliminating greenhouse gas emissions in France, however. [*Low-Carbon Diet without Nukes in France*](#) shows that, despite the essential elimination of the use of oil in the French electricity sector since 1973 and the reduction of coal use, greenhouse gas emissions are high and have been rising. This is because the main greenhouse gas emissions come from the transportation sector as well as from the use of oil and natural gas in the residential, commercial, and industrial sectors.

According to the report, the constraint is not a lack of carbon-free energy sources energies but that existing resources are devoted disproportionately to nuclear energy to the detriment of other sources. Official studies of the use of plutonium as a fuel in 20 nuclear reactors in France indicate that this aspect of nuclear power alone gets about \$1 billion per year in subsidies. Yet, until the past few years total investment in wind energy in France had not even reached the annual plutonium subsidy.

"It is not possible to reduce greenhouse gas emissions in France significantly without large efficiency increases in the transportation sector and in residential and commercial heating," said Dr. Arjun Makhijani, president of IEER and co-author of the report "The technologies are commercial or nearly so. But the official devotion to nuclear energy, including heavy subsidies for plutonium fuel production, has sidelined other aspects of energy policy."

IEER presents two scenarios that use official economic projections of high energy use to show that nuclear power would be phased out over a period of 30 to 40 years while setting a path to much reduced carbon dioxide emissions. The scenarios use existing technology or more advanced technology to achieve 20 percent and 40 percent CO₂ reductions with a simultaneous phase out of nuclear power. It acknowledges that nuclear power must be phased out gradually rather than abruptly, because it is such a large part of France's electricity sector and because abandoning existing plants prematurely would divert resources that could be used for investments in efficiency and renewable energy sources, notably wind energy.

"There is no question that France will have to dig deeper into the advanced technology basket to produce the same percentage of reductions in carbon dioxide emissions as the United States," said Dr. Arjun Makhijani. "But the country that invests in that future can grab future technological and economic leadership on reducing greenhouse gas emissions."

"France has unfortunately chosen its technological leadership in the energy sector to be in nuclear technology," noted Annie Makhijani. "But France and the world are ignoring warning signs, like the statement of Ichiro Ozawa, the Japanese Labor Party leader, that the commercial nuclear energy sector could provide plutonium for nuclear weapons."

The French company AREVA, which is majority-owned by the French government, provides reprocessing services to Japanese utilities. Japan has a large stock of separated plutonium as a result, stored partly in Japan and partly in France.

The report notes that a low carbon, zero-nuclear-power future for France by the middle of the 21st century will involve significant technical and policy changes, including

- Regulations requiring new cars to achieve an average fuel efficiency of 100 miles per gallon by the year 2020 and improvements in efficiency of delivery vehicles and trucks.
- Improvements in heating and cooling in the residential and commercial sector that use existing technologies like co-generation and earth-source heat pumps.
- Government procurement of advanced technologies to stimulate innovation, in place of tax breaks for existing technologies.
- Abandonment of reprocessing and retirement of nuclear power plants when they reach the end of the licensed lifetime (40 to 45 years after start up).
- National policies to put wind, pumped hydro, and natural gas and, in the more advanced technology scenario, solar photovoltaic cells, at the center of the electricity sector.