ENERGY POLICY/LEGISLATIVE BACKGROUNDER

Members of Congress have introduced dozens of energy-related legislative measures in 2005-2006, as they attempt to address national security, environmental issues, and high energy prices, including high gasoline prices at the pump and high electricity bills as air conditioning use increases in summer months.

What’s Already Happened on Renewable Energy

Congress passed the Energy Policy Act of 2005 (EPAct) and President Bush signed it into law. EPAct authorized a number of provisions that would help advance alternative fuels, vehicles and infrastructure, including:

- Renewable Fuels Standard – increases the use of renewable fuels to a minimum of 7.5 billion gallons by 2012, including provisions to require at least 250 million gallons of cellulosic ethanol from 2013 onward;
- Loan guarantees for biorefineries and contract provisions (e.g., “reverse auction”) for facilities that are unable to take advantage of loan guarantees (appropriations required for this to have any effect);
- Funding assistance (primarily grants) for “cellulosic biomass ethanol conversion assistance” – to construct cellulosic ethanol production facilities, as well as R&D funding support for bioenergy (appropriations required for this to have any effect);
- Tax credits for fuel efficient vehicles; and
- Tax credits to encourage the installation of more E-85 re-fueling stations and pumps.

The bill also contains a variety of energy efficiency tax credits as well as authority for DOE to set standards, e.g., for homes, appliances, and buildings; it also includes federal procurement requirements. Fuel economy standards for cars were not addressed by EPAct. A Renewable Portfolio Standard (requiring a certain minimum percentage of electricity from renewable sources by a given date) passed in the Senate but was not included in the final law. In separate legislation, Congress extended the renewable energy production tax credit, but only through the end of 2008.

Current Congressional Energy-Related Activities

Legislation to open up the Outer Continental Shelf (OCS) to exploration and development may be the only energy legislation to pass in 2006. Hundreds of other bills have been introduced in Congress on energy, but no action is expected on them. The following summarizes energy policy options that have been proposed:

- **Oil savings targets** – Reduce oil consumption by a certain amount by certain dates (some include interim as well as longer-term targets). For example, 2.5 million barrels per day in oil savings by 2016; 7 million barrels per day by 2026 (5 million barrels per day savings by 2025); and 10 million barrels per day by 2031. The federal government must develop an action plan and regulations to achieve these targets. Includes: fuel economy standards for heavy-duty trucks; R&D on biomass, plug-in hybrids and lightweight materials; loan guarantees, manufacturing credits, consumer incentives, and federal fleet requirements for advanced vehicles; new vehicles must be capable of using alternative fuels; minimum amounts of fuel must be produced from cellulosic biomass and sugar; production incentives for cellulosic biomass fuel; and low-interest loans and grants for delivery of E-85.
  - Require super-efficient, high capacity airplanes (that consume less fuel, e.g., 15%, than current airplanes) by a date certain.

- **Flexible Fuel Vehicles** – Require an additional 10 percent of FFVs per year over the next 10 years up to 100%, or provide tax incentives to manufacturers and consumers to encourage the production and purchase of more FFVs. Require fuel cap labeling for FFVs.

- **Alternative Fuels** – Increase the Renewable Fuels Standard beyond the levels provided in EPAct within certain time frames, (e.g., 25 billion gallons by 2025, 60 billion gallons by
2030). Require all fuel to include at least 10% ethanol blends. Temporarily or permanently lift import tariffs on ethanol. Provide federal funding to local governments for fleet replacement. Provide a small agri-biodiesel producer tax credit.

- **Renewable Fuels (E-85) Infrastructure** – Increase the tax credits for alternative refueling property beyond the levels authorized in EPAct. Require oil companies to install alternative fuel infrastructure. Authorize funding for R&D, and grants for pilots. Require stations with at least 10 pumps to install alternative fuel pumps, once 10% of vehicles can use a specific alternative fuel.

- **More Efficient Vehicles** – Give the President authority to change current fuel economy standards. Phase in fuel economy increases over a period of time. Require the Transportation Department to issue regulations establishing an average fuel economy standard for automobiles; or establish standards based on 1 or more vehicle attributes; standards shall attain a projected aggregate level of average fuel economy within a certain time frame; the projected aggregate level of average fuel economy from that date onward increases by 4 percent from the level for the prior model year; DOT can prescribe lower standards if it can justify technological, safety or cost infeasibility, based on specified criteria; allow credit trading. Provide tax incentives for hybrid and plug-in hybrid vehicles. Require production of a certain minimum number of plug-in hybrid vehicles. Reimburse domestic auto manufacturers for up to 10% of the costs of providing health care to retired employees, provided that the manufacturers use at least half of these savings to invest in technologies that will reduce petroleum use.

- **Renewable Electricity-related Provisions** – Require generators to produce a certain minimum percentage of electricity from renewable sources by a given date (Renewable Portfolio Standard) (e.g., 10% by 2020). Authorize R&D funding for nascent renewable energy and transmission technologies. Establish an Advanced Research Projects Administration-Energy (ARPA-E) at the Department of Energy. Expand funding for the Renewable Energy Systems and Energy Efficiency Improvements Program of the Department of Agriculture. Increase the annual level of Commodity Credit Corporation funding for the program.

- **Energy Efficiency Provisions** – Authorize greater R&D funding for weatherization and for Energy Star programs. Set goals/targets for improving energy intensity. Set federal efficiency requirements for construction/re-construction of public housing projects. Provide tax credits and incentives for energy efficient commercial buildings, new homes, businesses, appliances, and products.

- **Funding Renewable Energy (Appropriations)** – The President requested some, but not full, funding for the renewable energy provisions authorized in EPAct. Spending bills are currently moving through Congress, and funding may be cut further.

- **Public Education and Awareness** – Support public education on renewables and efficiency. Authorize higher education curriculum development and graduate training in advanced energy and green building technologies.

- **Climate Change Legislation** – Limiting carbon emissions would encourage the use of renewable energy and promote energy efficiency. Establish emissions reductions targets to be achieved through regulations -- market-based cap and trade program; includes an RPS and efficiency standards. Establish an emissions reduction goal with milestones to be achieved through regulation -- using market-based allowances; requires vehicle emissions standards to meet certain emissions reduction levels; generator low-emission and other requirements; credit trading; competitive grants for sequestration projects; standards for measuring emissions reductions from sequestration; efficiency standard; RPS; RFS; federal fleet efficiency requirement; corporate disclosure of climate change risks; inclusion of climate in Environmental Impact Statements. Establish an economy-wide (covers mobile and stationary sources) cap and trade program.