

Chapter 29 Conclusion

This report is intended to help policy makers sort through the many issues associated with energy policies. This report can be used as a tool to understand the current energy environment and as a starting point to assess the potential impact of the numerous policy proposals presented to them. In putting together this report, Comptroller staff interviewed scores of experts in energy and related fields and reviewed thousands of research reports, articles and other documents.

This report makes it clear that Texas will need a broad mix of energy resources, technological advances and efficiency improvements to meet growing energy needs. Texas' economic health is dependent on reliable energy and this report should help lawmakers evaluate the potential economic impact of proposed policies.

Texas, in contrast to many other states, has a wide variety of existing and potential resources to meet its energy demands in the coming decades, though the fuel mix of the future could be quite different than today's. As should be clear from this report, the days of near-total reliance on cheap and abundant fossil fuels may be drawing to a close. Instead, we will rely on a mix of fuels and improved efficiency.

Still, it is important to remember that traditional fossil fuels will continue to be our primary sources of energy for many years. Gasoline and diesel will continue to provide the vast majority of our transportation fuel. Natural gas and coal will not be displaced anytime soon as our primary sources of electricity. In fact, worldwide demand for fossil fuels is increasing rapidly, and China in particular is investing heavily in fossil fuels, opening coal-fired power plants at an average rate of one per week.

This demand, however — and the shrinking reserves being tapped to meet it — make it vitally important that we learn how to use these fuels more efficiently. As this report has documented, any source of energy has its own benefits and limitations. The fuels we have relied on for decades generally are still the least expensive for most uses. But they can carry costs that are not necessarily reflected in the prices consumers pay. The costs of pollution, for instance, may be borne by all.

U.S. policymakers, however, are increasingly likely to quantify and impose some of these costs on producers and consumers. In particular, greenhouse gas emissions seem likely to be restricted in some manner.

The expectation of such policies, along with rising fossil fuel prices, has directed a great deal of attention toward renewable energy sources and nuclear power. Investment in the technologies needed to tap these resources is rising rapidly, driven in part by government subsidies.

Policy makers will have a number of decisions to make regarding energy policy in the coming years. And just as choices made by energy producers and consumers carry costs and benefits, so do choices made by governments. Furthermore, much as decisions made by private businesses can have spillover effects, the costs of which are paid by society, government policies intended to encourage the development of a chosen resource can have unintended consequences. For example, federal policy now mandates that a portion of the U.S. transportation fuel supply come from ethanol and other biofuels. Critics have noted that the subsequent rapid rise in demand for corn has driven corn prices higher, encouraged farmers to replace existing crops with corn and has thus contributed to rising prices for a wide array of other food products.

The unintended consequences of new government action can be exacerbated by establishing policies that favor given resources – "picking winners" – instead of setting policy goals and establishing broad guidelines that will allow the market to meet those Texas will need a broad mix of energy resources, technological advances and efficiency improvements to meet growing energy needs.

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goals in the most efficient means possible, no matter the fuel source or technology employed.

Government has played a large role in the development of alternative energy sources. The development of wind energy, biofuels and nuclear power has been assisted by the application of government subsidies to make new energy technology affordable. Yet such assistance must be applied carefully. Public policies that attempt to pick winners in the race for new energy technologies are an inefficient way to achieve policy goals, running the risk not only of wasting taxpayer money, but also of directing private investment away from promising uses.

Fortunately, Texas is in a position to lead on national energy policy, due to its unique experience in conventional energy technology, its vibrant research community and its vast reserves of energy resources. Breakthroughs made in Texas can have an enormous economic impact on the state — and the world.

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