

**Mediating Renewables:
How Newspapers Report on Clean Energy**

by

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Mediating Renewables: How newspapers report on clean energy

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Abstract: Covering a complex issue such as energy policy is problematic for any deadline newsgathering institution, but energy policy, as a political issue, is critical to the future health of the planet and its inhabitants. A relative handful of daily newspapers cover renewable energy issues frequently, accurately and thoroughly. They do so by investing significant resources in a specialized energy beat, covered by a trained reporter who draws on sources outside the newsroom for statistical, economic and technical expertise. Production requirements, institutional issues and agenda-setting judgments affect the ways in which newspapers cover renewable energy – and by extension energy policy in general. The public has proven to be more receptive to renewable energy initiatives than are policy makers in general. In markets where newspapers provide inadequate coverage of renewable energy issues, perceptive readers find the information they need in long-deadline media. The newspaper has a role to play in providing evidence to policy makers that political will exists to undertake clean energy initiatives.

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Introduction

A question of coverage

In the spring of 2003 I spent a few weeks in Berkeley. The daily routine included cycling to a local coffee shop to burrow through the newspapers. The big stories were the recent invasion of Iraq and Enron's bankruptcy proceedings. Another persistent theme was the aftermath of California's 2001 energy crisis. All these stories were hooked to issues of energy security, which, in the context of global warming, had become a political issue of worldwide import. Progressive Northern Californians seem to love the notion of energy independence, and the environmental reporters at the *San Francisco Chronicle*, who devote several stories a week to the health of the Bay Area's ecosystem, also wrote about solar, wind and geothermal energy sources. A persistent topic in newspaper stories was a double-barreled controversy regarding whether global warming was real, and whether it was caused largely by widespread human use of fossil fuels.

It's beyond the scope of this thesis to explain the global warming crisis, its causes and remedies. However, my argument is predicated on the vital importance to the world's economy, biota, and human health of converting the global energy infrastructure from carbon-producing fuels to renewable sources, as rapidly as possible. This notion has been accepted as a political and economic reality in most of the world, and is expressed in carbon-reduction agreements like the Kyoto Protocol, and in aggressive programs in Europe and Japan to cap carbon emissions and convert to carbon-neutral energy sources. The American fossil fuel and energy utility industries, along with the government agencies

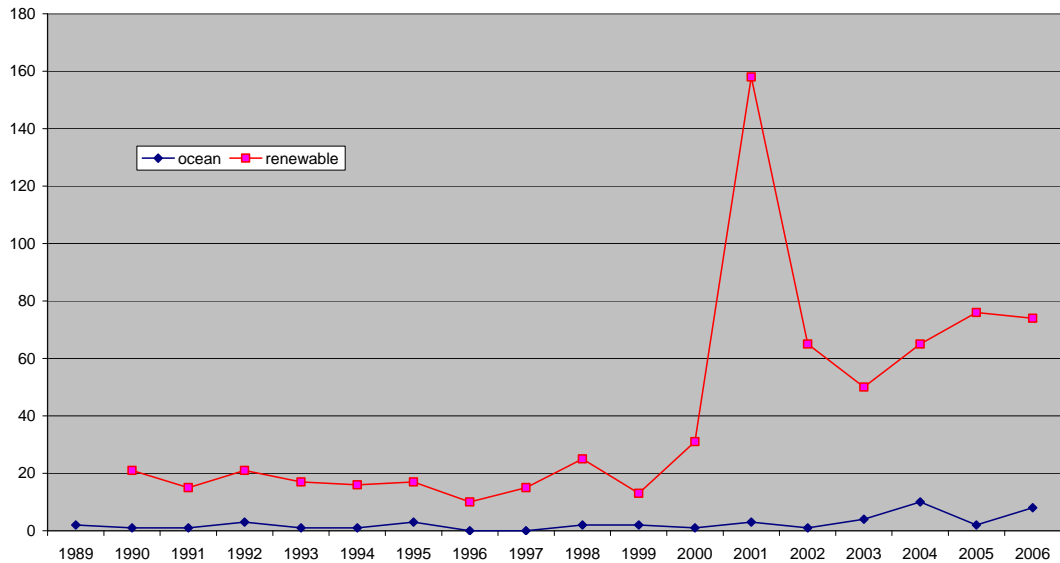
charged with their regulation, have resisted the emerging world consensus on climate issues. This paper examines the ways in which daily newspapers engage clean energy issues, and the politics of renewable energy.

On May 7, 2003, the *San Francisco Chronicle* ran a 111-word story on page A21, with no byline, and headlined “Board OKs using tides to make electricity.” The San Francisco Board of Supervisors had, following an initiative by its president Matt Gonzalez, granted \$1 million to study the feasibility of generating power by tapping tides and waves passing under the Golden Gate Bridge. I was intrigued. Back at my computer, I Googled “ocean energy.” I learned that, in theory, enough water flows through the Golden Gate to power most of Northern California. I learned that inventors and entrepreneurs had been building “wave motors,” water-wheels and other tide-driven generating gimmicks along San Francisco’s shores since 1873. All of the devices had been battered to bits by storms. And I learned that half a dozen companies in Europe and North America were ready to offer ocean power proposals to the city. In fact, a considerable body of ocean power literature existed in specialty magazines – in engineering journals, environmental advocacy periodicals, and hobbyist ‘zines – but almost nothing in the newspapers. I began to wonder why newspaper reporters eager to cover emerging wind and solar sources would pay so little attention to a massive clean energy source flowing, literally, right under their noses.

The San Francisco ocean energy project has, over the past three years, paddled slowly toward completion of an environmental impact statement and a

business plan. It's fascinating stuff, and is easy to read about in monthly magazines devoted to energy issues, but has achieved no traction with local news reporters. A Lexis-Nexis search of the *Chronicle*, on the terms “renewable energy” and tidal or tide or wave, compared to “renewable energy” and wind and solar, produced the following history (2006 figures cover the first nine months only):

Chart 1: San Francisco Chronicle -- Energy terms
 Lexis-Nexis terms: Renewable energy + tide or tidal or wave
 vs. Renewable energy + wind + solar



The impressive spike in stories mentioning wind and solar energy corresponds to the California energy crisis of 2001, and the trough beginning in the autumn of 2001 corresponds to the appetite for news about the 9-11 attack and the invasions of Afghanistan and Iraq. Throughout the period, ocean energy stories were absent, or nearly so. The initial city council story in May 2003 was followed that fall by two more short items regarding the Matt Gonzalez mayoral

campaign, mentioning his sponsorship of the tidal power study. The tidal wave of coverage in 2004 – ten stories by nine different reporters and OpEd writers working on half a dozen different desks – was generated by a flurry of climate change and renewable energy stories, each mentioning ocean energy in passing. By 2005 the *Chronicle's* reporters had largely forgotten about the project, even while plans were laid to exploit ocean power in other parts of the world. Portugal installed a battery of Scottish-built Pelamis wave-power machines, and New York City put a set of tide-driven turbines in the East River, near Roosevelt Island.

And so a pair of research questions arose.

- **Research question 1:** Do some newspapers cover renewable energy issues more thoroughly than do others, and if so, how do they do it?
- **Research question 2:** Why do some renewable energy projects get generous newspaper coverage, while others are ignored?

Initial readings suggested several lines of inquiry. It appeared that editorial decisions are made based on

- *news production requirements*, such as the need to prioritize breaking news over trend stories;
- *resource issues*, such as the time available to research a complex story and the space available to report it;
- *structural issues* within the newsgathering institution, such as the way beats are defined; and

- *salience judgments*, such as whether a story is local or tied to a popular celebrity or politician.

Methodology: To discover which renewable energy projects get covered, and by which newspapers, and to learn how their newsrooms function, I embarked on a three-step line of inquiry:

1. *content analysis* to quantify which renewable energy stories are covered by which papers and by which reporters covering which beats. I identified two rival newspapers that cover renewable energy aggressively, one newspaper that covers the subject moderately, and one newspaper that almost ignores the issue.
2. *interview reporters* and other stakeholders to discover the incentives and disincentives under which stories are pursued at the four newspapers selected for study.
3. A second round of *content analysis* to test the perceptions voiced in the interviews.

The answers to these research questions are important because of the role the press plays in helping to shape public policy. Energy policy is the key to resolving – or exacerbating – the global warming crisis that may drive the droughts, storms, floods, migrations, depressions and wars of the 21st century. Large energy projects require large public investment and are therefore highly politicized. To the extent that it affects policy-makers and voters, the framing of

energy projects by the press will have enduring and multiplying effects on the future of the nation and the world.

I was fortunate to embark on this research just as events in science, politics and public policy pushed renewable energy and related issues to a higher level of news salience. Dramatic spikes in the content analysis data could easily be traced to the reporting of real-world news.

The nature of the Lexis-Nexis and ProQuest databases used in the content analysis requires comment. The databases are reasonably complete only back to that era, between 1975 and 1990, when most newspapers converted to digital typesetting and therefore to digital text storage. Moreover, these databases do not lend themselves easily to close statistical analysis. For a variety of reasons, including ownership changes and corporate financial policies, newspapers enter and depart database participation at unpredictable times. Copyright negotiations often cause individual newspapers to remove blocks of freelanced stories from the databases. Some newspapers delay uploading content to the databases for days or weeks; some newspapers remove content after three months, six months or longer. The size of each database therefore varies slightly from year to year and even month to month. Database searches may not be precisely replicable from week to week, and the number of participating newspapers varies from year to year. The ways in which the datasets in this paper tie to real-world events demonstrate that they are descriptive of newspaper content, but do they do not lend themselves to standard tests of statistical reliability.

How this paper is organized

Chapter 1: Audience, agenda and political speech comprises a review of prior literature regarding the traditional function of the mainstream press in a republic, and ways in which the mainstream press has traditionally handled – or oversimplified, or neglected – complex and slowly-developing issues of public policy. The press has an important role to play in part because the scientific culture avoids speaking directly to the public in unambiguous language. When newsroom resources and tight deadlines forestall close analysis of complex issues, the professional value of balance often leads the reporter to seek a middle ground between competing interests. The process can exert a centripetal effect on public discourse and can function to delay political action.

Chapter 2: Space and time outlines the initial round of content analysis, and maps the frequency with which North American daily newspapers cover renewable energy issues. Coverage at many papers has increased in frequency over the past decade, more or less in step with energy prices. A few papers stand out with frequent and thorough coverage over an extended time frame. The analysis led me to select four exemplary papers for closer study of newsroom practices.

Chapter 3: Specialist beat reporters and their sources examines some institutional practices influencing the frequency and aggressiveness with which reporters pursue renewable energy stories. Where the paper develops a strong energy beat, or strong environmental beat, renewable energy coverage is often strong. Otherwise, the topic may fall through the crack between the city desk and

business desk. Interest groups, including environmental advocates, extractive industries and utility companies, play a significant role in promoting coverage by furnishing data that would otherwise be out of reach even of well-trained specialized reporters. Reporters consider it important to maintain a stable relationship with any productive source. Informal feedback from readers, via unsolicited phone calls and email to reporters, often influences the type of stories to be pursued.

Chapter 4: Salience and agenda setting examines the mechanisms that can turn a low-priority “trend” story into a front-page headline. These mechanisms include crises real and artificial, celebrity endorsements, and political events. By the same token, a story can be squeezed off the editorial budget by more immediately newsworthy content. Local stories take precedence over distant stories, and photogenic or dramatic forms of renewable energy technology are more likely to achieve coverage than “invisible” subsurface technologies.

Chapter 5: Audience and media stratification examines a hierarchy of media according to their technical sophistication. At the bottom of the pyramid, local broadcast media devote little or no time to renewable energy issues. Daily print media do a better job. Weekly newsmagazines, and especially monthly literary and political journals, often devote detailed feature stories to energy policy. The top of the pyramid consists of scientific and engineering journals. At each level going up the pyramid, the audience is smaller but more influential with policy makers.

Chapter 6: Discussion and conclusions synthesizes trends in newsroom practices with recent geopolitical events to explain the rising salience and frequency of renewable energy coverage.

Chapter 1: Audience, agenda and political speech

How media mediate

In preparation for the research project, I reviewed previous literature on the role of the daily newspaper in complex public policy issues. This chapter pays special attention to the traditions of reporting on science, the environment and the economics of energy distribution as analogs and precursors to the renewable energy beat. Early researchers found that when covering a very complex topic, the reporter often operates beyond his or her own training, and functions as an interpreter of technical material prepared by experts who don't normally address the public directly (Schoenfeld, 1973). When the expert's "new knowledge" suggests a need for policy change, that change is often opposed by institutions invested in existing economies and technologies. The reporter then must mediate between competing messages. The newsroom decisions made in arriving at an appropriate mediation constitute part of the process called "agenda setting."

The role of the press

Ever since the Industrial Revolution accelerated the extraction and use of fossil fuels, energy issues have been highly political, because they reference access to valuable and highly localized resources, with access closely controlled by narrow interests and requiring large investments for processing and transport. Energy policy involves exploitation of resources—often publicly owned or "commons" resources—through government or private enterprise. Extraction and use entails labor and safety issues, environmental pollution and public health and safety

issues, the political economy of distribution including the economic effects of energy pricing, foreign policy and military issues surrounding the security of foreign supply. This litany of considerations cannot be disentangled from any other aspect of economic life or political discourse.

One normative role of the press in a republic is to provide information for use by the voters and their elected representatives in making and reviewing policy decisions. Two generations ago, Walter Lippmann pointed out the impracticality of this model for a complex and far-flung society (Lippmann, 1922). Entire scholarly books have been written on science policy-making with no mention whatsoever of the press (Clark, T., 2002), which suggests that many scientists communicate directly with policy makers. Stephen Bocking argues that scientists who neglect to frame their findings in language accessible to the press and public cannot communicate productively with policy makers (Bocking, 2004). Broad scholarship supports the notion that if the press doesn't influence policy more or less directly through public opinion, it does play a critical role in agenda setting—that is, the press can and does focus public attention on decisions that need to be made soon (Rogers & Dearing, 1988). The scientific community is largely in agreement that dramatic world-wide action needs to be taken to avoid climate change due to the continued overuse of carbon fuels. Yet political will to take ameliorative action is slow to build, for reasons elucidated by Itzhak Yanovitsky (Yanovitsky, 2002). Daily newspapers in North America, as I'll show, have been uneven and often negligent in putting ameliorative action on the public agenda,

Renewable energy lies at the nexus of energy and environmental issues. Both are politically charged areas, rife with newsworthy conflict, and they therefore get plenty of attention from the press. A considerable body of literature suggests that both energy and the environment are problematic for deadline press institutions, which have trouble devoting sufficient resources to analyze and elucidate the background issues needed to educate policy makers.

According to the liberal tradition, institutions speak to publics, and to other institutions, in order to influence behavior. Behaviors can include buying, voting, relinquishing prejudicial practices, regulating, deregulating, building, funding, conserving, recycling, or any other socially significant activity. A typical behavior is the dedication of public or rate-payer funds to construction of any large electric power generation and distribution facility, clean or otherwise.

Action on energy issues requires political will to overcome corporate and other institutional resistance to change. Popular attitudes and behaviors – including voting behaviors – are influenced by personal experience, peer group and family communication, education, political and activist group communication, and by mass media.

The critical literature on energy coverage in the media is thin, but it mirrors the issues in any other complex subject, including business and economics reporting, and science and environmental writing. Renewable energy as a subject for news reporting has emerged only recently – over the past three decades – from a conjunction of environmental reporting, often

covered from the metro desk, with the energy beat, which is covered at most papers from the business desk and traditionally focused on extractive industries. Much of the following discussion therefore references pertinent literature on environmental and energy reporting.

Experts and mediators in the democratic process

In order to make informed decisions about energy policy, citizens and their policy-making representatives need to understand issues in economics, physics and engineering. This is a tall order. In a republic, a complex problem is often handled by turning policy-making power over to representative committees (for instance, public utilities commissions and legislatures) advised by expert staffs and consultants. Representative committees mediate between the technical community and the public, and often have trouble resolving the tension between “authoritative” science and a sometimes skeptical electorate (Bocking, pp. 16-43).

So does the press. There’s little direct communication between the scientific/technical community and general audiences. Rare is the lay reader who subscribes to engineering or environmental science journals. Scientists and technicians who write or speak directly to the public are quickly regarded as educators or activists or “popularizers” – not a term of approbation among scientists. The communication gap has long been of interest to the technical community. Historically, most scientists, while aware that their writing style is

impenetrable to the lay reader, have made little effort to write with better transparency (Hay, 1973; Hunt & Brown, 1973; and Witt, 1972). Witt wrote

Note the circularity of communication in the scientific community. Scientists communicate primarily with other scientists about their specialties. They are a relatively insular group, insulated by their extreme specialization. If they did attempt to communicate directly with the public, they probably wouldn't be understood or appreciated anyway. (Witt, p. 61)

Xin and Bateson (1999) confirm that most popular audiences are uninterested in science *per se* – at least, until the science appears pertinent to their own immediate interests.

This gap between the technical community and the general public creates a niche for interpreters or information mediators, with whom scientists and technicians maintain an uneasy symbiosis. Scientists need interpreters to develop public understanding and support of scientific research projects, if only to ensure public funding. The interpreter community includes science writers and other journalists, science educators, and environmental activist groups (Schoenfeld, 1973).

Like the republican form of government, the popular audience for technical and scientific reporting is firmly grounded in liberal Enlightenment tradition. Late in his life, Voltaire explained Newton to his bourgeois audience (Voltaire, 1778). The first journalist to write about the polarity and flow of electricity was Benjamin Franklin, who published accounts of his own findings, including the first description of the lightning rod, in 1750 (Clark, R., 1983, p. 83). Franklin's reports appeared not only in proceedings for other scientists, but in popular pamphlets and newspapers. Generations of youngsters followed the

evolution of steam and hydroelectric power in the newspapers and in popular magazines like *Scientific American*, launched in 1845. The 19th century saw the emergence of writers like Thomas Henry Huxley and Herbert George Wells, non-scientists who devoted careers to the popularization of new science (Huxley was a naval surgeon, Wells a journalist and historian). Both men consciously addressed their work to a newly-emerged audience: the literate, autodidact mechanic. The commercial success of science reporting as a distinct discipline constitutes evidence that scientists needed to be mediated.

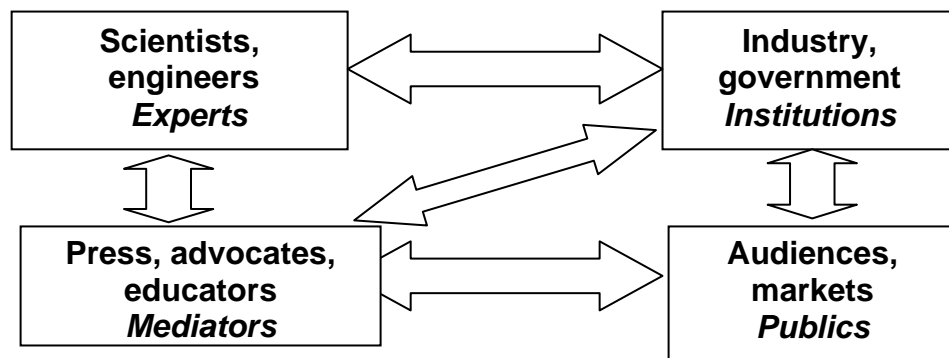
The environment had early non-scientific advocates like the engineer John Muir. Early self-identified interpreters of environmental issues were foresters and biologists, often working for government or for educational institutions. When they “interpreted” nature, they often did so in the name of *conservation* (Schoenfeld, 1973, p. 14). By the 1960s, science writers and reporters had discovered the term *ecology*, which came to replace *conservation* in most of the literature. The term *environment*, as we understand it, first appeared in a U.S. government document in 1962 (Schoenfeld, Meier, Griffin, 1979). Within the past two decades the terms *global warming* and *climate change* – phrases that would sound foreign to the energy industry of 1955 – have come into widespread use.

Energy reporting emerged as a specialization within the business beat during the oil boom of the 1890s and came to prominence in the trust-busting work of muckraker Ida M. Tarbell between 1902 and 1904 (Tarbell, 1904). Her 1902-1904 series in *McClure’s Magazine* led eventually to the break-up of the

Standard Oil Company in 1911 – a watershed event in the sometimes adversarial relationship between corporations and democratic government. The price of kerosene for lamps and cooking, of fuel oil for heating, and then of gasoline for transport, has been a matter of acute interest to readers ever since Pennsylvania began pumping and refining the stuff. The oil industry, in particular, drives political and foreign reporting as well as business stories.

Energy reporting entrains several publics. Voters and consumers, corporations and policy-makers, environmental and consumer advocates, and scientific experts all need to speak to and through the press. Most technically complex information originates with experts (scientists or economists, for instance), and is mediated through an interpreting community of activists, educators and mass media (Bocking, p. 23). It's also consumed and mediated through a policy/industrial complex. The information/influence cycle can be diagrammed as Figure 1 (note the absence of a direct avenue between science and the public):

Figure 1: Flow of technical information



Newsroom reaction time

Mass media have historically been slow to report scientific findings about slow-moving events. In fact, over 80 years elapsed between the first scientific report on anthropogenic global warming (Arrhenius, 1896) and its emergence as an issue in mass media, after climate scientists began publishing results of their computerized climate models in the late 1970s. Science itself is responsible for some of the delay: A scientist will often insist that a reporter embargo his story until the work is published in a peer-reviewed journal. However, a number of studies outline institutional barriers within the press to science and technology reporting, including complex energy issues and related political and economic stories. Pryor (1972), referring to newspapers, noted that very complex stories require weeks or months for preparation, and therefore need enlightened editing. Rubin and Sachs (1973, p. 22) depicted the failure of the daily papers to cover the complex and expensive California water bills of 1960. Since that time, the new discipline called “newsroom sociology” has offered some insights. An example is Archibald (1999), who concluded, after interviewing reporters, that the complexity and subtlety of the science involved leads many editors to pronounce environmental stories boring (this is certainly the case, as we shall see, with coverage of meetings and hearings by public utility commissions). An editor can then drop the story, force it to portray an unrealistically dramatic human conflict, or truncate it to meaninglessness. Lowe and Morrison (1984) found that the very complexity of

the issues prevented ordinary beat reporters, untrained in science, from reporting on environmental issues – for decades.

All these writers explained that the culture of the newsroom, and the realities of popular taste, dictate that “newsworthy” events – discrete, reportably dramatic occurrences – take precedence in the editorial budget over “slow-onset disasters.” This means that in order to draw attention to a long-standing cause, activist organizations resort to staging “pseudo-events” – especially demonstrations. With other social issues, elections, legislation, riots and strikes are news events, while sit-ins and marches are (sometimes) newsworthy pseudo-events. In the energy arena, oil embargoes, blackouts, nuclear plant accidents, new legislation and price spikes are news events.

Real news events are usually covered by “real” news reporters – that is, by reporters who cover politics and foreign policy. Thus, in writing of the first OPEC oil embargo of 1973, Alan Reynolds – then an editor of *National Review* – noted that

Before getting into the shortcomings of energy reporting, it is only fair to consider the constraints that make perfection an unreasonable goal. First of all, the press is rushed. Even the largest newspapers have staffs of only three or four dozen reporters, with four or five people covering Washington. Deadlines are often very tight, though this is less true of news and business magazines. Secondly, members of the press rarely have much technical expertise. The clubby Washington press corps, in particular, is composed of generalists who must cover a wide variety of political issues. The politicians too are rushed and often lack specialized expertise, so the media and politicians continually misinform each other.

Finally, there is a subtle pressure put on the press to limit criticism of government policies, since this can cut off a reporter’s access to vital sources. This pressure tends to divert the media’s attention toward finding fault in the private sector, rather than in public policies. (Reynolds, 1983, p. 3).

This passage, written by a free-market economist, backs into the point frequently noted by media theorists that deadline reporters depend first and foremost on institutional (often government) sources, and therefore tend to construct reality around institutional or official versions of “truth.” Mark Fishman notes that

Quite literally the domain of [news beat] coverage is produced for the newsworker in formally organized settings by clerks, forest rangers, policemen, stock brokers, councilmen, morticians and judges – all certified status incumbents in structural positions of knowledge. (Fishman, 1988, p. 52)

To some extent, this is a simple matter of deadline pressure on the reporter, and of time availability on the part of the source: A hard-working reporter on a small mountain-town daily told me “When I can’t get anyone else on the line, the Forest Service will always pick up the phone” (Hamilton, 2006). Many public officials are compelled by “sunshine laws” to talk to reporters, while corporate officers often feel that, aside from their statutory responsibilities to release financially significant data, they don’t need to talk to the press (Raabe, 2006). Large institutions, public or private, have public relations officers who will return phone calls and whose job it is not only to construct official reality but to cultivate relationships with reporters. On a news desk this dialog inevitably affects the reporter’s view of reality. Says Gans:

Beat reporters become identified with the sources with whom they spend so much time, and they have little contact with an agency’s adversaries. They may not personally share the political values and objectives of their sources, but they accept agency practices and let

themselves be used to advance agency objectives, particularly when the result is a dramatic or exclusive story. (Gans, 1979, p. 135)

Moreover, a reporter's status within the newsroom depends in large measure on the number, status and utility of her sources (Tuchman, 1978, p. 69). In short, a competent reporter has plenty of productive sources.

The source as labor-saving device

We might reasonably expect a time-stressed reporter to depend on public relations sources for highly technical information, including pre-digested budget forecasts, energy production estimates, and competitive data. Fishman makes the same point, adding that this labor-saving function of sources goes straight to the newspaper's bottom line:

In effect, an enormous network of governmental agencies, corporate bureaucracies, and community organizations underwrite the costs of news production. The modern news organization is predicated on this invisible subsidy. (Fishman, 1988, p. 151)

The availability of prepared material also has an important agenda-setting function: Reporters depend on press releases for story ideas (Fishman calls this "news detection") and will often pursue a story well-supplied with predigested statistics over a competing story that may require a lot of digging and spreadsheet analysis. Renewable energy advocates and utility company press agents alike understand this issue. Shoemaker and Reese (1991) suggested that elite institutions have an advantage in influencing reporters, but Tuchman (1978, p. 134) notes the importance to social movements of attaining news relevance through the recruitment of reporters.

The efficient allocation of a reporter's time grows more important in an era of newsroom cutbacks. In May, 2006, the Project for Excellence in Journalism of the Pew Research Center estimated that American newspapers would slash up to 1500 newsroom jobs in the course of the year (PEJ, 2006). The Project noted a corresponding cut in news hole pages. In this environment, many hard-working reporters will take all the help they can get from sources.

Conflict, narrative and the perception of bias

Bocking (p. 23) notes that both environmental advocates and industrial interests are eager to influence the media – advocates by “selling” the validity of new science and industry by “selling” the uncertainty of new science. Lowe & Morrison (1984) note Jurgen Habermas' argument that news normally functions to reproduce a dominant or institutional ideology, but they also explain that pollution events and disastrous blackouts “command media attention and lead reporters to question technology.” Moreover, the journalistic preference for the negative and dramatic narrative over the positive and unfolding narrative leads media to typecast actors as good and evil: people vs. bulldozers, community vs. speculators, species vs. polluters, “cleans” vs. “dirties.” Pryor (1972) warns that it's nearly impossible for reporters to avoid charges of bias:

The interpretive writer often prognosticates disaster. This is not a neutral act but involves some sort of commitment to those being warned. Words such as “polluted,” “toxic,” “clean” or “natural” take on moral overtones. Sources in the industrial camp become wary and defensive. With the kind of information an investigative writer picks up,

it becomes difficult to remain neutral toward a particular industry that he knows is capitalizing on deceit and inaction. (p36)

As we'll see in Chapter 3, the desire to avoid the appearance of bias drives a lot of newsroom behavior.

Saliency

The entire field of agenda research appears to spring from Bernard Cohen's oft-quoted observation that "The press may not be successful much of the time in telling people what to think, but it is stunningly successful in telling its readers what to think about." (Cohen, 1963) It does this simply by judging a story newsworthy. Because a slowly developing issue rarely fits the definition of news, the public is often left more-or-less blissfully unaware of a long-term social process or impending crisis until an event makes it newsworthy.

Anthony Downs describes this process (Downs, 1972).

He posits that a triggering event catapults a problem to public attention. There is a period of generalized public concern and usually a number of government initiatives in the area. But inevitably attention wanes, the issue loses its ability to capture public attention, and its place is taken by new issues. Finally, he notes ironically that little is likely to have changed in the fundamentals. (Neuman, Just, Crigler, 1992, p. 43)

The salient event doesn't have to be a disaster. It can be the legitimizing entry of a newsworthy celebrity or politician into the arena. Thus Margaret Thatcher legitimized environmental issues with her "green speech" in 1988. Renewable energy saw just such legitimizing events in 2006. In January, George W. Bush made front-page headlines with a State of the Union address

noting that the U.S. is “addicted to oil.” In May, the documentary film “An Inconvenient Truth,” featuring Al Gore, reached theatres. In September, the industrialist Sir Richard Branson announced that he would dedicate \$3 billion in transportation profits to renewable fuels research. In October, reports began to appear regarding the Fourth Assessment of the Intergovernmental Panel on Climate Change, and the British Government released its Stern Review on global warming. Soon thereafter, Al Gore’s film was nominated for an Oscar – and on February 25, 2007, won the award. All these events made front page news, and in Chapter 4 I’ve plotted the associated sharp rise in coverage of renewable energy.

Television and media stratification

A number of studies suggest that intense, long-term press coverage eventually affects public opinion, while single-event or short-term series have minimal impact on public opinion and attitudes. Wiebe (1971) reported that people acknowledge environmental issues only when they’d been exposed to a threshold level of media impressions. Erickson and Van Tubergen (1971) found that a television special on 161 NBC stations produced a flood of 1600 pro-wolf letters to the Bureau of Sport Fisheries and Wildlife. Ostman and Parker (1987) found that teenagers knew more about the environment than did their elders, both before and after media exposure. While Neuman, Just and Crigler suggest that the one-way communication of newsprint makes for inefficient teaching of political meaning (1992, p. 3), the experience of the

energy reporters I interviewed is quite different: They noted frequent queries from passionately interested and well-informed readers (see Chapter 5 for a discussion of how reporters sometimes act literally as telephone or email mediators of information directly between utility companies and baffled or enraged ratepayers).

Early studies reported that television programs influence viewers' attitudes toward environmental issues, but the effect is short-lived. The same studies, and parallel, contemporary studies, report that habitual readers of newspapers and magazines gain more knowledge of specific complex subjects than do habitual television viewers. Ostman and Parker (1987), with a telephone survey of the Ithaca, New York area, concluded that while newspapers provide a credible and enduring news source, television viewing has a negative correlation with environmentally sensitive behavior.

The more television the respondent viewed, the less likely she or he was to behave in an environmentally positive manner, the less critical he or she was of media handling of environmental topics, and the less likely he or she was to have discussed the subject with others. (Ostman & Parker 1987, p. 4)

But Neuman, Just and Crigler conducted a survey of 1500 experimental subjects who submitted to a test of cognitive skills, and found that the print-reader knowledge premium is accounted for by their superior capacity for learning, and not by a deficit of the television medium itself. "It appears," they wrote, "that television news coverage has been blamed for the skewed media preferences of the cognitively advantaged." (Neuman, Just & Crigler, 1992, p. 113) Moy and Gastil (2006) confirmed that literate audiences gather more

pertinent information for “deliberative conversation” than do habitual television viewers.

If readers are “cognitively advantaged” over viewers, are scientists cognitively advantaged over non-scientists? Witt’s observation (1972) that scientists write for other scientists in scientific journals opens the issue of a hierarchy of readers that may match a hierarchy of news media. At the top are technical journals serving a very narrow and sophisticated specialist audience. Next comes a group of monthly magazines (*Scientific American*, *The New Yorker*, *The Atlantic*) aimed at a literate and inquisitive audience and containing feature articles of sufficient length (3,000 to 12,000 words) to explain fully a complex technical, economic or political topic. Next come the weekly newsmagazines (*Time*, *Newsweek*, *The Economist*) with articles of newspaper length and longer, but prepared on a weekly deadline that allows for significant research by teams of reporters, some of them specialists, and carefully fact-checked (Gans, 1979). Daily newspapers, especially local papers, comprise mostly deadline stories written quickly, from a limited choice of sources and with, usually, inadequate time for thorough fact-checking. Lightest in information density are local broadcast news media, assembling provisional stories on the fly for transmission several times daily.

If print and broadcast media fall into a natural information hierarchy, so do Internet media. The Internet originated, at the Defense Advanced Research and Development Agency, as a communication tool for scientific researchers, and research institutions still use it that way. But a vast bottom-of-the-pyramid

culture has grown up with the emergence of Web sites like youtube.com, myspace.com, and email spam. I'll discuss these issues in more detail in Chapter 5.

Specialist beats

When reporters spend more time with scientists, they report more thoroughly and more accurately (Furlow, 1994). Where media do a generally lax job of reporting, publics hold a generally shaky grip on the facts. A whole sub-genre of studies described the misinformation and misconceptions held by citizens: For instance, Kempton (1991) found that while most news consumers had heard of global warming, they held inaccurate ideas about its causes. As I'll show in Chapter 3, newspapers that hire or train reporters with special expertise to cover complex issues do, in fact, produce more frequent and reliable reporting on those issues.

The specialist reporter has a specific beat. See Gaye Tuchman's *Making News* (Tuchman, 1978, p. 29) for a discussion of turf issues amongst different beat reporters and their mediation by editors. Like most complex issues, energy is covered best by a trained reporter who can write quickly about breaking events without misrepresenting the underlying economic and technical issues. An 800-word news story cannot reasonably provide deep background, but it should not oversimplify underlying issues to the point of distortion. The energy reporter may be attached to the business desk, the science or the environmental desk, depending on the market. The relative rarity of the energy beat accounts

in large measure for the wide variation in the frequency of renewable energy stories demonstrated in Chapter 2.

Counter-claims, political speech and production of consensus

Tichenor, Donohue, Olien and Bowers (1973) suggest that environmental messages begin with “insider” communication amongst scientists and activists, then are discovered and popularized by mass media, eventually generating political speech.

Barry DeGeorge (1987) suggests that the corporate vs. advocate dyad speaking on either side of an issue, and mediated by a reporter, mirrors the classic American political story, featuring Republican vs. Democratic agents speaking on either side of an issue, and mediated by a reporter. In both examples, the reporter achieves “objectivity” or “balance” by giving equal weight to both voices, regardless of the technical merits of the case.

DeGeorge notes that the word “medium” has several definitions, and that two are pertinent to the role of the press. The first is in the sense of a conveyor of meaning analogous to air as a medium for sound; the second is as a negotiator between opponents. The media mediate disputes for their audiences in both senses. Reporters and editors seeking to translate stories into narrative instinctively describe disputes between regulators and utility companies, between ratepayers and utility commissions, and between clean energy advocates and the coal industry. Advocacy groups on the one hand, and

corporate press agents on the other, are only too happy to hand reporters an endless series of ready-made battles.

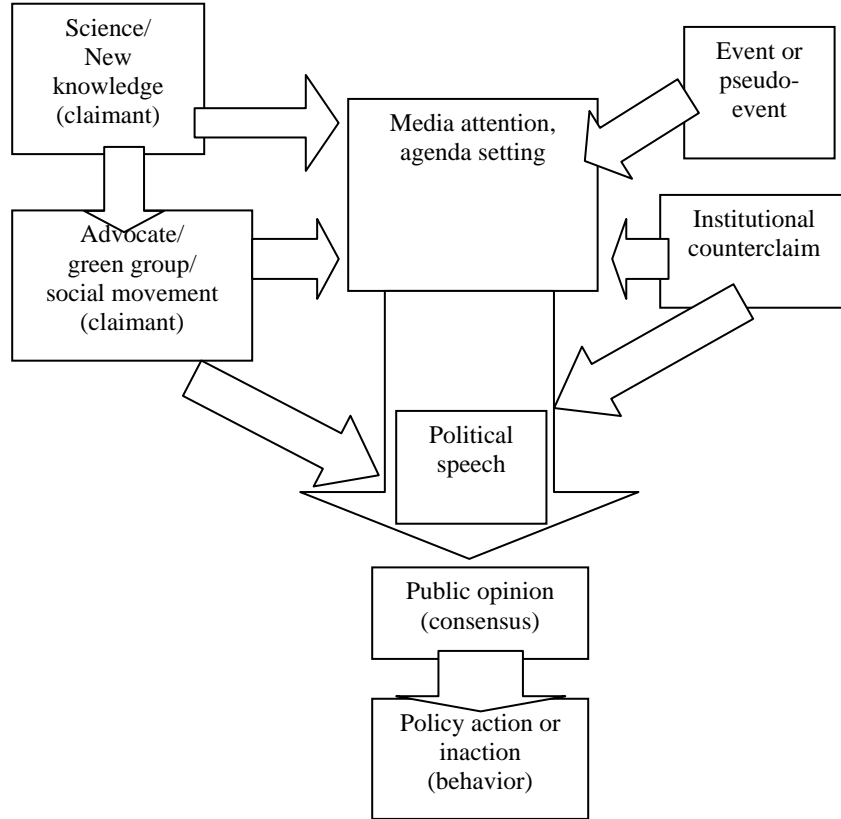
American media have experienced a history of counter-campaigns by large institutions, usually corporations. For instance, in the 1920s, General Motors and the oil companies waged a successful media counter-attack in defense of leaded gasoline, aimed at the Harvard researcher Dr. Alice Hamilton, who had drawn attention to lead's health hazards (Neuzil & Kovarik, 1996, p 129). A less successful campaign was launched by the chemical industry in defense of DDT and PCB, following the 1962 publication of Rachel Carson's *Silent Spring*. A number of papers describe counter-environment campaigns in the media: Sandman (1973) measures the public opinion effects of a 1970 campaign by Chevron Oil to obfuscate the contribution of auto exhaust to air pollution. Hepburn and Hepburn (1985) recount how the Reagan Administration's State Department labeled as "foreign propaganda" a set of movies by the Canadian Film Board on the subject of acid rain pollution, with a resultant measurable boost in demand for the films. On the energy policy front, McCright and Dunlap (2000 and 2003) have documented a decades-long conservative campaign to challenge global warming as a concept, and to frame efforts to reduce atmospheric carbon pollution as anti-profit, anti-capitalist and even anti-American. The effect of this campaign was to delay policy action so long as politicians perceived that a significant portion of the public remained skeptical of energy and climate issues (see Yanovitzky, 2002, for a discussion of this mechanism). At the end of March, 2007, the Time/ABC/Stanford

University poll reported that 13 percent of the 1002 Americans queried answered “no” to the question “Has the world’s temperature been going up slowly over the past 100 years?” This is down from 22 percent in 1997. And 19 percent of those who answered “yes” believe the warming trend is a purely natural phenomenon (*Time*, 2007). Despite the fact that an overwhelming majority of the public accepted the reality of anthropogenic global warming, the policy mechanism lagged far behind. I’ll discuss this in more detail in Chapter 5.

In responding to pressures from clean-energy advocates on one side and resistant utility companies on the other, reporters seek a centered or balanced position: a *medium* – a third definition of the word – between left and right. Quoting two sources on either side of a debate, and thus avoiding the appearance of endorsing a potentially deviant position, is the reporter’s day-to-day contribution to political consensus, defined here as a majority view sufficient to approve action, and not as unanimity (Hall, 1986, p, 86). The daily newspaper, as an institution, normally protects its “objectivity” – a key element in its access to advertisers, audiences and sources – by enforcing non-partisan behavior on reporters through editorial supervision (Starr, 2004, pp. 130-139).

This evolution of media attention to the issues, with public opinion effects and industry reaction, leads to a dialectic model of information flow, in which the main line of consensus expressed by mainstream reporters is pushed left and right by new knowledge (science, mediated by advocates) and events, and by reactive institutions or claimants. It may be diagrammed as in Figure 2:

Figure 2: Centripetal model of mainstream channeling



Note that this model considers only information offered to media, and ignores any direct communication between science and policy makers, undisclosed to the public (a great deal of government and military business is transacted outside the view of media, including all classified activity). The central axis of the chart represents the “mainstream,” and daily newspapers generally attempt to remain within it, regardless of how it may swing to the right or left with the tenor of the times.

In a democracy, this centripetal process can be of value in countering the tendency of isolated publics to polarize – that is, to depart from a central consensus that may lead to action. Following the weakening of what has been

called the Roosevelt-era Liberal Consensus, we have seen that when public sentiment is sharply polarized, political will and policy action may be paralyzed. In their experimental study of political discussion groups titled “What Happened on Deliberation Day,” Schkade, Sunstein and Hastie (2006) note that

On the large issues of the day, discussions by like-minded people fueled greater extremism, and also increased divisions between liberals and conservatives. At the same time, both liberal and conservative groups became more homogeneous; deliberation reduced internal diversity. There is every reason to believe that results of this kind occur not simply in experimental settings, but in many domains in which citizens engage in political discussions with one another. (Schkade, Sunstein, Hastie 2006)

To the extent that reporters quote both sides of a dispute, they serve a binding function in society. And to the extent that “mainstream” media lose audience and influence, publics can be expected to grow more polarized. Boykoff and Boykoff (2003) described how “balanced” reporting in the mainstream press acts to obscure the scientific consensus on climate issues, but they didn’t separate specialized beat reporting from general-interest political reporting.

Chapter summary

The reviewed literature suggests that energy and environmental policy matters are treated by the media and by the political process in very much the ways in which all complex social issues are treated. Interviews in Chapters 2 and 3 will show that renewable energy stories are handled, when handled at all, as a subset of the energy and environment beats. Classic studies of press theory and

newsroom sociology adequately account for most problems in renewable energy reporting. I will explain the few exceptional issues in the concluding chapter.

Scientists have rarely spoken directly to the public, and may rarely do so in future, with the result that policy action will continue to depend in large measure on mediation of their message by activists, educators and the press. Media do a better job of covering complex issues when they employ specialist reporters with technical or economics training; but in today's financially pressed news environment, specialized reporters are often asked to handle broader beats, which can dilute the attention paid to specialized stories (Raabe, 2006). The political economy of news production depends in large measure on labor-saving "pre-production" by institutional press agents. By dint of their labor-saving function, these press agents play an important role in news detection and story selection, and therefore in both agenda setting and reality construction. In Chapter 3, I'll show through content analysis and stakeholder interviews how these realities affect the relationship between working reporters and their sources.

The newsworthiness of a renewable energy story is also related directly to its local relevance and to its connection to important breaking news on other beats. Chapter 4 comprises an analysis of renewable energy in the cycle of breaking news.

Habitual readers know more, and care more, about complex issues than do habitual broadcast consumers. I'll discuss this in more detail in Chapter 5.

To start, however, we need to look at our research questions, beginning with how some papers cover renewable energy, and others do not. This is the subject for Chapter 2.

Chapter 2: Space and time

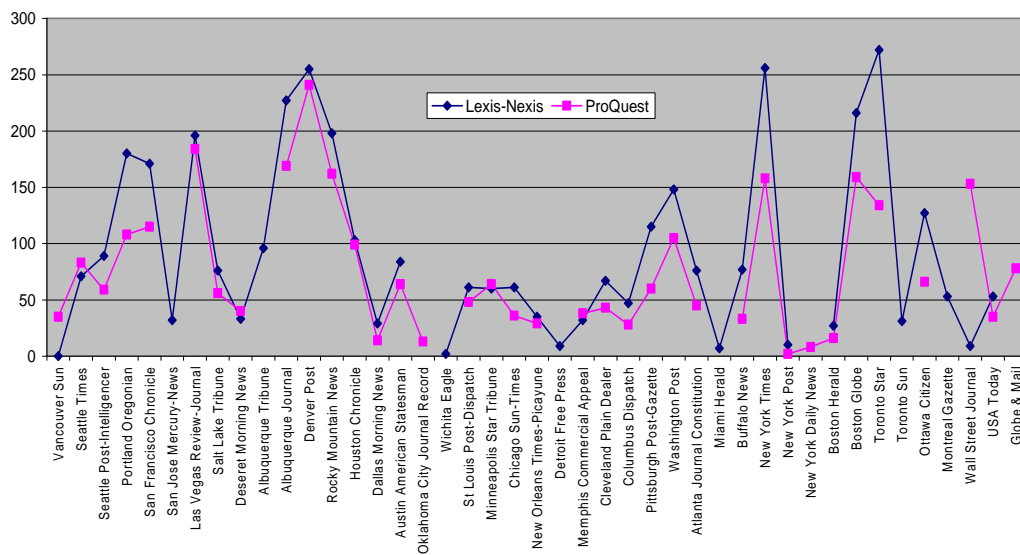
*Who covers renewable energy, who doesn't,
and how agendas change over time*

In order to examine good practice in renewable energy reporting, I first needed to find it. As a starting point, I needed to identify which papers cover renewable energy issues regularly, and which ones do not. Using the Lexis-Nexis and ProQuest databases of newspaper content, I surveyed major English language daily papers across North America. The article count shows that coverage of renewable energy issues in daily newspapers is geographically and temporally uneven.

I used these data to narrow my sample. I wanted to compare newsroom practices at high-frequency papers (newspapers that cover renewable energy regularly) to those at low-frequency papers (newspapers that cover the topic sporadically). As high-frequency papers, I chose the two Denver dailies, the *Denver Post* and *Rocky Mountain News*. The pairing also gave me an example of competing papers. For the low-frequency example I picked the *Chicago Sun-Times*, because of its consistency over time and for the fact that, like Denver, Chicago is a two-paper town. The rival *Chicago Tribune*, as noted, appears only on the six-month chart, but covers renewable energy at a comparable level to the *Sun-Times*. However, most news markets today are single-paper towns, and I wanted to include one of those for a contrasting look at newsroom praxis. For a moderate-frequency example, I therefore chose the *San Francisco Chronicle*, which no longer has serious competition in its city-core market.

For the initial survey I searched the terms renewable energy AND wind AND power in the full text of 43 major North American papers, over the ten-year period ending Sept. 30, 2006. To include all beats, I accepted any occurrence of this combination, whether as local news, wire service story, op-ed piece or letters-to-the-editor. The search produced 3691 citations in Lexis-Nexis and 2780 citations in ProQuest, graphed West to East in Chart 2

Chart 2: Renewable energy terms - Daily Papers - 10 years
 Search terms: Renewable energy +wind +power
 Distribution: West to East



This spiky pattern makes intuitive sense. More renewable energy stories appear in West Coast papers, with traditions of strong environmental reporting; in Rocky Mountain states, where a history of oil drilling and coal mining means that key papers have strong energy beats; and in national papers (*The New York Times*, *The Boston Globe*, *The Toronto Star*) based on the East Coast.

Coverage was frequent (more than 190 articles in ten years) in the *Las Vegas Review Journal*, *Albuquerque Journal*, *Denver Post*, *Denver Rocky Mountain News*, *New York Times*, *Boston Globe*, and *Toronto Star*.

Moderate coverage (more than 100 articles in ten years) appeared in the *Portland Oregonian*, *San Francisco Chronicle*, *Houston Chronicle*, *Pittsburgh Post-Gazette*, *Washington Post*, *Ottawa Citizen* and *Wall Street Journal*.

Sporadic coverage (50 to 100 articles in ten years) ran in the *Seattle Times* and *Seattle Post-Intelligencer*, *Salt Lake Tribune*, *Albuquerque Tribune*, *Austin American-Statesman*, *St. Louis Post-Dispatch*, *Minneapolis Star-Tribune*, *Chicago Sun-Times*, *Cleveland Plain Dealer*, *Atlanta Journal-Constitution*, *Buffalo News*, *Montreal Gazette*, *USA Today* and *Globe & Mail*.

Skimpy coverage (fewer than 50 articles in ten years) ran in the *Vancouver (BC) Sun*, *San Jose Mercury-News*, *Salt Lake Deseret News*, *Dallas Morning News*, *Oklahoma City Journal-Record*, *Wichita Eagle*, *New Orleans Times-Picayune*, *Detroit Free Press*, *Memphis Commercial-Appeal*, *Columbus Dispatch*, *Miami Herald*, *New York Post*, *New York Daily News*, *Boston Herald*, and *Toronto Sun*.

To confirm that the papers I selected for closer study have consistent editorial policies over time, I repeated the ten-year survey over the five-year and six-month windows. The results are graphed in Charts 3 and 4, and closely mirror the pattern of the ten-year chart. This suggests that a typical newsroom's attitude toward the general subject of renewable energy is largely consistent over the decade.

Chart 3: Renewable Energy terms - Daily papers - Past 5 years

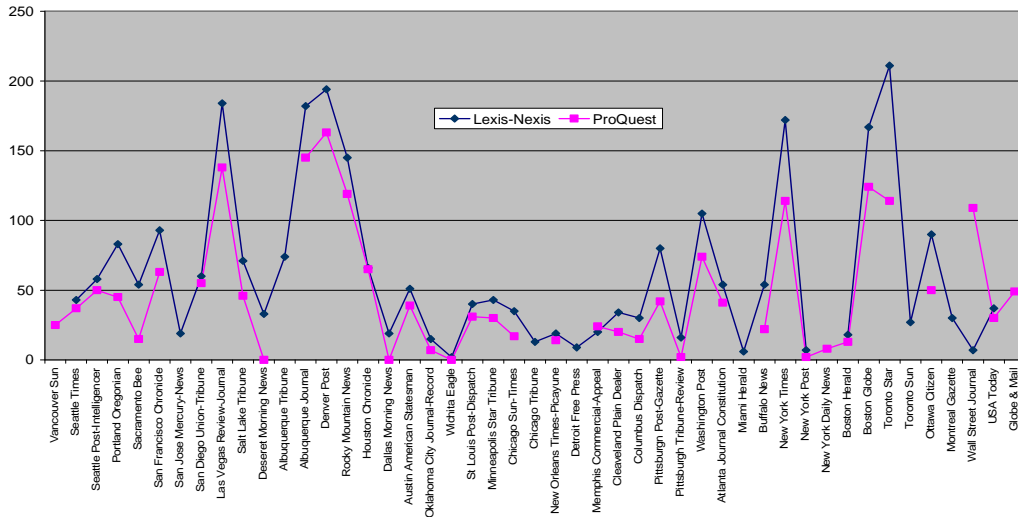
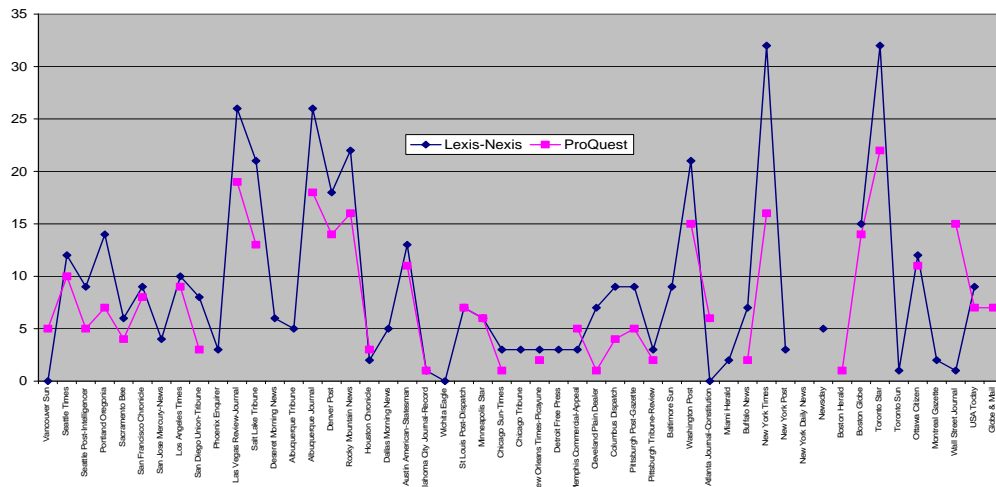


Chart 4: Renewable Energy terms - Daily papers - Past 6 months



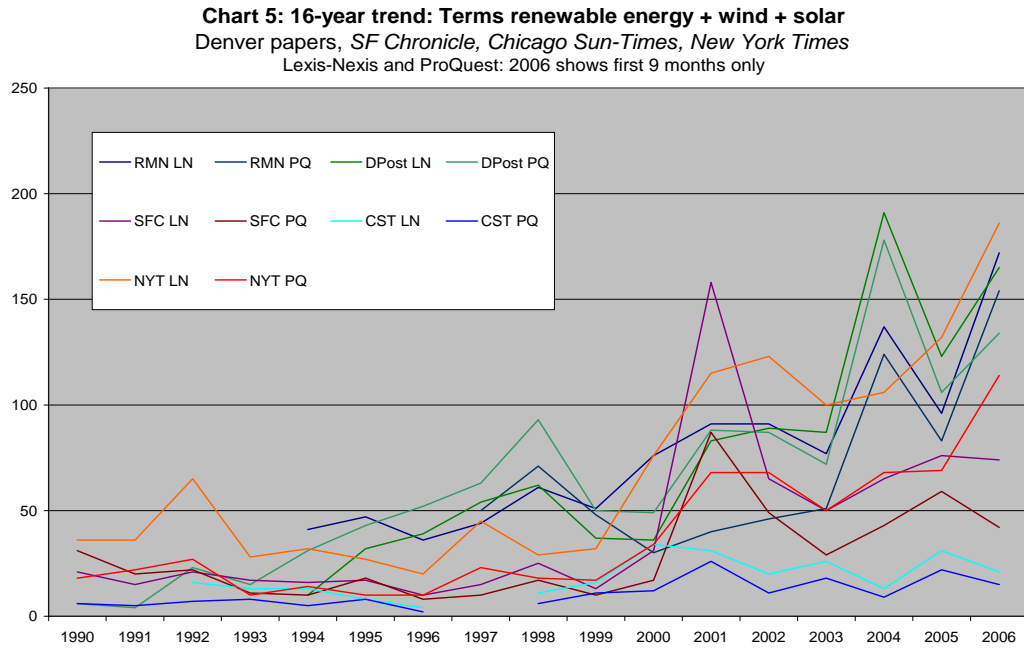
I speculated that this consistency over time is more likely to derive from stable institutional structures and outside influences than from the tacit or explicit policies of shifting editorial staffers. Chapter 3 deals with this issue.

A few prominent papers are poorly represented in the databases. The *Baltimore Sun* and *New York Newsday* drop stories more than six months old. The *Los Angeles Times*, *Chicago Tribune* and *Sacramento Bee* began uploading

stories only in the first quarter of 2002, the *Pittsburgh Tribune-Review* in January 2001, and the *San Diego Union Tribune* in January 2000.

Frequency of coverage and energy events

Chart 5 maps a long-term survey, showing the rising incidence of



renewable energy references in the Denver dailies (green and dark blue lines), the *New York Times* (red and orange lines), the *San Francisco Chronicle* (brown and purple lines) and the *Chicago Sun-Times* (light blue lines). Note that both Lexis-Nexis and ProQuest databases were queried for these data, and the chart accordingly shows two lines for each newspaper.

Energy pricing events

Associating spikes in the data to specific news events is straightforward: it's simply a matter of noting the headline content. See Appendix 1 for a sample data sheet with headlines – each of the charts in this paper was built from a similar data sheet.

Specifically, Chart 5 above shows four prominent data spikes. The bump in *New York Times* coverage in 1992 corresponds to passage of the 1992 Energy Policy Act. The 1998 spike in the Denver papers represents a flurry of stories about the launch of Windsource wind energy sales, along with the construction and opening of the state's first significant wind farm in Pennequin, Colorado, operated by Public Service Company of Colorado. The two remarkable spikes in 2001 and 2004 represent, respectively, the 2001 California electricity crisis and the 2004 passage of Colorado's Amendment 37 Renewable Portfolio Standard.

The *Chicago Sun Times* covers renewable energy infrequently throughout this period, and shows no upward trend even through the spikes of 2001 and 2004.

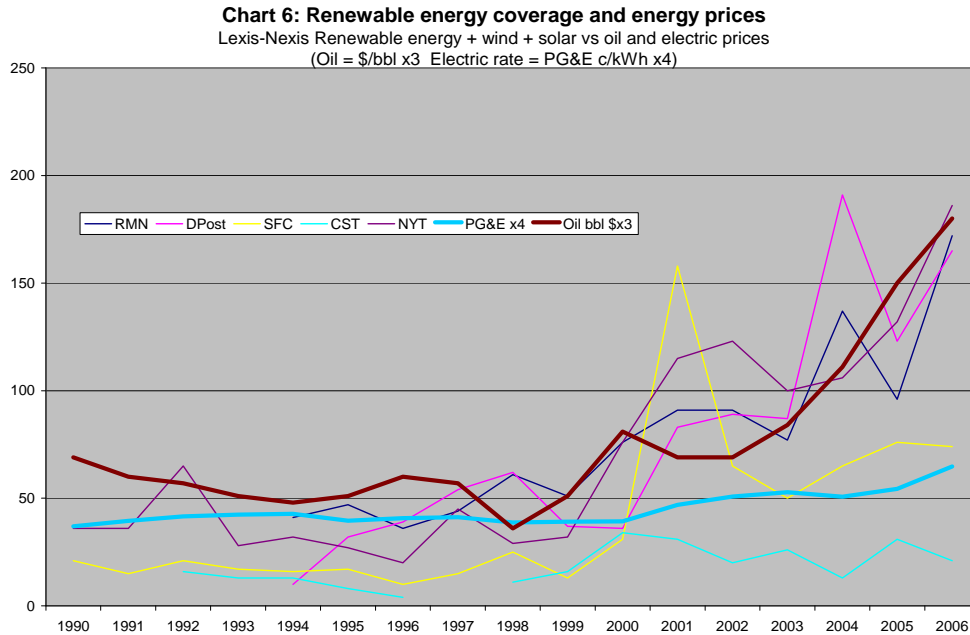
Steve Raabe, energy beat reporter for the *Denver Post*, noted that rising energy costs can drive coverage.

Q: Is energy a tradition at the paper?

A: It's always been a focus for the *Post*, given our multi-state regional mandate. In recent years it's been given more importance due to the rise in commodity prices. We always feel that when it becomes more of a pocketbook issue it's worth more attention. (Raabe, 2006)

To test this observation, I compared this rising frequency of renewable energy stories to consumer energy prices. Chart 6 plots Lexis-Nexis occurrences

of renewable energy stories against the average annual price of a barrel of oil; the pump price of a gallon of gasoline usually equals about four percent of the price of a barrel of oil.



I also plotted the average California electric rate, in cents per kilowatt/hour. In this dataset, the heavy brown line represents the average price of a barrel of oil during each of the years back to 1990 – it’s been scaled to fit this chart by multiplying the price in U.S. dollars by the factor three. The average price of a barrel of oil was \$50 in calendar 2005, and it’s represented on this chart at the 150 mark. The newspaper coverage tracks represent the number of Lexis- Nexis items in each paper, per year, referencing the terms “renewable energy + solar + wind.”

Note that the story count in the Denver papers, and *The New York Times*, follows oil prices closely, except for spikes in 2001 (the California energy crisis) and 2004 (Colorado’s Amendment 37 Renewable Portfolio Standard),

confirming Raabe's observation. However, the *Chicago Sun Times* (light blue line) remains indifferent to the story of renewable energy. The *San Francisco Chronicle* (yellow line) spikes at the 2001 California energy crisis, then roughly parallels California's electric rates (heavy blue line).

The question arises whether reporters and editors respond directly to price rises or to increasing feedback from readers. Reporters at the renewables-responsive papers (Baker, D., 2006; Chakrabarty, 2006; Raabe, 2006) tell us that readers express enthusiasm for renewable energy stories via phone and email (see page 72 for further discussion of this point), and that newspapers do market research to learn about reader interest. Because the audience studies are proprietary, I was unable to quantify increasing reader interest over the years. But Matt Baker, executive director of Environment Colorado, told me that "Everyday voters are way ahead of the decision-makers, the politicians, PUC and utility directors, in understanding energy issues and willingness to pay for it." (Baker, M., 2006)

Baker's claim is supported by a body of consumer surveys, extending back to 1979, suggesting that a healthy proportion of the audience is perennially interested in clean energy issues (see Chapter 4 for sample polling data). The key study of Colorado consumers, published by the National Renewable Energy Laboratory in 1999, found that

Colorado homeowners follow national trends in preferring renewable energy over conventional energy sources. They tend to view nuclear energy, coal, and oil as posing environmental threats when used to produce electricity. Homeowners regard solar and wind power as the best electricity sources from an environmental standpoint. (Farhar & Coburn, 1999)

I'll discuss the phenomenon of the sophisticated reader in Chapters 4 and 5. Here it should simply be noted that, at papers with a tradition of renewable energy reporting, readers frequently communicate their eagerness to read about subject to reporters—and the message, over time, gradually gets through to editors and even to the utility companies. As Steve Raabe of *The Denver Post* told me:

The editors perceived that I was doing too many stories on renewables, and told me to do more oil and gas and rein in the renewables. But we kick around story ideas, and then someone from the upper ranks likes those renewable ideas and says “Why not do more of those stories?” And I say “Because you told me not to.” So there are a lot of whims and unpredictability. I like to do renewables because I still think that's what gets the most reader feedback. And now you're seeing things changing fast. Xcel Energy recently held a press conference at the Pepsi Center with Environment Colorado and Western Resource Advocates, to promote the environmental exhibit they're sponsoring there, with all the environmental groups participating. And they used to be 180 degrees apart. (Raabe, 2006)

By contrast, when I asked a former energy reporter from the *Chicago Sun-Times* if he ever had feedback from readers, positive or negative, on renewable energy stories, he said simply “No. Nothing.” (Wisby, 2006)

Chapter summary

This chapter established that newspapers vary widely in the attention they pay to renewable energy issues, that coverage rises and falls in response to news events and especially, over the long term, to energy pricing issues. It also establishes that an individual newspaper is likely to be fairly consistent over time in its level

of interest in renewable energy. That is, a paper that runs a relatively high proportion of renewable energy stories is likely to go on doing so, and in fact to gradually increase its coverage over time, while a paper that displays relative disinterest in the topic remains disinterested over time.

Chapter 3 examines some of the newsroom practices that may account for these observations.

Chapter 3: Specialist beat reporters and their sources *Territories and the spaces between them*

Sociologist Herbert J. Gans notes that journalists habitually sort stories into

. . . such symbolic complexes as Government, Business and Labor, the Law, Religion, Science, Medicine, Education, the Arts – complexes that have also become sections in the newsmagazines. New complexes are added as new actors and activities come to the fore. (Gans, 1979, p. 19)

This is not just a matter of organizing one's worldview. As discussed in Chapter 1, it's a practical matter of organizing the work process for best efficiency. The daily process of manufacturing a newspaper requires that reporters detect news by contacting sources, shape the news into a narrative (usually based on some disputed issue or conflict), and balance the news by quoting sources on either side of the conflict. This process is most efficiently pursued by a reporter with quick access to a list of reliable sources on either side of any issue likely to be encountered. For purposes of covering a complex issue, the specialized beat reporter with a great Rolodex (or Palm Pilot) is more valuable to the news enterprise than the general assignment reporter who must devote valuable time tracking down new sources for each story.

Thus an editor who needs to cover a complex beat aggressively will, when the financial resources are available, seek out and recruit a trained reporter or two with a track record on that beat. Gargi Chakrabarty has covered the energy beat for Denver's *Rocky Mountain News* since the summer of 2003. Before joining the *Rocky*, Chakrabarty worked on the business desk of the *Indianapolis Star*. When Heather Draper, the energy beat reporter for the *Rocky*, announced

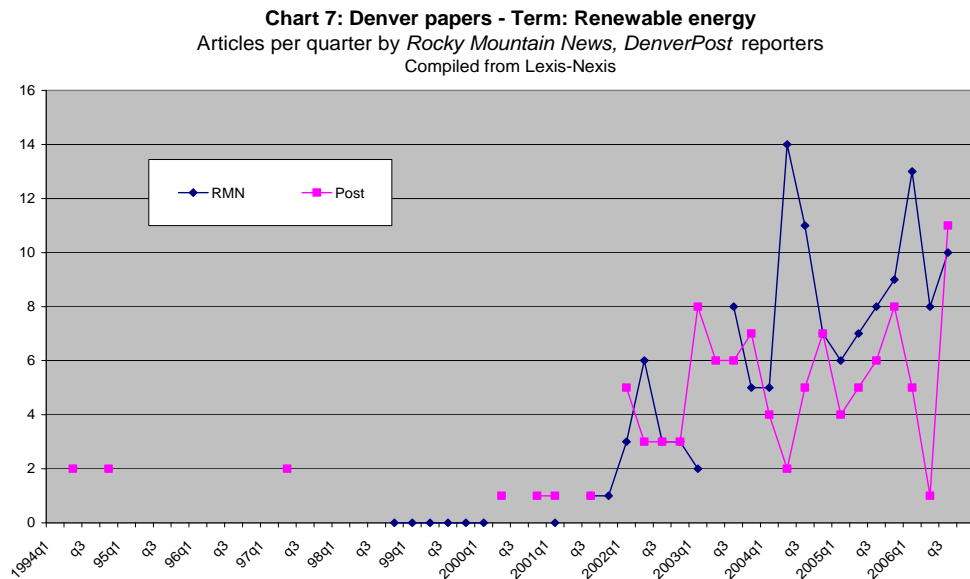
her intention to leave, business editor Rob Reutemann recruited Chakrabarty.

Here’s what Chakrabarty says about the energy beat on a Denver daily:

Colorado has always been a state that’s very strong in energy development. The laws are very rigorous both in environmental protection and in encouraging extraction. It’s a very fair and balanced climate for the energy industry. For the most part local communities are not litigious. There’s a long tradition of mining, and it brings the state a lot of revenue. [Business editor] Rob Reuteman stresses renewables as an emerging industry in Colorado, and when he did my performance review he made it clear that he wants good coverage but he doesn’t set a specific target [for the number of renewables stories]. There’s a lot going on here, with NREL [National Renewable Energy Laboratory], and a lot of start-ups especially in bio-fuels, and projects at the [Colorado] School of Mines, and the Governor’s Office allocated \$10 million for fuel cell development. I should be on top of it. (Chakrabarty, 2006)

Competition between beats

Chart 7, “Denver papers,” shows how Chakrabarty competes with her rival Steve

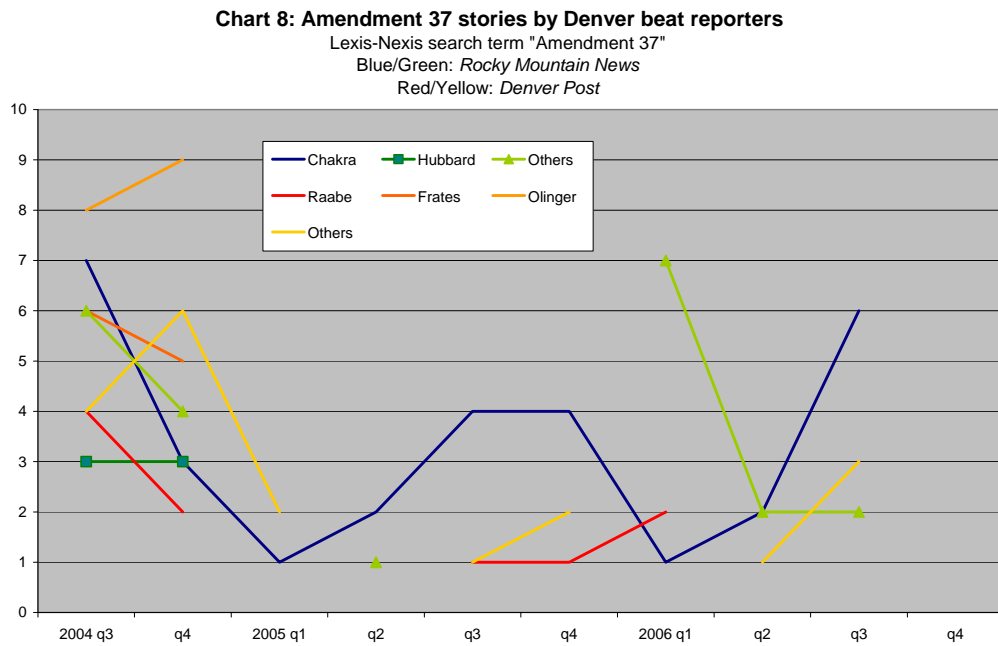


Raabe, the energy beat reporter on the *Denver Post*. In this chart, the blue line represents stories mentioning “renewable energy” in the *Rocky Mountain News*

and written by Helen Draper (up to second quarter, 2003) and by Chakrabarty (from third quarter 2003 onward). The red line represents renewables stories by Raabe at the *Post*.

Note the spike in Chakrabarty’s production for Q3 2004, during the campaign to pass the Colorado ballot initiative Amendment 37. Chakrabarty was part of the team that covered the pre-election campaign. By contrast, during that campaign the *Denver Post* ran nine stories on renewable energy and Amendment 37 – most of them handled by political and state-house beat reporters (Frates and Olinger, for instance), rather than by Raabe on the business desk.

Chart 8, “Amendment 37: Denver beat reporters,” traces distribution



among Denver’s daily reporters of stories mentioning the Amendment 37 initiative, which imposed a renewable energy portfolio standard on Colorado’s investor-owned utility companies. *Rocky Mountain News* staff are depicted with

blue and green lines, *Denver Post* reporters with red and yellow lines. Note that Chakrabarty of the business desk handled the bulk of this work for the *Rocky*, with several metro desk reporters filling in during the election reporting in Q3 and Q4 of 2004, and again when Xcel Energy announced launch of the RPS rebate program in Q1 of 2006 (the metro desk includes the environmental reporter Todd Hartman). At the *Post*, Steve Raabe, the energy beat reporter, took a back seat on this issue to the political reporter Dave Olinger. The metro desk includes the environmental reporter Kim McGuire. (The other trough in Raabe's reportage comes in Q3 2006, when he spent three months as a business desk editor.)

Allocation of renewable energy stories is problematic at every paper.

Chakrabarty's lock on the subject at the *Rocky* is unusual. Steve Raabe notes that

Any energy stories that have an environmental aspect go to the metro desk. . . . It's covered by Kim McGuire and by Jeremy Stone, who's new. We had a very competent and aggressive guy, Theo Stein, who left a few months ago to be an editorial page editor at a daily someplace in Maine. (Raabe, 2006)

At *The New York Times*, renewable energy stories have recently appeared under a dozen different bylines, but most often are written by Andrew Revkin (science desk), Felicity Barringer (environment), Matthew Wald (transportation) or Kirk Johnson (politics). At the *San Francisco Chronicle*, energy beat reporter David R. Baker explained

. . . If it's something in the California legislature then it goes to Mark Martin or Matthew Yee in our Sacramento bureau. If it's a Federal issue it goes to Ed Epstein [in the *Chronicle's* Washington bureau]. Some of the packages, like international conferences, are for foreign correspondents like Rob Collier. Then there are times when our environmental people do it. (Baker, D., 2006)

The issue of dispersion of stories across beats isn't unique to renewable energy. Clark and Illman note

Studies of the development of the environmental beat have also highlighted the importance of news-gathering routines. In the early days, "the environment" did not fit easily into any of the existing beats. Issues were covered but in a piecemeal fashion, as part of coverage of politics, business, health, the outdoors, science, or consumer affairs . . . (Clark & Illman, 2003)

The following tables demonstrate how renewable energy sources may be distributed between beats, desks and sections. In order to see how political stories involving renewables might be allocated amongst news divisions, I queried Lexis-Nexis for recent stories containing the terms "state law" + renewable energy + either California or Colorado. The results are enlightening. Compared to Colorado issues, California issues drew more coverage from papers across the country, and roughly twice as many stories. The California stories ran longer, too.

**Table 1: California state law
Lexis-Nexis search terms "state law"
+ California + renewable energy
2000 to 2006 all newspapers (n=76)**

Section	Items	Average length	Section p1
News (16 papers)	46 (65%)	1092 words	22*
<i>Politics</i>	23		
<i>Environment</i>	5		
Business (10 papers)	12 (17%)	1310 words	11**
<i>Energy</i>	5		
Op-Ed (9 papers)	10 (14%)	974 words	
Letters (4 papers)	5	N/A	
Money (1 paper)	1 (1.4%)	2318 words	1
Real estate (1 paper)	1 (1.4%)	1984 words	1
Home (1 paper)	1 (1.4%)	1622 words	
Total (excluding letters)	71		

*Includes 11 front-page stories

** Includes 1 front-page story

**Table 2: Colorado state law
Lexis-Nexis search terms “state law”
+ *Colorado* + renewable energy
2000 to 2006 all newspapers (n=40)**

Section	Items	Average length	Section p1
News (7 papers)	15 (43%)	798 words	3
<i>Politics</i>	6		
<i>Environment</i>	3		
Business (4 papers)	12 (34%)	800 words	9*
<i>Energy</i>	6		
Op-Ed (3 papers)	5 (14%)	727 words	
Letters (3 papers)	5	N/A	
Money (1 paper)	2 (6%)	1159 words	
Real estate (1 paper)	1 (3%)	1238 words	1
Total (excluding letters)	35		

*Includes a single front-page story

California stories were three times as likely to be classified as news – typically political or environmental news – rather than as business or energy stories. When covered as a business or energy story, a California item ran about 25 percent longer, implying better depth and expert knowledge on the part of the reporter, compared to coverage as a news or political item. See the Appendix for the full breakdown of these searches by newspaper, desk, writer and story length.

When stories fall through the cracks

When the editorial budget is not driven by an event like an election or crisis, the beat editor sets the agenda, choosing which stories to cover within the beat. The news hole contains only so much space, reporters have only so much time available, and not all stories that come to their attention can be covered. David Baker said

Sometimes you shake your head ruefully and think, Why couldn't we do that story? For instance there was a small setup piece on a solar energy conference in San Jose recently. I missed going to it. I just had too much on my plate—you can't do everything. There are lots of reports that come out [from government agencies and advocacy groups] that we just have to make judgment calls on. (Baker, D., 2006)

A story that clearly belongs to a specific beat is more likely to draw newsroom attention, and coverage, than a story that falls into a gray area between beats. Some reporters are oblivious to this issue. Gary Wisby, who shared the environment and energy beat at the *Chicago Sun-Times* with Mary Wisniewki, said “We'd have picked up anything that was a legitimate story.” But Chakrabarty confirmed this potential:

Question: Do renewable issues tend to fall through the cracks between beats?

Answer: At the Indianapolis Star, Tammy Weber was the environmental editor, and sometimes she did these stories. Yes, I can see how that would happen. We also didn't have organized sources pitching us stories the way we do in Denver. (Chakrabarty, 2006)

Mediating sources

This brings us to the issue of the beat reporter's developed sources. Colorado is home to about a dozen environmental and energy advocacy groups, from the American Solar Energy Society and the Colorado Solar Energy Industries Association, to the Rocky Mountain Institute and the Western Business Coalition for Clean Energy Technologies. It's also the site for several major research centers: the National Renewable Energy Laboratory, the National Center for Atmospheric Research, the University of Colorado/Boulder and the Colorado School of Mines. Between them, these institutions put out hundreds of press

releases a year. Chakrabarty estimated she gets 10 or 15 press releases daily from advocacy groups, and Raabe said “At a rough guess there’s 15 to 25 contacts a day, counting local and national groups. There are lots of groups that are very competent at getting their message out.” (Raabe, 2006).

At the *San Francisco Chronicle*, David R. Baker enjoys “10 to 12 emails a day [from environmental advocacy groups] I have to triage through.” He works within walking distance of the national headquarters of the Sierra Club, and most of the national environmental advocacy groups have regional offices nearby. In addition, the impressive facilities of both Stanford University and the University of California at Berkeley lie within half an hour’s travel by train. Story detection is not an issue for these reporters—they are besieged and cannot possibly handle all the stories pitched to them. “The green advocates are quite frustrated with me,” said Baker. “They’d like more ink from me.” (Baker, D., 2006)

The easy availability of story leads is part of the reason the Denver and San Francisco energy reporters devote about 20 percent of their stories to renewable issues (that figure is calculated from my content analysis of their work). At the *Chicago Sun-Times*, Gary Wisby, recently retired, was not so lucky. Story ideas from advocacy groups arrived infrequently. “Every once in awhile they’d have a press conference to release a new study or something,” Wisby said. “Four or five times a year. I always wrote about them.” (Wisby, 2006). The result: Wisby estimated that only about 10 percent of his energy stories mentioned renewables.

Reporters consider it very important to maintain good relations with sources on both sides of an issue. Historically, the opposition to renewable energy projects consists of the fossil fuel extractive industries and the electric utility companies. In an era when building a wind farm was more expensive per unit of energy produced than building a coal plant, it made economic sense for utility companies to resist renewable energy initiatives. In recent years wind has become cost-competitive with fossil fuel, at least when production tax credits and other subsidies are calculated in, and utility companies often plan for a time when carbon taxes may make wind cheaper than coal (Komor, 2004, pp. 35-38). These considerations reduce the conflict potential in renewable stories. But as recently as 2004, utility companies waged push-back campaigns against attempts to legislate renewable portfolio standards (RPS), which compel them to buy power from wind farms or other renewable sources. Thus, whenever a reporter writes about a renewables proposal, there is an obligation to call the utility company for a countervailing view. Matt Baker, executive director of the renewable energy advocacy group Environment Colorado, described the reporter's situation this way:

Renewable energy is a sexier issue [than light rail] and therefore I was surprised at how difficult it was to get media interest. Given the high price of natural gas, wind in particular would save the utilities money. Xcel and TriState opposed Amendment 37. It wasn't about the money – it was about control, about who was going to tell them what to do. Internally, their own engineering people were telling them that wind would save money. They didn't like the solar piece. Now, with new leadership and a track record for wind, it's hard to see Xcel ever opposing a renewable project.

But [during the campaign] media wouldn't act as a referee. Steve Raabe got it, but he has a business beat and wouldn't report it once it got on ballot – it became a political story [for the *Post*]. Energy issues often

fall through the cracks. They go to the business beat more often, which is good because you get to talk about costs, which for wind is a big plus. As a business story, the environment seems to have nothing to do with the story. [Environmental reporter] Todd Hartman at the *News* occasionally does a good piece. His editor insists on “balance” from the other side. What we need is a Dave Olinger [the *Post* political reporter who covered the Amendment 37 ballot issue] – someone analytical. (Baker, M., 2006)

John Anderson, a senior engineer at the Rocky Mountain Institute who spent 20 years working at the National Renewable Energy Laboratory, had a different view of why utilities resist building renewable energy projects:

There’s immense inertia [within utility companies]. The leaders are guys our age [late 50s] from engineering, or they’re accountants, with narrow skill sets. Now they’re late in their careers, and we’re asking them to completely rethink the lens through which they look at the world. The utility industry is subject to management fads. It’s tough for the technical and financial guys to distinguish what’s a fad and what’s real. C-level executives get it better than most and have trouble bringing the B-level guys along. (Anderson, 2006)

Reporters can’t risk appearing to advocate either side in the debate between clean-energy advocates and the utility companies. The reporters interviewed described three reasons for wanting to maintain balance between the advocacy groups and the utilities. In no special order: 1) balance is expected by newsroom supervisors; 2) balance leads to respect from sources on either side of a controversy and therefore easy access to sources on both sides; and 3) reporters have internalized the idea that balance is a professional value.

Consequently, even when the reporter sympathizes silently with an environmental advocacy group, it’s compulsory to phone the utility company for a reactive quote – and *vice versa*: When a utility company proposes a project,

it's compulsory to get a quote from a critic. According to Gary Wisby, the *Sun-Times* reporter:

Every time there was a protest by one of the activist groups I'd cover it, to the point where I got tired of them. That's not to say they didn't have plenty of good reason for protesting. They did. . . I always called the utility on this kind of story. They always said the science wasn't there, or it's too expensive [to comply with protester demands], or it would increase costs for the ratepayers. (Wisby 2006)

Steve Raabe at the *Post* took it personally when he was accused of imbalance:

At one point I was told by an editor that there was too much green bias in my coverage. That blew me away because I always thought I was a professional, fair and balanced reporter. I was held in high esteem by the fossil fuel industries for my objectivity. So I was taken aback. (Raabe, 2006)

Gargi Chakrabarty at the *Rocky Mountain News* outlined the very practical reasons for staying in the middle of the dispute: she has at least two separate bureaucracies checking her work.

They [Xcel Energy, the utility company] don't like it when you write tough stories. Their PR department does a sort of good cop – bad cop routine. Someone calls you up and acts tough and unhappy, and then someone else invites you out for coffee and is friendly. It's very important to write in a way that's fair in my own mind, and always accurate. I recheck numbers right up until we go to press. The utilities are very sensitive about numbers and if you get them wrong they have a negative attitude toward you and it hurts your credibility. It's better now that I've been here three years and they know me better. When I first got here in 2003, the price of natural gas spiked. It tripled, and there was a 76 percent increase in gas bills. There was banner story after banner story, and the Xcel folks were very unhappy with me. I heard a lot about it.

Q: And how about when you run a positive story, like yesterday when you reported that gas rates are coming down 43%? Do you hear from them then?

A: Not so much when the story is positive. They tend to challenge us more on tone than on our facts. If you're tough, they think it's a slant

piece. But I think it's fair, since the editors never complain. In my position there are so many people above me, the assistant deputy editor, the deputy editor, the business editor, the editor, the publisher, who read every story in the paper every day. (Chakrabarty, 2006)

If advocacy groups are aggressive in putting their agenda before beat reporters, the utilities are somewhat less so. Raabe said, of corporations in general:

. . . I think because they operate under SEC regulatory requirements, they feel their [quarterly] filings fill the need to communicate.

Q: Does that mean that their press agents operate mostly in a reactive mode?

A: Yes, they do operate more in a reactive than pro-active mode most of the time.

Q: Do you get push-back from them when you have to write something prickly?

A: Significantly, from Xcel Energy. They take a media affairs approach. They have one person who will almost always call back on a story, especially if he finds a problem. (Raabe 2006)

Competition and reader response

One of the characteristics of a good reporter is the kind of news sense that looks for a scoop – beating the competition to a story. Competition implies rivalry with another paper in town, but relatively few markets today are served by two daily papers. Denver and Chicago are among the lucky survivors. In Denver, Chakrabarty at the *Rocky Mountain News* said the rivalry with the *Denver Post* keeps her sharp:

Steve Raabe and I have been good for each other. I like the two-newspaper town. It keeps you sharper. I hate getting up in the morning to see that your rival got a banner story that you don't have. It makes me try harder. (Chakrabarty, 2006)

Curiously, Wisby at the *Chicago Sun-Times* never felt the same kind of pressure.

There wasn't a lot of daily competition from the *Tribune*. The *Trib* takes a larger view. They cover all of Illinois or national issues. The *Sun-Times* covers local stories. The *Sun-Times* is a city and regional paper: The *Trib* is a state and national and international paper.

Q: So in that sense Chicago isn't really a two-newspaper town?

A: (Laughs) I guess you could say that. (Wisby, 2006)

On the other hand, David Baker in San Francisco – in effect a one-paper town since the absorption of *The Examiner* into the Philip Anschutz empire – is keenly aware of competitors around the state and across the country.

The competition on this beat is complex. I compete with the [*San Jose Mercury-News* and the *Contra Costa Times*. The *Los Angeles Times* is very good. Frankly, I compete with the *New York Times* and everyone else. (Baker, D., 2006)

Another factor that keeps a dedicated beat reporter energized is plentiful reader feedback. Here's what Chakrabarty said about feedback:

Q: Do you get response from readers?

A: A lot. On utilities stories I get calls from older readers, people on fixed incomes who want to know more about rates, and whether Xcel is fleecing them. I try to explain the service fee structure, and that the utility just passes along costs. Young people respond to stories about renewables, about the wind programs, about the PV rebates. They want to know how to get the rebates. (Chakrabarty, 2006)

Here's the *Chronicle's* David Baker on reader response to stories about renewable energy:

Readers can't get enough of it – I don't know if we've ever asked [via audience research]. It's what you get calls and emails about, and blogged about. People who [call and write] in tend to be very obsessive about it, with very detailed questions. (Baker, D., 2006)

At the Denver Post, Raabe confirmed reader interest.

Q: Do you get feedback from readers?

A: Disproportionately for renewable energy over other stories. They're more curious and interested in participating. We did a couple of pieces on PV installations. One was a home in Boulder where they went off the deep end with passive solar and superinsulation – far beyond what's normal – and it got a lot of interest. After A37 we did something on a more typical installation with the rebate, along with figures on costs. People called to ask for more information and to find more resources to find out about it. (Raabe, 2006)

Raabe also noted that reader feedback helps to insulate the reporter from interference by the institution. If the readers like the coverage, it's defensible.

Editorial independence

Finally, reporters like to think that they function independently of the institutional interests of the publishing company. The *Denver Post* and *San Francisco Chronicle* maintain centrist-to-liberal editorial pages, which are consistently supportive of renewable energy projects. Except for the concern expressed by Raabe above (p. 54) regarding his reputation for balanced reporting, he and Baker don't have to worry about coming into conflict with editorial page politics. *The Rocky Mountain News*, on the other hand, runs a pugnaciously libertarian, free-market editorial page. Chakrabarty said they don't pester her.

Q: You have a libertarian editorial page. Do they influence you?

A: No, we have a real Iron Curtain. Sometimes if they know I'm doing a story they'll ask for information on the issue, but I never know about the stand they'll take until I read it myself in the paper. I recently wrote that Xcel paid over \$1 million in PV rebates in two months, and no one disagreed with that. But the next day the editorial page wrote that people who want PV should just pay for it themselves and not impose the cost on

ratepayers. Once, an editorial called the Xcel folks “comrades” because of their five- and ten-year plans for development. They said it’s not the American way. The Xcel PR people called me and said they were calling each other “comrade” in the office. (Chakrabarty, 2006)

Chapter summary

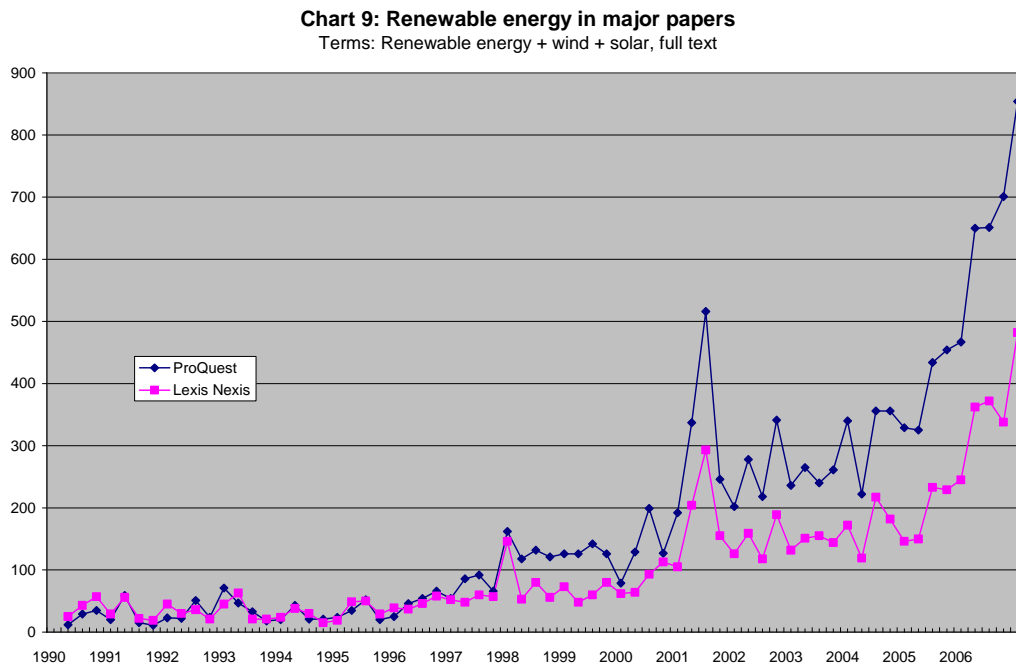
This chapter argues that a newspaper can cover renewable energy issues with good frequency when it hires or train a reporter (or two, or three) with special expertise in one or more related fields: energy, economics, science or the environment. The specialized reporter develops a reliable network of sources, and comes to depend on these sources for help in developing or digesting very complex material.

Absent a specialized reporter, coverage of renewable energy may fall through the cracks between beats. When renewable energy becomes an item of political news, it may be covered superficially by a political beat reporter unfamiliar with the background issues.

Chapter 4 examines in more detail how renewable energy acquires more prominence in the news budget through association with high-salience events and personalities.

Chapter 4: Salience, agenda setting and pictorial value
How “newsworthy” events boost the visibility of slow-moving trends

In the last half of 2006 and the early months of 2007, renewable energy achieved a level of salience in the daily press not seen since the Carter administration’s efforts, in the wake of the 1973 OPEC oil embargo, to improve American energy independence. Chart 9 illustrates the sharp spike in the number of stories mentioning renewable energy appearing in major North American newspapers during this period. Each data point represents the number of stories appearing in a calendar quarter.



The spike in 2001 corresponds to the California electricity crisis and the promulgation of Dick Cheney’s energy policy. The trough beginning in 2002 represents a period in which the 9/11 attack and the invasions of Afghanistan and Iraq took precedence over other news stories.

As noted in Chapter 1, dozens of studies support the observation that slow-moving trends, analogous to a chronic condition, rise to the level of newsworthiness only upon being connected to a newsworthy event, analogous to an acute condition. The newsworthy event may be passage of legislation, an electoral campaign, an economic or environmental crisis, a strike or demonstration, a court case, some event connected to war or crime, or the involvement of a high-profile politician or celebrity. Renewable energy, as an issue linked to global warming, has experienced several salience-boosting events following the oil embargoes of 1973 and 1980. These include (but are not limited to) the “Green Speech” by Prime Minister Margaret Thatcher to the Royal Society in 1988 (Prins, 1990) and the testimony before Congress that same year of atmospheric scientist James Hansen; and (shown by Lexis-Nexis and ProQuest data since 1990) Vice President Dick Cheney’s energy policy of 2001; the California electricity shortage and subsequent Enron scandal of 2001-2003; the hurricane season of 2005; the State of the Union addresses by President George W. Bush in January 2006 and January 2007; the debut and success of Al Gore’s documentary “An Inconvenient Truth” beginning in the summer of 2006 and the announcement, in September 2006, of Sir Richard Branson’s \$3 billion alternatives fuels investment; and the publication early in 2007 of the Fourth Climate Assessment of the Intergovernmental Panel on Climate Change.

Political issues: Legislature vs. ballot

Editors and reporters cover renewable energy as a newsworthy local story when it involves a local company (especially an electric utility provider) or when it becomes a local political issue – especially a ballot issue. Craig Cox, executive director of the Interwest Energy Alliance, a wind power advocacy group, said “Nothing in the legislature is typically covered in the press quite so thoroughly as major ballot issues, primarily because of the money put into advertising.” (Cox, 2006) Local reporters confirmed that electoral issues get more space in the papers than do legislative issues. This, for instance, is the comment from Gargi Chakrabarty, energy beat reporter at the *Rocky Mountain News*:

Q: Is it correct to say that Amendment 37 got a lot more space as a ballot item than as a legislative item?

A: Yes. When it’s in the legislature there are incremental changes, and it’s a very small item when the bill moves between committees. You only write about it when something happens. (Chakrabarty, 2006)

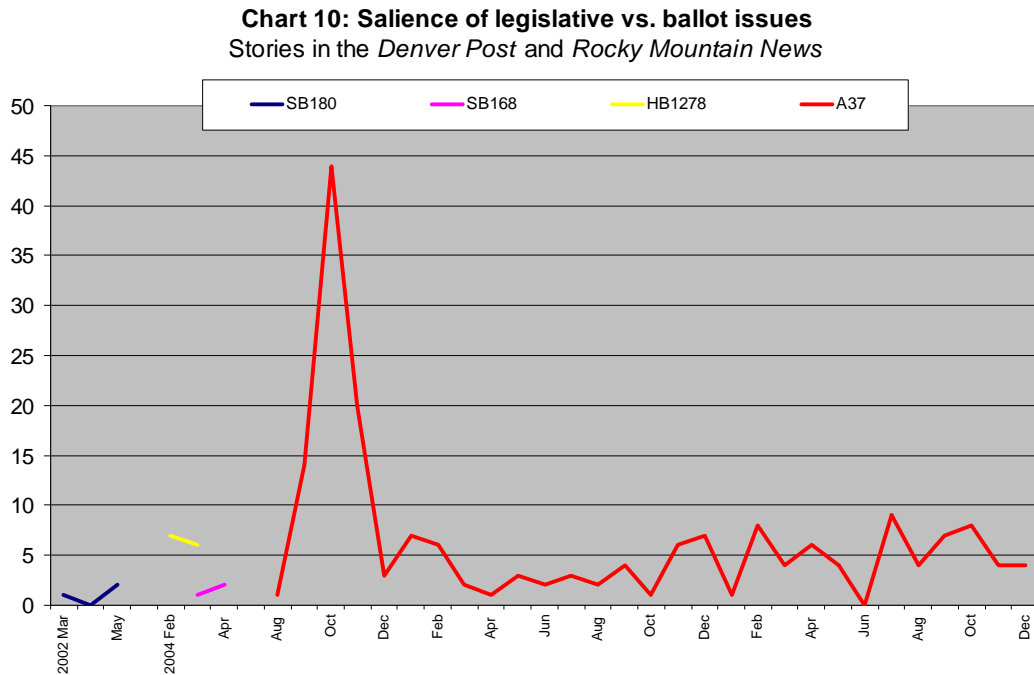


Chart 10 shows what happened to renewable energy coverage in the Denver

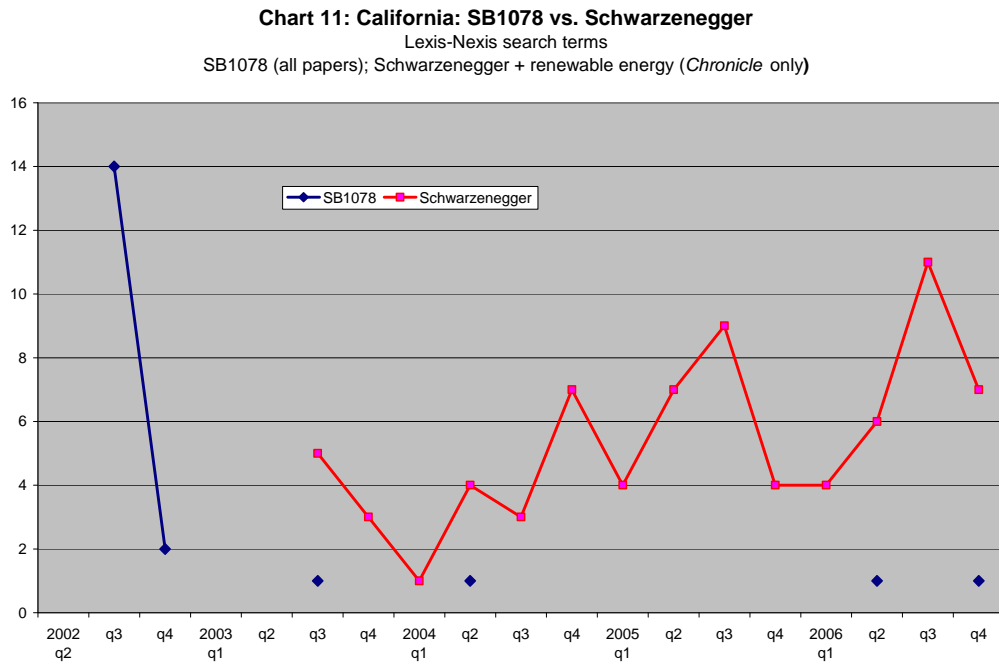
papers when the renewable energy portfolio standard moved from the state legislature onto a state-wide ballot. Colorado's RPS measure requires the state's investor-owned utilities (IOUs) to generate or buy 10 percent of their electric capacity from non-hydro renewable sources before 2015. The legislature failed to pass an RPS three times between 2002 and 2004, despite its sponsorship by Speaker of the House Lola Spradley, a conservative rural Republican. During the 2002 legislative session, the measure drew only three mentions in the *Denver Post* and *Rocky Mountain News*. During the subsequent legislative effort, the papers covered the issue in a dozen stories.

In the spring of 2004, when SB168 failed in the Colorado Senate, Spradley and Congressman Mark Udall, a liberal Democrat, launched a campaign to put the RPS measure on the ballot. They had instant traction. Coverage in the two Denver papers soared beginning in August, 2004. Voter interest was instant and intense, and despite an aggressive campaign by several utility companies, Amendment 37 passed easily in the November election.

I discussed in Chapter 3 the way in which coverage of the Amendment 37 campaign and counter-campaign was distributed amongst political and city desk reporters as well as energy reporters working for the business desk. Note that following the passage of the RPS measure, in November 2004, the story remained alive at the business desk. For the next year, the reporters filed several stories each month as utility companies worked with the Public Utilities Commission to negotiate the terms and financial details of compliance, and then announced implementation of the new programs.

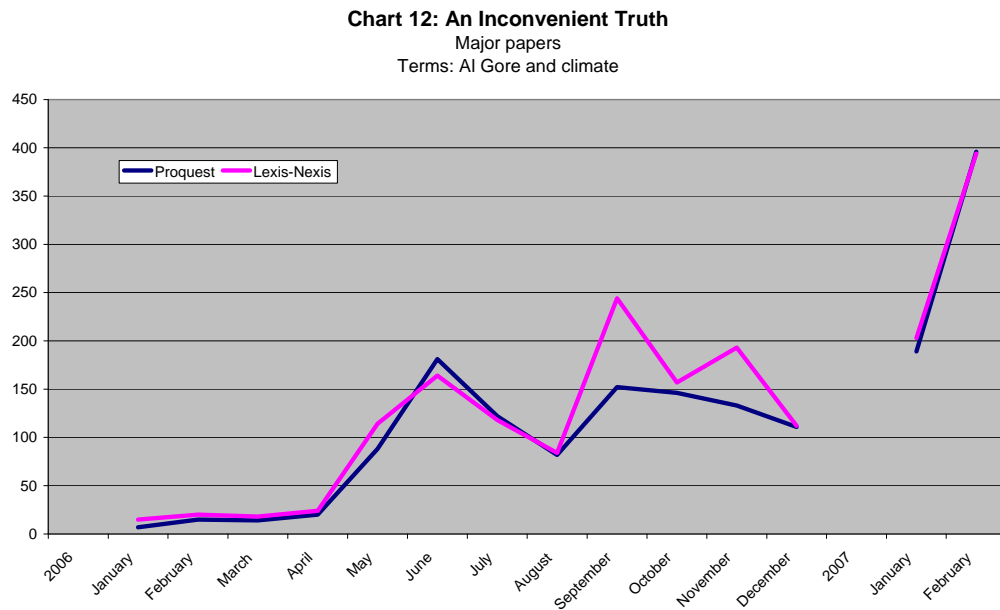
Star quality: The importance of celebrity endorsement

State initiatives rarely achieve national attention, unless supported by a prominent politician or celebrity. A unique example is California's Governor Arnold Schwarzenegger. Chart 11 illustrates the power of a



nationally recognized face to influence coverage. California's Senate Bill 1078 updated the state's RPS, sharply increasing the renewable energy component in the wake of the 2001 electrical shortages. The chart shows that passage of the bill drew about 16 stories in papers across the country in the late spring of 2002 (blue data points). When Gov. Schwarzenegger included renewable initiatives in his re-election platform beginning later that year, hundreds of stories followed over the next two years. I've kept this chart manageable by plotting only the several dozen stories in the *San Francisco Chronicle* (red line).

Chart 12 illustrates the course of coverage enjoyed by former Vice President Al Gore. His name was linked to the term “climate change” in a handful of stories each month, until the debut of the documentary film

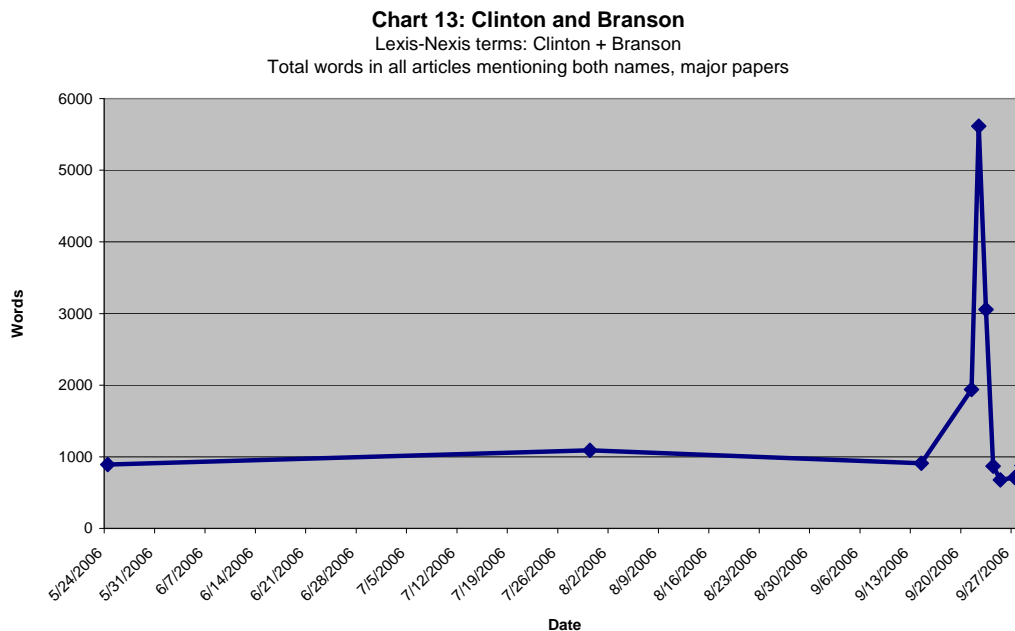


“An Inconvenient Truth.” Then his salience spiked. Daily papers covered the film as an environmental story, an energy story, a political story and an entertainment story. Story frequency peaked after the film’s launch in May, 2006, again when it was nominated for a couple of Oscars the following Fall, and again when it actually won the awards in February, 2007.

A similar spike accompanied Sir Richard Branson’s announcement, in September 2006, that he would devote future profits from his transportation companies – roughly \$3 billion – to the development of non-fossil-based, carbon-neutral aviation fuels. Branson made the announcement at one of the semi-annual meetings of the Clinton Global Initiative, organized by the William J. Clinton

Foundation and hosted by former President Clinton. The conjunction of the two names pushed the issue of alternative fuels onto front pages across the country.

Chart 13 shows the total words running in major dailies in stories



that mention the names Clinton and Branson together. Note that in late May and late August, a few stories announced the upcoming conference. Another flurry of stories appeared in mid-September. Branson made his alternative fuels announcement on Sept. 21, and coverage spiked across the country.

Visual value

Physical or psychological prominence plays a role in media consciousness, and therefore contributes to salience. When an installation is photogenic, an editor is more likely to run a background story, or to place a photo above the fold. Matt Baker of Environment Colorado noted that “TV paid attention if we had a good

prop, a big wind turbine for instance.” (Baker, M, 2006) Jon Tremayne, a press relations officer at Pacific Gas & Electric Co. in California, noted that

Wind turbines get better coverage (than other renewable installations). They’re quick and easy to get to, and highly visible. You can do stand-ups. It makes a great visual. (Tremayne, 2006)

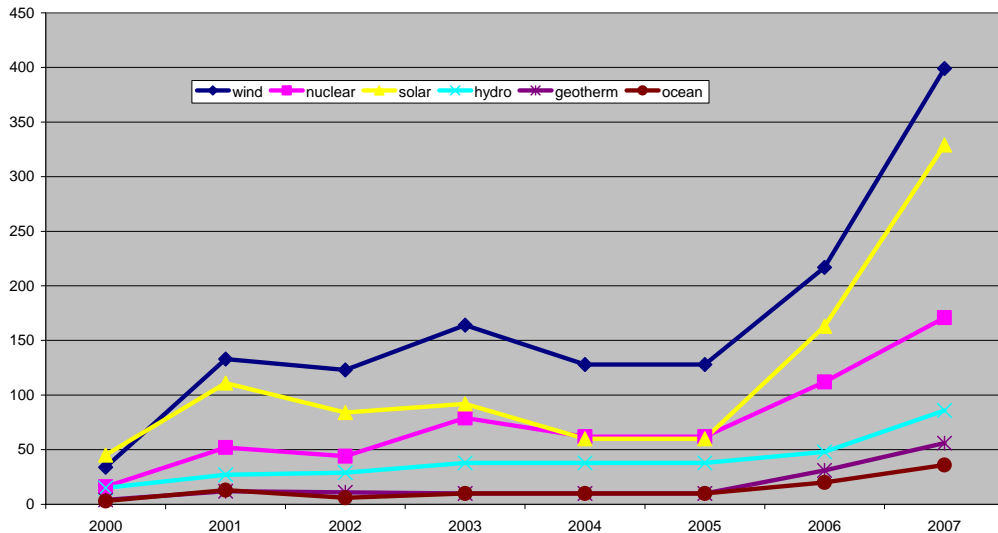
Tremayne went on to suggest that different forms of energy draw editorial attention, in part, depending on their visual prominence in the landscape: that is, to the extent that they draw the attention of TV crews, photographers and editors. If this is indeed the case, we would expect to see stories devoted to different energy sources in roughly this descending order:

- Wind farms – highly visible on hill-tops, with moving parts
- Nuclear power plants – highly visible near bodies of water, and scary
- Solar arrays – highly visible but stationary
- Hydro dams – highly visible but often located in remote valleys
- Geothermal and ocean installations -- nearly invisible underground or under water

To test this hypothesis, I counted references to the separate terms energy+wind, energy+nuclear, energy+solar, energy+hydroelectric, energy+geothermal, and energy+ocean. Chart 14 shows the result.

Chart 14: Stories about clean energy sources

Lexis-Nexis terms: Renewable energy + wind, nuclear, solar, hydro, geothermal, ocean
in major papers

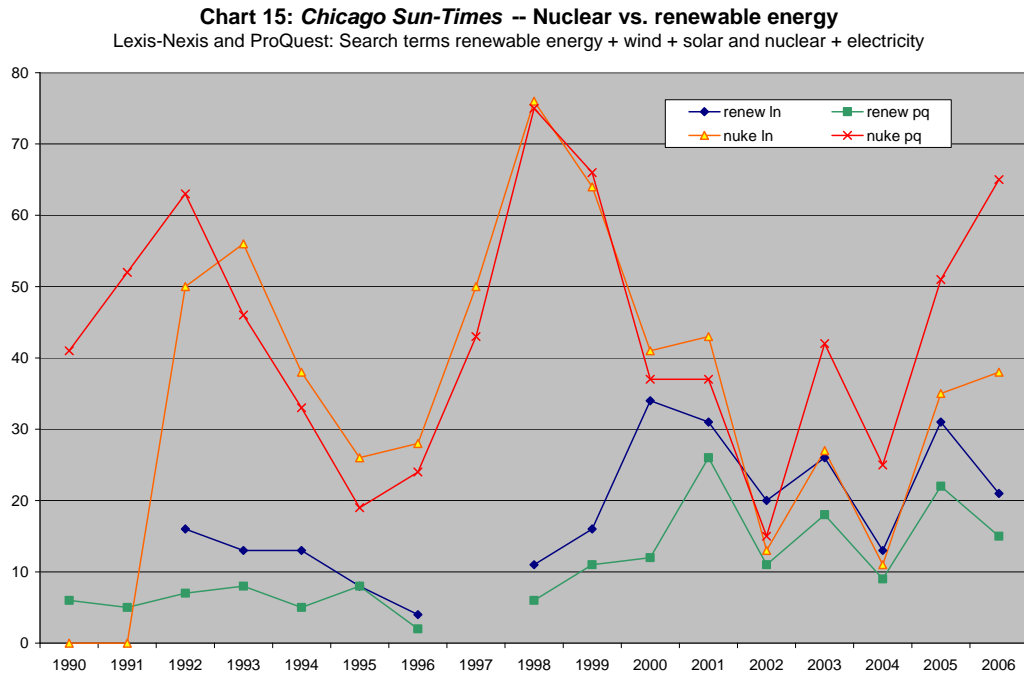


Note that the most visible physical plants – wind turbines and solar panels – received the most coverage, followed by nuclear plants, which are the next most visible. Hydroelectric, which in Pacific states provides roughly 42 percent of electric generating capacity, gets roughly 20 percent as many mentions as does wind. Geothermal and ocean energy sources earn even fewer mentions.

Local issues

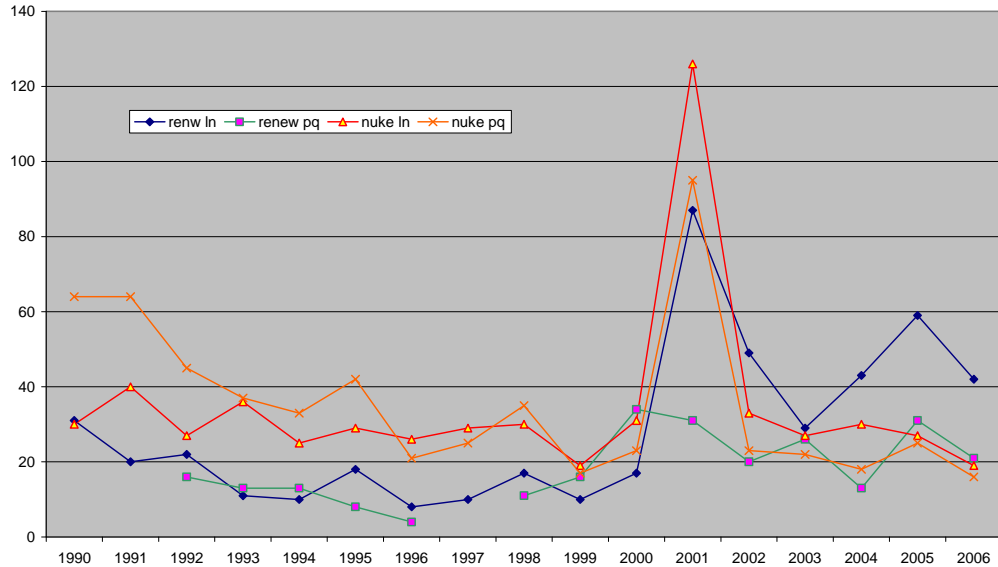
Beat reporters obviously follow stories of local interest. Illinois generates 50 percent of its electricity from six nuclear plants, and draws only about 1.5 percent of its electricity from renewable sources (Energy Information Administration, 2007). This means, according to retired *Sun-Times* city desk reporter Gary Wisby, that when he wrote on energy, it was often in response to actions by anti-nuclear groups (Wisby, 2006). Wisby’s recall is confirmed by a content analysis (Chart 15) of *Sun-Times* stories: stories mentioning the terms nuclear and

electricity (red and yellow plots) consistently outnumber stories mentioning forms of renewable energy (blue and green plots). The search was conducted in both the ProQuest and Lexis-Nexis databases. The spike for nuclear stories in 1998 relates to the resumption of operation at the LaSalle Unit 1 after a two-year shut-down for maintenance and reconstruction.



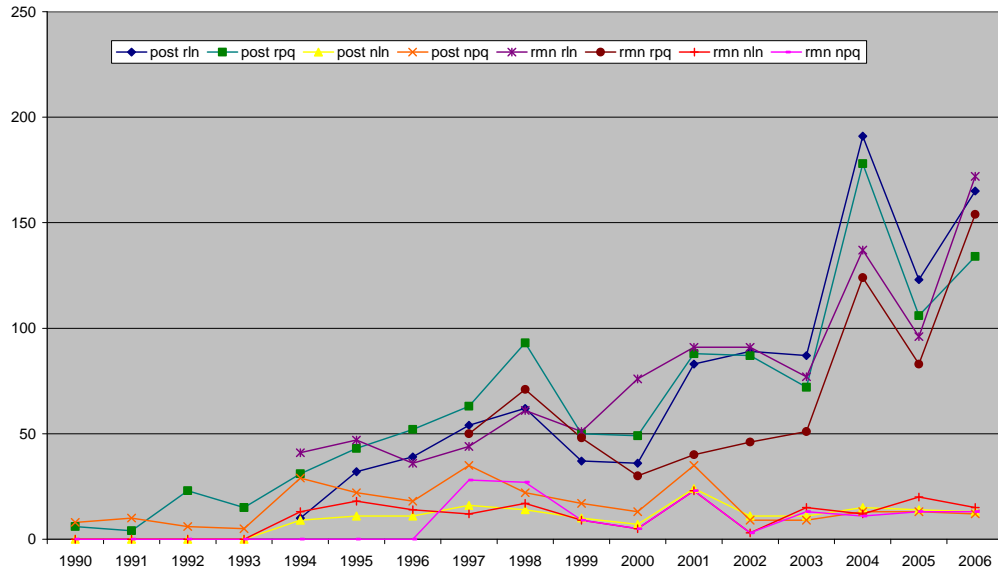
By contrast, California has a more balanced energy budget. The state gets about 15 percent of its electricity from nuclear plants, 15 percent from hydroelectric dams, and 11 percent from wind farms, geothermal sources and even biomass generators (EIA, 2007). Chart 16 shows energy coverage in the *San Francisco Chronicle*, using the same search terms as Chart 15. Note that stories are more or less evenly distributed between nuclear and renewable power sources.

Chart 16: San Francisco Chronicle -- Renewable vs. nuclear



Colorado has had no nuclear power generating capacity since the Fort St. Vrain reactor was shut down and converted to natural gas, beginning in 1989. Nuclear safety is a local issue mainly because of the long battle over the clean-up at Rocky Flats. Those stories were largely excluded from this discussion of energy issues by the inclusion of electricity as a search term. At this time (early 2007) the state draws about five percent of its electricity from renewable sources, a figure that should double within five years thanks to passage of the Amendment 37 Renewable Portfolio Standard in 2004. Chart 17 shows the result of a content analysis of the *Denver Post* and *Rocky Mountain News*. Once again, mentions of nuclear + electricity are represented by red/yellow/orange plot lines, and renewable energy terms are represented by green/blue/brown plot lines. Note that renewable energy issues have a much higher local salience than does nuclear power.

Chart 17: Denver papers -- Renewable vs. nuclear



Inter-media influence

A number of recent studies have examined the influence of media one upon another. Golan (2006), for instance, examines the ways in which television network news editors determine their evening news budgets based in part on what appears in the morning's *New York Times*. When a topic achieves widespread attention, so that editors and reporters feel they can no longer afford to ignore the stories appearing in competing media, the resulting spike in coverage may be perceived as a media frenzy. Richard A. Kerr, writing in *Science* in February 2007, used the term media frenzy in reference to the sudden spike in articles about climate change (Kerr, 2007). The data in Charts 9, 12 and 14 suggest that, following the widely-covered testimony of Al Gore before the Senate Environment Committee on March 21, 2007, highlighted by his

confrontation with Sen. James Inhofe, global warming and renewable energy have, for now, achieved that level of salience.

Chapter summary

This chapter has detailed a number of common salience-building triggers, including national and local political or economic relevance; celebrity endorsement; and visual value. These triggers can conjoin around a newsworthy event. When events coincide or concentrate in time, the total of media attention may constitute what might be termed a *sum salience*—a concept similar to what has been termed elsewhere a media frenzy. If we chart such a cascade of stories, the rising curve may look like a geometric progression.

Chapter 5 will consider the stratification of audiences or publics, and the hierarchy of media that address the different levels of complexity in a given topic.

Chapter 5: Audience/media stratification

*When the public knows more than the press has told them –
where did they learn what they know?*

On March 24, 2007, Congressman Ed Markey (D-Mass), chairman of the Select Committee on Energy Independence and Global Warming, told an interviewer on the NPR program Living on Earth that “The public is far ahead of Congress on this (the renewable energy) issue.”

Markey noted that the recent public attention to energy measures proposed by Al Gore and Speaker of the House Nancy Pelosi had caused politicians to pay attention to their own polls. These showed that the American public is ready – and long has been ready – for a national policy on renewable energy.

Renewable energy advocates, and even utility company executives, have long been aware of the fact that the public is receptive to energy policy initiatives. Matt Baker, executive director of Environment Colorado, said “Everyday voters are way ahead of the decision-makers – politicians, PUC and utility directors – in understanding energy issues and willingness to pay more for it.” (Baker, M., 2006)

And Jon Tremayne, press officer for Pacific Gas & Electric, said

We got phone calls from the public after the opening of the Al Gore movie – but not from reporters. I’m not aware of any polls we’ve done (on renewable energy), but in our focus group research people are very high on renewables. . . In conversations internally, our focus group data and consumer data are very high on solar. (Tremayne, 2006)

In fact, plenty of polling data show that public support is strong for renewable energy, well in advance of the press and policy-makers. A 1999

consumer study, “Colorado Homeowner Preferences on Energy and Environmental Policy,” commissioned by the National Renewable Energy Laboratory, found strong support for renewable energy five years ahead of Colorado’s Amendment 37 initiative. And a long series of national polls dating back three decades to the Carter era shows strong public support for renewable energy. Table 3 reproduces a progression of fourteen loosely comparable questionnaire items from national public opinion polls in the Lexis-Nexis database. All polls listed here had at least 1000 respondents.

Table 3: Public opinion on renewable energy issues
Source: Lexis-Nexis Roper Public Opinion database

Date	Research question	Yes/ support	No/ oppose	Don't know/ no answer
Oct-06	Support increased use of renewable energy sources to counteract climate change?	93	5	2
Jun-06	Willing to pay more for electricity if derives from wind or solar source?	70	27	3
May-06	Explore wind energy as alternative to nuclear power?	81	15	4
	Explore solar energy as alternative to nuclear power?	85	12	3
Mar-06	Alternative or renewable energy should be a top priority for reducing dependence on foreign oil?	77	20	3
	Do you support state initiatives against global warming?	83	12	5
Sep-97	Requiring utility companies to offer alternate forms of energy would be effective	85	10	5
	I favor requiring utility companies to offer alternate forms of energy	82	12	6
	Willing to pay more for alternate forms of energy	80	14	7
Dec-96	Should require utilities to produce 5% of their energy with renewables, even if it means a \$1 monthly rate hike	53	38	5
Mar-92	Would solar or hydro power help meet our increased need for energy in the future?	91	5	4
Jan-91	Can renewable (solar/wind) produce enough energy by the year 2000 to help meet our energy needs?	69	24	7
Feb-83	How important is Federal support for research in alternative energy (solar/synthetic fuels)	89	10	2
Jan-80	Which form of energy would you prefer to see generating electricity? Solar 53% Coal 25% Nuclear 17%			3
May-79	Are you willing to pay more for solar energy?	39	24	31

Reporters are aware of reader interest in renewable energy. Here's what David R. Baker, an environmental reporter for the San Francisco Chronicle, said when asked if the newspaper had polled readers regarding their interest in the issue:

Readers can't get enough of it – I don't know if we've ever asked. It's what you get calls and emails about, and it gets blogged about. People who call in, or send email, tend to be very obsessive about it with very detailed questions. (Baker, D., 2006)

The observation by activists and journalists alike that the public is more receptive to renewable energy projects than are politicians or newspapers raises the issue of where audiences have been educated about renewable energy. If not from newspapers, then from other media: magazines, books, television, radio, film, the Internet.

Press officers are aware that the audience is stratified. "There's a few people who know a lot, and a lot of people who know a little," said George Douglas, press officer at the National Renewable Energy Laboratory. (Douglas 2006) We saw in Chapter 1 that readers – particularly readers of books and magazines – are better-informed about complex issues than are watchers of television; in fact several studies show that heavy television viewing has a negative correlation to accurate knowledge of news and issues.

Media are stratified, too. The energy advocates I talked to suggested that media with the time and resources to do feature-length articles or long-form broadcasts can convey some of the complexities of energy issues, while deadline

television and radio rarely even cover energy unless it's tied to a crisis or political event.

I asked the question "Which media, and which reporters, do a good job covering renewable energy issues?"

Matt Baker of Environment Colorado said this:

TV paid attention if we had a good prop, a big wind turbine for instance. They cover wind power and economic development. They get it that \$1 billion investment in a rural economy yields \$3 or \$4 billion in results. But in general, there's no TV for other issues. If you can show a signature gathering and a prop, they'll use your data and show the pictures. It's hard to develop an angle they'll use.

Everyday voters are way ahead of the decision-makers – politicians, PUC and utility directors – in understanding energy issues and willingness to pay more for it.

At the daily papers, the statehouse reporters are the worst. If there isn't a vote pending, there's no story. Everything's event-based with no analysis.

In the eastern plains we're able to get radio if they have a news desk. So many of those stations are Clear Channel and just do recorded programs. Colorado Matters [at KCFR, Denver's public radio news station] did a good program with Dan Dreier – we got 15 minutes to tell our story, Xcel told theirs.

The real heroes are the weeklies outside Denver. Every release we do is tailored to them. Sometimes they just run the press release as a news story, which reflects they're short-handed. They like renewables, a lot. (Baker, M., 2006)

John Anderson at the Rocky Mountain Institute said this:

This comes up often in the national press, especially the weekly newsmagazines. *The New York Times* and *The Washington Post* are reasonably thorough. It's tough to tackle these issues in anything short of a feature story. You can't do it with a six-inch news story. The problem for us arises that when you don't have a short answer, you don't have an answer. (Anderson 2006)

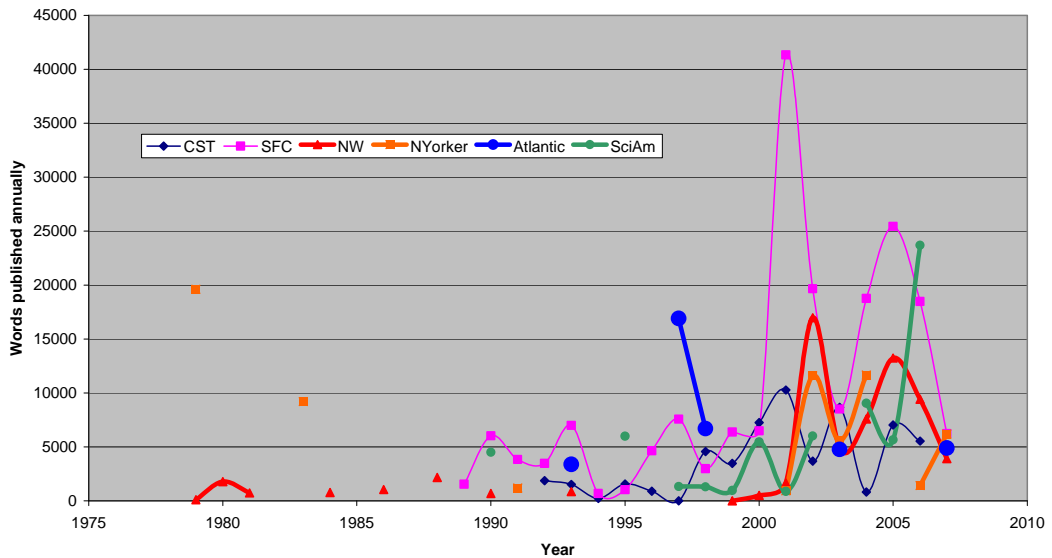
Magazines vs. newspapers

“Literary” magazines like *The Atlantic Monthly*, and special-interest magazines like *Scientific American*, cover energy issues infrequently, but when they do cover it, they can run long information-rich feature articles of several thousand words. Not only do they have time – weeks, months or even years—to develop research, but they are largely immune to the institutional pressures for “balance” found in newsrooms. Writers like John McPhee or Elizabeth Kolbert at *The New Yorker*, Richard A. Kerr at *Science*, William Langewiesche at *The Atlantic Monthly*, and their peers, enjoy a level of editorial independence that is analogous to academic freedom. They can report at a quasi-academic level of authority. The total number of column inches that a monthly journal can run in a year is much smaller than can be accommodated in a daily newspaper, which runs thousands of short articles. Between newspapers and monthly magazines lie a variety of weekly magazines, from *Time*, *Newsweek*, and *The Economist*, which run newspaper-length and feature stories, to *The New Yorker*, which does long-form features on issues of the day.

I selected six representative publications, and tracked the number of words in renewable energy articles printed annually. I used two daily newspapers, the *San Francisco Chronicle* and *Chicago Sun-Times*, represented in Chart 18 by lightweight plot lines; two weekly magazines, *Newsweek* and *The New Yorker*, represented by heavy red and orange data plots; and two monthly magazines, *Atlantic Monthly* and *Scientific American*, represented by heavy blue and green datapoints. Note that with the exception of the *Chronicle* spike

corresponding to the 2001 California electric crisis, a reader would have found at least as much material in the magazines as in the daily newspapers,

Chart 18: Newspapers vs. Magazines
 Terms: Renewable energy +solar +wind
 Lexis-Nexis and proprietary databases



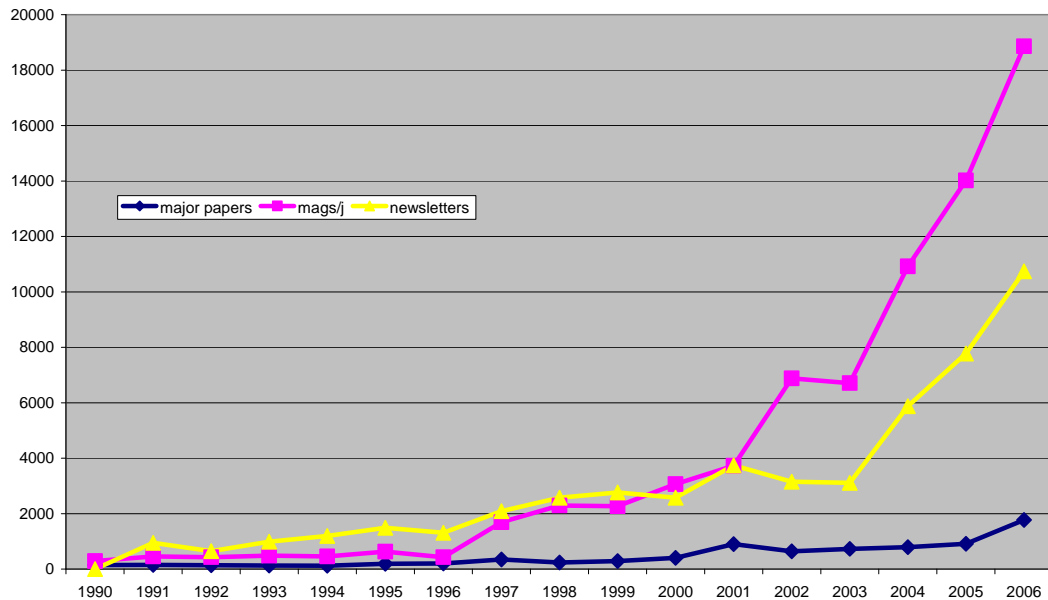
in spite of the lower frequency of coverage in the magazines. Occasionally, *The New Yorker*, *The Atlantic Monthly* and *Scientific American* ran book-length articles or supplements by leading experts in the field, including Barry Commoner, Amory Lovins, and Colin Campbell.

Note that the 2007 totals (the righthand end of the plot lines) represents only the period January through March. The average article length for renewable energy stories in *The New Yorker* was 5282 words, with three articles over 9000 words – sufficient to explain the complexities of the issues. The average *Atlantic Monthly* story ran 3664 words, and the average *Scientific American* story ran 3242 words. By contrast, *Newsweek*'s average story on the subject ran 1354

words. The *Chronicle* and *Sun-Times* allocated an average of 884 and 808 words per story, respectively.

If we look at the broader universe of publications represented in the Lexis-Nexis database, and control for publication frequency, it becomes clear that the typical single issue of a weekly or monthly magazine contains more content on renewable energy than the typical single issue of a newspaper. Chart 19 summarizes these calculations, which, due to the year-to-year variations in publications contributing to the database, are necessarily approximate.

Chart 19: Print media stratification
 Lexis-Nexis terms: Renewable energy +solar +wind
 Estimated number of words published per publishing cycle
 in major papers, magazines & journals, and newsletters



The data were developed by summarizing total words per year in articles mentioning the terms renewable energy, solar and wind in major papers, magazines and journals, and newsletters, then dividing by frequency: 365 for newspapers, 25 for magazines (averaging monthly, bi-weekly and weekly magazines), and 50 for newsletters. The result approximates the number of words

published nationally in any given publishing cycle in that medium. In 2006, this amounted to roughly 1900 words per day in newspapers, 10,500 words per week in newsletters, and 19,000 words fortnightly in magazines and journals.

More complete and persuasive information is conveyed via feature articles in monthly magazines. These magazines reach a smaller audience than do the daily newspapers, but their audience is more politically active and possibly more likely to attempt to influence policy.

Broadcast stratification

A similar split is evident between deadline broadcast news outlets – especially local television news – and feature-style documentary programs, like Nova, on PBS and cable channels. Local and network news work on daily or hourly deadlines and rarely have time to push renewable energy news above “bleeding” stories with good visuals. Long-form documentaries on science and the environment often find a home on PBS and cable networks. George Douglas, media relations manager at the National Renewable Energy Laboratory in Golden, Colorado, put it this way:

Broadcast outlets cover our issues sketchily. They don't do stories often. Lee Anne Gregg has done a good job a couple of times at NBC, channel 9. The only coverage NREL gets is story-to-story. It's not issues-oriented. When the price of gas spikes, they're here.

On national media, there's a lot of interest from the cable channels, with feature-length documentaries. The Discovery Channel, the History Channel, PBS, Nova. Nova did a solar energy story airing in January, Discovery did one on climate change and energy, the History Channel does Modern Marvels. There's many more. We've had half a dozen film crews through here since February. (Douglas, 2006)

Soft media: Talk programming and satire

Mainstream news media – newspapers and broadcast news – have been losing audience steadily in recent years. According to proprietary Nielsen figures, most network news audiences peaked in the first quarter of 2003 (Fox News peaked in the second quarter of that year). Over the next 30 months, ABC’s World News Tonight, the CBS Evening News and NBC’s Nightly News saw their audiences slide by 24 percent, CNN fell 20 percent, CNBC 50 percent, and MSNBC 25 percent. Fox lost 9 percent (TVB Research, 2005). Meanwhile, due largely to competition from television news, market penetration by daily newspapers experienced a long decline, from 1.28 newspapers per household per weekday in 1945 to .52 newspapers per household per weekday in 2000 (PEJ, 2004).

During the same period, audiences for “soft” news grew dramatically (Pew, 2005). By soft news is meant talk broadcasting (Rush Limbaugh, Oprah Winfrey), religious broadcasting, TV comedy and satire (Jay Leno, Jon Stewart) and a variety of dramatized TV news formats (Entertainment Tonight, MTV News). Baum (2002) shows that these media are surprisingly influential, bringing awareness of current issues to a large audience that is usually inattentive to mainstream news. In particular, soft media are eager to participate in media frenzies, and contribute to the rising salience of the issue *du jour*. The problems, of course, are that soft news media don’t necessarily communicate *facts* – and that broadcast audiences often demonstrate a negative correlation to accurate understanding of the issues (see page 24, above).

New media stratification

My personal observation while working in Web-based journalism at Microsoft Corp. and AOL-Time Warner is that a parallel hierarchy exists on the Internet. Database resources, Web sites and newsgroups associated with universities and other research institutions serve the top of this pyramid and run peer-reviewed content, along with sites run by and for scientific societies (like aaas.org, operated by the American Association for the Advancement of Science). Mass-appeal Web sites like youtube.com and myspace.com occupy the bottom of the pyramid and depend on unfiltered user-generated content. In between lie “middlebrow” news Web sites like wsj.com (*Wall Street Journal*), nytimes.com (*New York Times*), and cnn.com, which adhere to traditional journalism norms, and the emerging universe of political blogs, which maintain their own widely varying editorial standards.

More to the point, renewable energy has its own very complete set of Web sites. Most of the clean energy trade papers are, in fact, exclusively on-line journals. Companies selling and servicing renewable energy products maintain very informative Web sites. Advocacy groups and laboratories have educational content at their Web sites, as do utility companies and government energy agencies. In today’s media market, any sophisticated consumer will begin a search for renewable energy information with a Web search.

Chapter summary

A significant proportion of the audience for mainstream news appears to be inquisitive and knowledgeable about renewable energy issues, to the extent that public opinion research polls have historically found majority support for renewable energy policy initiatives. In an era of shrinking audiences for deadline news, and shrinking budgets to report mainstream news, it's logical to conclude that audiences get much of their information on renewable energy from other media. Content analysis suggests that weekly and monthly magazines cover renewable energy issues sporadically, but with very good depth and accuracy. Long-form, long-deadline media don't labor with the institutional structures that limit deadline newsroom praxis.

Renewable energy advocates point out that long-form TV documentary programs cover their issues. These media have counterparts on line, and Web site sources constitute the deepest well of accurate information on renewable energy and energy policy.

Finally, the bottom of the audience pyramid—the “inattentive” audience that doesn't take mainstream news seriously—is often made aware of cultural trends and policy issues via “soft” news media.

Chapter 6: Discussion and summary

A crisis of balance

The energy system is incredibly complex, unfathomably big, and the press doesn't get that. People get the impression that changing a few light bulbs would help. The press fails to make the right connections. The whole system needs to be changed, and it can't be changed in less than a century, and without a great deal of investment. . . A terrible job would be covering medical science.

--George Douglas, *National Renewable Energy Laboratory*
(Douglas, 2006)

Douglas, a former science reporter at the *Rocky Mountain News*, meant that complex issues are difficult to cover with accuracy, on deadline, and energy is not unique in that respect. I set out to learn how daily newspapers cover renewable energy issues, with the thesis that what I learned would illuminate newsroom practices applicable to coverage of other complex news topics.

Research question 1 asked: Do some newspapers cover renewable energy issues more thoroughly than do others, and if so, how do they do it? I learned that in a relatively small number of specific markets, newspapers cover renewable energy very well, by employing competent reporters to handle a specialized energy or environmental beat. At most papers, without a specific energy beat, renewable energy stories often fall into the cracks between beats; absent a "newsworthy" political or economic event, renewable energy warrants scant attention. City desk and general assignment reporters lack the time and sources to detect significant renewable energy news. They often lack the expertise to perceive the importance of energy trend stories.

Even where renewable energy is covered frequently and knowledgeably, the story is often framed as a conflict narrative, usually as a political fight over

allocation of public or rate-payer funds to development of competing energy technologies. When so framed, reporters respond to institutional requirements for “balance.” That is, they mediate between sources on either side of an issue.

Where the public, and policy makers, perceive through the press and elsewhere no clear consensus for action, policy action is often delayed. The mediating role of the reporter can therefore be exploited as a delaying tactic by one or more parties to the dispute. A reporter eager to cover a specific issue can cite as reason to do so both reader interest and work by a reporter on a competing paper.

Where a paper lacks eager, enterprising reporting on any specialized beat, the coverage of that beat’s issues, especially of complex issues, is infrequent and often shallow.

Research question 2 asked “Why do some renewable energy projects get generous newspaper coverage, while others are ignored?” I learned that a number of factors contribute to a story’s salience. “Hard news” of political events, foreign crises, natural disasters, and especially of spikes in energy pricing, drive stories to the front page. Ballot issues take precedence in the news over legislative and PUC committee work. Local issues get covered, so that the forms of energy production important to the local economy take precedence over other forms. Celebrities – prominent politicians, recognizable industrialists and even Hollywood actors – can, through personal involvement or endorsement of an issue, raise its salience. Photogenic topics often get more play than static or visually obscure subjects. Finally, media influence other media. When an editor

perceives the rising salience of a story in competing news sources, he or she is likely to take the story more seriously, and move it up on the editorial budget.

These observations should be of value to reporters and editors making quick, on-deadline judgments regarding the news value of complex stories. Stories with deep background in technical or economic arcana don't yield to the traditional 600- to 800-word inverted pyramid format. Quoting source vs. opposition source may yield "balance" at the expense of clarity. Scientists and advocates for environmental causes should bear these newsroom realities in mind when speaking to reporters and, more important, when preparing the source materials on which beat reporters depend for background information.

The data developed here suggest some additional questions. What are the media consumption habits of key policy makers and politicians, and how does their reading influence their perception of political will? How can advocates for low-salience clean energy technologies (bio-generated and coal mine methane, geothermal and ocean power) improve their "mind share" among reporters and editors? What is the relative role of the editorial pages and the news pages in influencing public opinion and policy maker attitudes? And how can general assignment reporters learn, or be taught, to use sourced technical material productively in the manufacture of accurate deadline news?

Renewable energy policy is a geopolitical issue of critical importance to the economic and environmental health of the planet, and to its political stability. The relatively affluent and literate audiences of North America, which manage to burn almost 30 percent of the world's production of fossil fuel each year, ought

to be playing a central role in moving their economies into a carbon-neutral future. Perhaps more important in the short run, the concept of energy independence has become an important consideration in setting foreign policy, trade policy and national security policy.

Mainstream deadline news media have been unable, for some decades, to push this major story to the head of the news budget. In fact, as McCright and Dunlap (2000, 2003) and Boykoff and Boykoff (2003) have shown, and as my interviews confirmed, the newsroom value of “balance” has helped to legitimize the delaying tactics of “climate change skeptics” advocating for the extractive and energy distribution businesses.

From an institutional point of view, there is nothing unique about renewable energy issues. Any reporter working on these stories faces the same challenges as a reporter working on any other very complex issue. Tax policy, budget policy, foreign policy, social security, medical costs and medical science, educational turf wars, environmental policy, immigration and labor issues – all confront a reporter with the requirement to quote opposing views, regardless of the relative rationality of their arguments. In fact, the reporter often needs to balance a rational, science-based argument against an emotional, values-based argument – in which case it’s not even a debate in the traditional sense. Moreover, the technical complexity of many of these stories can take a general assignment reporter far outside the comfort zone of a liberal education.

If “balance” is in fact a substitute for analysis on behalf of rational decision-making, then deadline media have in a sense abdicated the Fourth Estate

role envisioned for the press by Thomas Jefferson and Benjamin Franklin, abetted by the early Congresses that subsidized literacy and newspaper circulation through the public school system, postal service and tax structure. It's fortunate that this role has, for the most part, been picked up by long-format, long-deadline media.

These long-form media have enabled the U.S. policy mechanism to work, albeit more slowly than may be desirable, without the timely help of the deadline press. As polling data show, the public came to accept renewable energy concepts long before they earned salience in the deadline press. Yanovitzky (2002) demonstrates that policy changes don't occur until politicians perceive the change to be in their own interest. And this is where the deadline press may, he suggests, play a catalytic role. When politicians see sharply rising salience in the press – when they perceive a media frenzy – they can interpret that as political will to action. Recent political events – climate initiatives by states, and Congressional hearings – appear to confirm this perception. It's not much different from observing that politicians do well to see which way the parade is going, and then run out front to lead it. If Yanovitzky is correct, then in terms of policy action, the most critical audience for the daily reporter is not the ordinary citizen, but the elected official. An important job of the reporter is to create clarity for the policy-maker by showing that the public mood is no longer “balanced” but instead has arrived at a one-sided consensus for action.

Specialized beat reporters, with training and experience in energy engineering and economics, understand these issues, and do a good job

communicating underlying issues to their readers. But they contend daily with the need to balance technically accurate reporting against vociferous counterclaims, rational and irrational. This is not a process designed to produce clarity for the reader. At some level, the perceptive reader, already educated by long-form media, understands that “balance” in a news story can be meant, by one or more of the reporter’s sources, to sow confusion. That reader may easily feel disillusioned with the newspaper itself.

Bernard Cohen’s observation about agenda-setting – that media are successful at telling the public what to think about – may have prescriptive value for the conscientious reporter. A defensible decision to omit from the story any “background” material that is oversimplified to the point of factual distortion would help to restore faith in the institution. This is where specialized training is useful: The expert reporter recognizes nonsense even when it’s presented as a direct quote. If the reporter cleaves to an ethic beyond simple balance, she declines to legitimize nonsense, and pares it from the 800-word news story.

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Appendix

Sample content analysis data sheets

state law, colorado, renewable

50 items

Date	Paper	Beat	Page	Words	Reporter	Title
9/24/2000	rmn	business	1g Sunday	956	j smith	electric rates may rise after gas hikes but coal will shield state
11/5/2000	rmn	business	2g Sunday	1129	letters	
5/10/2002	minn star trib	business	1d	1155	se peterson	xcel program will let customers pay premium for wind
3/20/2003	minn star trib	business	1d	449	se peterson	xcel customers can sign up for wind power
5/14/2003	dp	business	1c	482	s raabe	colo gets F on renewable energy xcel, state urged to ease natural gas prices
10/15/2003	dp	business	3c	414	s raabe	
9/22/2004	dp	business	1c	739	s raabe	conflict burns over coal plant
9/28/2004	dp	business	1c	548	j dunn	proposed xcel plant assailed xcel swaps enviro concessions for power plant
12/7/2004	dp	business	1c	844	s raabe	activist appeals state's ok of coal plant in pueblo
2/11/2005	dp	business	2c	276	s raabe	xcel rate hike has tempers rising as temp falls
10/7/2005	dp	business	1a	1139	s raabe, ks johnson	
12/1/2005	rmn	business	6b	1849	briefs	briefs
1/8/2006	milwaukee journal sentinal	business	1d	755	r barrett	biodiesel breakdown: trucking companies report engine probs
				10735		
11/9/2001	dp	educ	2b	500	d curtin	mines envisions key energy role
4/13/2006	usa today	money	2b	583	p davidson	energy laws vary from state to state incentives, savings push more families to renewable
4/13/2006	usa today	money	2b	1735	p davidson	
				2318		
10/22/2000	dp	news	7a 1b	2643	g lane b tansey, m	udall seeks 2nd term to finish business
1/28/2001	sfc	news	Sunday	1465	wilson	solar panels give power to people under the dome
2/16/2001	dp milwaukee journal sentinal	news	12a	595		
2/21/2001	dp	news	2d	412	l hawkins	group seeks more use of renewable power
3/22/2002	dp	news	14a 22a	584		under the dome
9/15/2002	dp	news	Sunday	236		us senator wayne allard
2/7/2003	at jour- const	news	1h	509	mc quinn	option of green energy coming mtbe okd for race: health dept gives 1-time bye to banned additive
8/30/2003	rmn	news	4a 1b	622	t hartman	wind farms find unlikely foe in environmentalists
8/1/2004	boston globe	news	Sunday	1373	b daley	
10/12/2004	dp	news	4b a19	581		trail dust
10/24/2004	sfc	news	Sunday	691	r collier	state makes progress kicking oil habit utilites pledge to meet goal but till cite cost issues
11/4/2004	dp	news	5b	476	d olinger	coloradans vote to embrace alternative sources
11/24/2004	nyt	news	16a1	1125	k johnson	
1/20/2005	rmn	news	28a	269	a imse	salazar calls for alternative energy

8/23/2005	dp	news	2b	392	ke crummy	elections overhaul halted
11973						
4/16/2000	boston globe	oped	3d	1238	w shutkin	MIT, pres New Ecology Inc
4/8/2004	rmn	oped	54a	1762	letters	
4/28/2004	dp	oped	6b	513	edit	don't leave energy to ballot
10/6/2004	dp	oped	7b	711	a knight	colo amend 37 merely tilts at windmills
10/31/2004	dp	oped	2e	4133	letters	
			3e			
3/5/2005	dp	oped	Sunday	755	ng muller	monopoly power in the power business
5/26/2005	dp	oped	6b	1399	letters	
9/19/2005	sac bee	oped	4b	3822	letters	
4/28/2006	dp	oped	6b	418	edit	xcel deal turns denver green
14751						
11/26/2000	sandiego uniontrib	real estate	1i	1984	rm showley	solar option: soaring cost of electricity sparks interest

calif, state law, renew

Date	Paper	Beat	Page	Words	Reporter	Title
7/2/2000	houst chron	business	1	4426	m davis	power grid in gridlock; dist troubles spawn blackout fears
5/20/2001	sfc	business	1e	1621	t abate	alternative fuel from farm waste-rice straw to ethanol
6/18/2001	Minn startrib	business	1d	1923	ga patterson	calif's electric probs and bush admin put nuclear power back in spot
5/10/2002	Minn startrib	business	1d	1155	se peterson	xcel program lets customers pay premium for wind
8/18/2002	Houst chron	business	9	314		texas gains on calif as wind power leader
11/7/2002	sdiego uniontrib	business	2c	968	brief	brief
5/14/2003	dp	business	1c	482	s raabe	colorado gets F on renewable state's a power in wind field:
7/20/2003	Minn startrib	business	1d	1486	n stanthony	additional turbines
10/5/2003	sdiego uniontrib	business	1h	2075	cd rose, j davies	power play: consumer group's lawsuit/PUC shift from pro-ratepayer
10/23/2003	sdiego uniontrib	business	1c	619	cd rose	summer shortage of power possible
7/2/2004	jerusalem post	economics	15	264	y grayeff	ormat to replace nevada plant new faces, big choices may shape PUC in 05
12/26/2004	sdiego uniontrib	business	1h	1433	cd rose	
1/12/2005	sdiego uniontrib	business	1c	636	cd rose	windmill energy company in deal
9/8/2005	sdiego uniontrib	business	1c	752	cd rose	sdg&e to buy solar elec
12/1/2005	rmn	business	6b	1849	brief	brief
4/30/2006	sacbee	business	1d	1148	c swett	puc focuses on telecom, saving energy
				21151	18334	1309.5714 14 stories
4/6/2002	sfc	home	4wb	1622	a pence	homes must be energy-smart to gain market edge
4/13/2006	usa today	money	1b	2318	p davidson	incentives, savings push more families to renewable
9/8/2000	sfc	news	1a	927	d lazarus	puc sidesteps on who pays utilities costs

1/21/2001	sdiego uniontrib	news	3a Sunday	854	c bostwick s sward. D lazarus	utilities nixed 95 bid to add new plants how pg&e missteps preceded crisis: plants sold, demand miscalc
1/22/2001	sfc	news	1a 1b	3460	b tansey, m wilson	
1/28/2001	sfc	news	Sunday	1465		solar panels give power to the people utilities and fed regulators shut door on renewable pow in calif
2/12/2001	sfc	news	1a	2235	s sward	
2/15/2001	sfc	news	18a	635	c burress	berkeley takes on energy crisis
2/16/2001	dp	news	12a	595		under the dome
4/10/2001	wash post santonio	news	1a	1612	g kessler, a goldstein	first bush budget makes modest cuts, spending up 4percent
5/12/2001	express	news	1d	786	d hendricks	san antonio inc distills years of community, industry talks
5/18/2001	csm wash post	news	24	547	brief	brief
6/28/2001	post wash post	news	5t 1t	911	k bredemeier	for consumers, a choice to make consumers face choice in power: shopping list to include supplier
7/1/2001	post	news	Sunday	829	k bredemeier	san diego tries to undo the damage: regional public power sempra opposed to bill on renewable energy
7/24/2001	sfc sdiego uniontrib	news	1a	1189	d lazarus	electric rate hike expected to get regulators' approval
9/8/2001	sdiego uniontrib	news	1b	582	cd rose	vote for public power no guarantee it will happen
9/20/2001	sdiego uniontrib	news	13a	502	cd rose	ebmud to study selling power as well as water
10/25/2001	sfc	news	17a	1226	r gordon	do-or-die goals for wind agency
2/14/2002	sfc	news	19a	501	c squatriglia	
4/1/2002	sacbee sdiego uniontrib	news	1b 1b	1243	c peyton	week in review
9/8/2002	uniontrib	news	Sunday	1013		
10/12/2002	sacbee	news	1a	1072	cp dahlberg	city utilities resist green power
12/31/2002	sfc sdiego uniontrib	news	9a 1a	1284		new state laws energy council goes its own way: plan for region trims sdg&e role
7/6/2003	sdiego uniontrib	news	Sunday	1668	cd rose	
8/30/2003	rmn	news	4a	622	t hartman	mtbe ok'd for race
9/20/2003	sacbee	news	3a	1108	cp dahlberg	winds of change: producers to increase their use of renewable
9/20/2003	santonio express	news	3b	406	s huddleston b	talk of nation focus on wind power, historic missions
10/10/2003	csm	news	1	868	knickerbocker	states take the lead on global warming
12/31/2003	sfc	news	13a 7wr1	1240	j kay	full ban on mtbe in 2004
2/1/2004	nyt	news	Sunday	671	ml wald	environmentalists head for the states primary battle: 4 democrats fighting for shot at 21st assembly
2/27/2004	sfc chicago suntimes	news	1e	1159	r kim	consumers object to unsightly solar- power devices
3/12/2004	Milwauk journal sdiego	news	4 6f	878	j carlton	solar panels create legal heat for owners: neighbors think ugly
3/14/2004	sdiego uniontrib	news	Sunday 1b	596	j carlton	city could fall victim to solar success: loses key benefit
3/28/2004	uniontrib	news	Sunday	769	k balint	
4/15/2004	sfc	news	4b	199	p hoge	solar power system produces big windfall
4/20/2004	sfc	news	1a	2793	r collier	oil erupts as issue in presidential campaign
5/15/2004	sfc	news	4b 1b	197	b egelko	san jose: power plant challenge thrown out wind farms find unlikely foe in environmentalists
8/1/2004	boston globe seattle	news	Sunday 4a	1373	b daley	
9/5/2004	times	news	Sunday 19a	747	brief	pacific northwest
10/24/2004	sfc	news	Sunday 1a	691	r collier	state makes progress in kicking oil habit
12/19/2004	sfc	news	Sunday	1620	j kay	taming deadly wind farm: often lethal for birds

10/30/2005	toronto sun	news	36 Sunday	335	reuters	sf: group seeks seasonal halt to turbines (bird safety)
11/4/2005	sdiego uniontrib	news	1a	1749	cd rose	power issue is complex and familiar
4/26/2006	sfc	news	1b	723	m martin	lawmakers hold key to energy aide's job
6/21/2006	lat	news	8b	472	j wilson	greenhouse gases rise 85% in 4 decades calif, taking big gamble, tries to curb greenhouse gases
9/15/2006	nyt	news	1a1	3706	f barringer	greenhouse gases
				48058	1092.2273	45 STORIES
1/28/2001	wash post	oped	4b Sunday	1509	ja anderson	let real competition show what it can do
4/9/2001	sdiego uniontrib	oped	18a	1332	letters	letters
4/19/2001	sdiego uniontrib	oped	7b	872	jo goldsbrough	bush budget cuts will make things much worse in Calif
4/12/2002	sfc atlanta	oped	24a 10f	1323	letters	letters
11/3/2002	jourconst	oped	Sunday	739	edit	water as a state resource: priceless
10/14/2003	sfc	oped	22a	461	edit	governor-elect's misplaced energy
7/12/2004	nyt seattle times	oped	18a1	544	edit	signs of energy
8/10/2004	dp	oped	6b	800	k riley	wind farms for Kittitas? More power to them
5/26/2005	dp	oped	6b	1399	letters	
9/19/2005	sacbee	oped	4b	3822	letters	
10/29/2005	sacbee	oped	7b 3e	762	vj white	no on prop 80: it would create uncertainty, risk
11/6/2005	sfc	oped	Sunday	1690	edit	voter's guide to state ballot propos
6/20/2006	rmn	oped	32a 2m	809	letters	
8/20/2006	lat hartford	oped	Sunday 2c	990	sp erie	shedding light on all those blackouts
9/3/2006	courant	oped	Sunday	570	edit	calif and global warming
				17622	9746	974 10 opeds
4/21/2002	wash post	politics	5a Sunday	624	d balz	gov engler admits no global warming toward gore
11/26/2000	sdiego uniontrib	real estate	1i Sunday	1984	rm showley	solar option: soaring cost of elect sparks interest
		Total wds	items	av w length		
	news, business etc	75757	64	1183.7		
	edit	4004	5	800.8		
	oped	7541	7	1077.3		