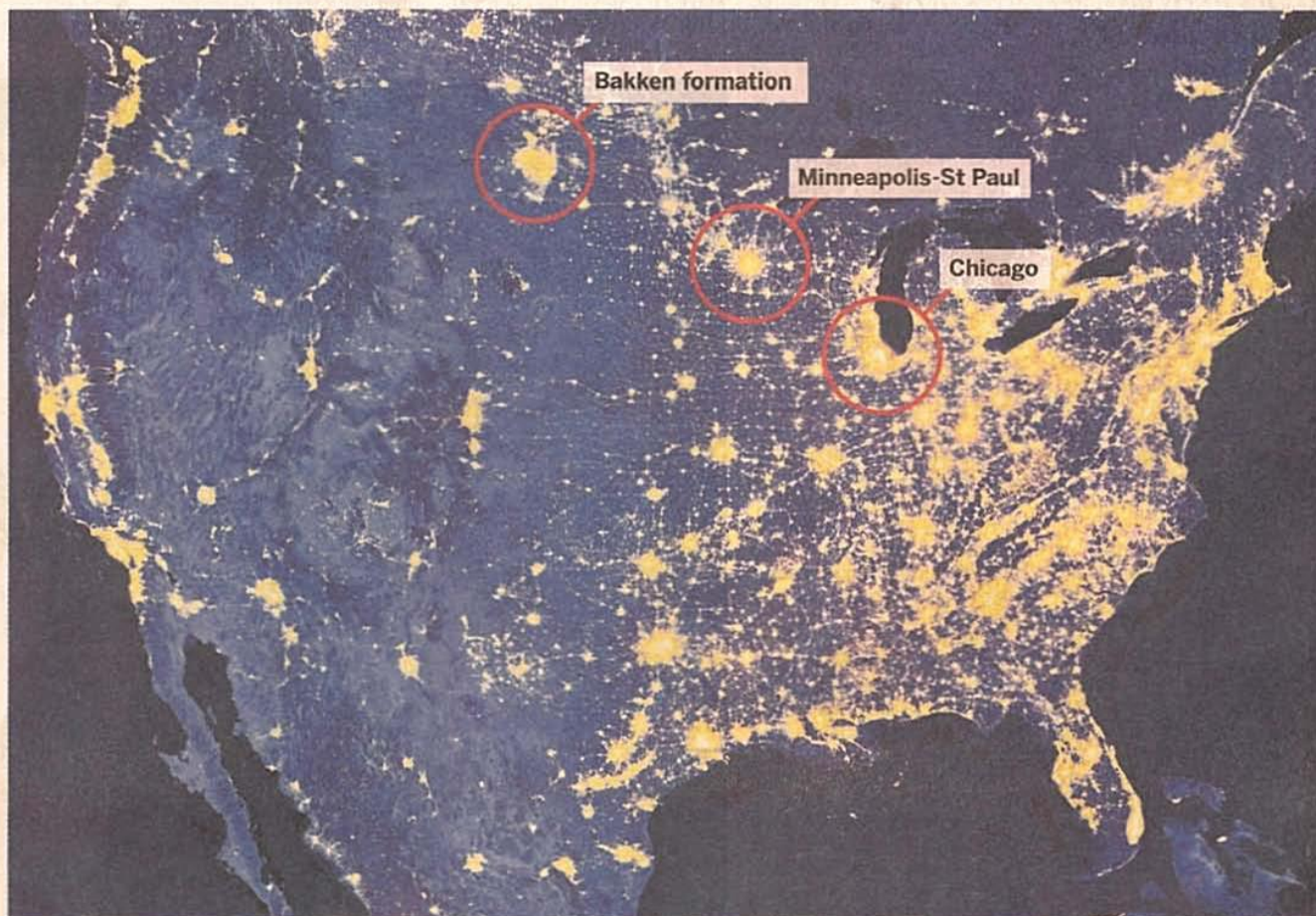


Shale boom fires environment fears as US gas flaring is visible from space



This night-time composite image shows North Dakota's Bakken field lights comparable to the size of Chicago and Minneapolis-St Paul Nasa

By Ajay Makan in London and Ed Crooks in New York

Companies at the heart of the US shale oil boom are burning off enough gas to power all the homes in Chicago and Washington DC combined, in a practice causing growing concern about the waste of resources and damage to the environment.

The volume of unwanted gas being flared off in North Dakota, the state leading the shale revolution transforming the outlook for US energy, rose by about 50 per cent last year. The surge at the state's Bakken formation is being replicated in other shale regions with Texas' state regulator issuing 1,963 permits to flare in 2012, sharply up from the 306 in 2010.

The rapid increase has made the US one of the world's worst

countries for gas flaring. The volume of gas it flares has tripled in five years, according to World Bank estimates, and it is the world's fifth highest, behind Russia, Nigeria, Iran and Iraq.

The flaring is a result in large part of North America's low gas price, which makes it uneconomic to build pipelines and tanks to handle gas released by oil production. Flaring can be the safest way to dispose of it.

The lights of flares burning

The volume of gas it flares puts the US fifth in the world rankings, behind Russia, Nigeria, Iran and Iraq

in the Bakken and Texas' Eagle Ford shale fields can be seen in night-time satellite photos.

Flaring has alarmed investors and environmental campaigners because of the waste and its consequences for greenhouse gas emissions, air pollution and disturbance to communities.

Flaring in North Dakota lifts by about 20 per cent the emissions from the state's oil production, refining and transport, compared with the US average, according to Financial Times analysis of official data.

Investors managing a total of \$500bn last year wrote to oil companies including Exxon-Mobil, Chevron, Statoil and US independents warning that "excessive flaring, because of its impact on air quality and climate change, poses significant risks for the companies

involved". Since then, flaring in the US and concerns over it have only increased.

This month, Mercy Investment Services, which manages the investments of the Sisters of Mercy order of nuns, filed a shareholder resolution calling on Continental Resources, the leading oil producer in the Bakken, to adopt clear goals for cutting or eliminating flaring.

Continental said it already flared proportionately less gas than the industry average, was making progress on further reductions and agreed to report on its progress in 2013.

The North Dakota legislature is considering a bill to encourage flaring reduction through tax breaks.

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