



Energy Issues and Climate Change Bulletin Articles

8 Week Series for Parish Bulletins on Hydrofracking

Week 1

While natural gas is the cleanest of all fossil fuels (gas, coal and oil), natural gas extraction impacts air quality and releases greenhouse gases into earth's atmosphere. Greenhouse gasses trap heat in the atmosphere and this is altering earth's climate.

Reflection: "Among the basic problems which the international community has to address is that of energy resources and the development of joint and sustainable strategies to satisfy the energy needs of the present and future generations." (Pope Benedict XVI)

Action: What do we mean by *sustainable* energy resources? How can we encourage development of sustainable energy resources rather than unsustainable, climate-altering fossil fuel energy sources (gas, oil, coal)?

Week 2

Hydraulic fracturing is an industrial gas extraction process by which millions of gallons of water (per well) mixed with highly toxic chemicals are forced down into the earth to break open (fracture) the rock to release gas trapped in the rock.

Reflection: "The goods of the earth are gifts from God. We have a responsibility to care for these goods as stewards and trustees, not as mere consumers and users. We should be guided both by concern for the health and well-being of others, with a priority for the needs of the poor and vulnerable, and by respect for the intrinsic worth and beauty of God's environment: the land, water, air, natural resources, and all His creatures." (New York State Catholic Conference 2010 Legislative Agenda)

Action: How can we encourage discussion about gas drilling in the Marcellus Shale of New York State that takes into account human health, science, experience of communities where drilling is occurring, economics, business interests, and the moral aspects?

Week 3

The chemicals used in hydraulic fracturing for gas are known to cause human health problems. Each well site emits air pollution in addition to diesel pollution from increased truck traffic to/from gas drilling sites (estimate is 600 truck trips per site during drilling/fracking).

Reflection: "Our Catholic tradition speaks of a 'social mortgage' on property and, in this context, calls us to be good stewards of the Earth. It also calls us to use the gifts we've been given to protect human life and dignity, and to exercise our care for God's creation." (Global Climate Change: A Plea for Dialogue, Prudence, and the Common Good ~ U.S. Catholic Bishops 2001)

Action: How are we to fulfill God's call to be stewards of creation in an age when we many have the capacity to alter that creation significantly and perhaps, irrevocably?

Week 4

Hydraulic fracturing for gas could transform the rural countryside into industrial well pad sites. Sixteen wells per square mile could be drilled in the Marcellus Shale of New York. Gas companies have projected drilling 60,000 wells in a seven county region of New York.

Reflection: "As Catholics, we are taught that the Earth and everything in it is a gift on loan from God. Further, we are all in this world together, and for each other. We are called by our faith to work together and care for our planet and work toward a common good." (Bishop Matthew H. Clark, Bishop of Rochester Catholic Courier January 2008)

Action: What is our vision for rural life and rural communities? What would be the impact of hydraulic fracturing on rural residents, on agriculture, wineries, tourism, recreation, wildlife, natural beauty of God's creation?

Week 5

Scientific findings document that earth's climate is being altered by the greenhouse gases trapped in the atmosphere. For example, Catholic Relief Services staff have observed changes in weather patterns affecting agriculture and water sources in Africa. Gas, oil, coal (fossil fuels) used to produce energy worldwide are primary sources of greenhouse gas emissions.

Reflection: "The ecological crisis offers an historic opportunity to develop a common plan of action aimed at orienting the model of global development towards a greater respect for creation and for an integral human development inspired by the values proper to charity in truth." (Caritas in Veritate ~ Pope Benedict XVI)

Action: Learn more about fossil fuels (gas, oil, coal) and the connection to poverty and global climate-change. Check out www.catholicsandclimatechange.org and the Climate Change study guide available from the National Catholic Rural Life Conference www.ncrlc.com

Week 6

In hydraulic fracturing, as many as nine million gallons of fluid (water, chemicals, sand) are pumped into the well under very high pressure to break up the rock. By 2010, 100 billion gallons per year of fresh water could be turned into fracking fluid. Between 30-70% of this fluid (called flowback), which could contain radioactive materials and other compounds such as arsenic, could come back up through the well bore (opening) and could be stored in a plastic-lined pit on the property. NYS has no clear plan or regulations on how to deal with this flowback fluid.

Reflection: "The dominion granted to man by the Creator is not an absolute power, nor can one speak of a freedom to 'use and misuse,' or to dispose of things as one pleases. The limitation imposed from the beginning by the Creator himself ... shows clearly enough that, when it comes to the natural world, we are subject not only to biological laws but also to moral ones, which cannot be violated with impunity." (The Social Concerns of the Church ~ Pope John Paul II 1987)

Action: What are people of faith to do when faced with all the consequences of consumerism and potential environmental hazards?

Week 7

Some economists suggest that a focus on *clean, renewable, sustainable* energy development could create jobs for the U.S. economy and help reduce the climate-altering emissions (from gas, oil, coal) that get trapped in earth's atmosphere.

Reflection: "Environmental pollution is making particularly unsustainable the lives of the poor of the world. In dialogue with Christians of various confessions, we must pledge ourselves to take care of creation and to share its resources in solidarity." (Pope Benedict XVI Aug. 27, 2006)

Action: Learn more about the concepts of sustainability and renewability. What is the connection with Christian stewardship and solidarity?

Week 8

Potential benefits of natural gas extraction in the Marcellus Shale of New York State could include: increased wealth for some, increased revenues for water purchased from municipal water companies and for leasing of public land, expanded employment in businesses servicing the gas drilling sector (hospitality, retail, legal, construction etc), increased charitable giving, increased owner occupied housing. **Among the potential costs:** increase in non-violent crime, increased road maintenance/repair, increased number of working poor, increased demand on emergency responders, increased need for health care, radioactive waste, increased demand for temporary housing, social conflicts due to influx of gas workers and increased costs to community members who may not have benefited from the gas boom. For more detail on costs/benefits see: *Marcellus Shale Natural Gas: From the Ground to the Customer* Pennsylvania League of Women Voters www.palwv.org/Indiana

Reflection: "The virtue of prudence is not only a necessary one for individuals in leading morally good lives, but is also vital to the moral health of the larger community. Prudence is a thoughtful, deliberate and reasoned basis for taking or avoiding action to achieve a moral good. Prudence not only helps us identify the principles at stake in a given issue, but also moves us to adopt courses of action to protect the common good". (*Global Climate Change: A Plea for Dialogue, Prudence and the Common Good* U.S. Catholic Bishops June 2001)

Action: Join with The New York State Catholic Bishops Conference to support a moratorium on hydraulic fracturing and a comprehensive legislative package to deal with the effects on public health, air, water, wildlife.