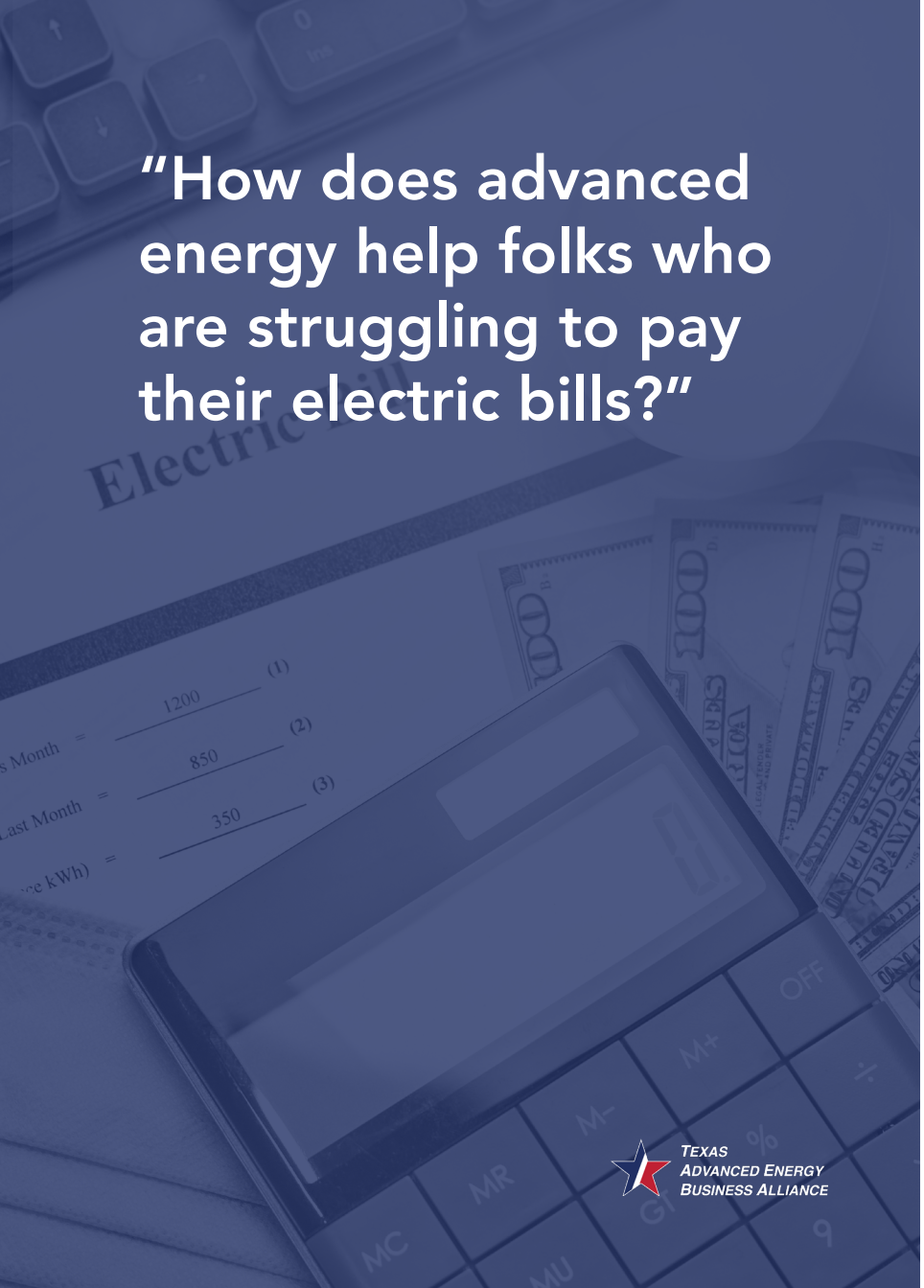
"Does advanced energy create good jobs?"

Texas Advanced Energy Business Alliance

Advanced energy technologies including solar, wind, and energy efficiency are poised to support our economy and growing population with secure, clean, reliable, affordable power. There are 247,600 advanced energy jobs in Texas. That's more jobs than in the entire real estate industry and triple the jobs in chemical manufacturing. From 2020-2021, advanced energy job growth in Texas was 6.8% slightly faster than the rate of state job growth overall.

SUPPORTING INFORMATION:

- 247,600 jobs: 159,000 energy efficiency jobs; 46,000 electricity generation jobs, 13,000 jobs in energy storage, microgrids; 23,000 in clean vehicles.
- Annual wages for solar and wind workers average $48k and $56k, respectively.
- Job growth rates of 52% for solar installers and 68% for wind technicians over the next decade are several times greater than the 8% average for all occupations.



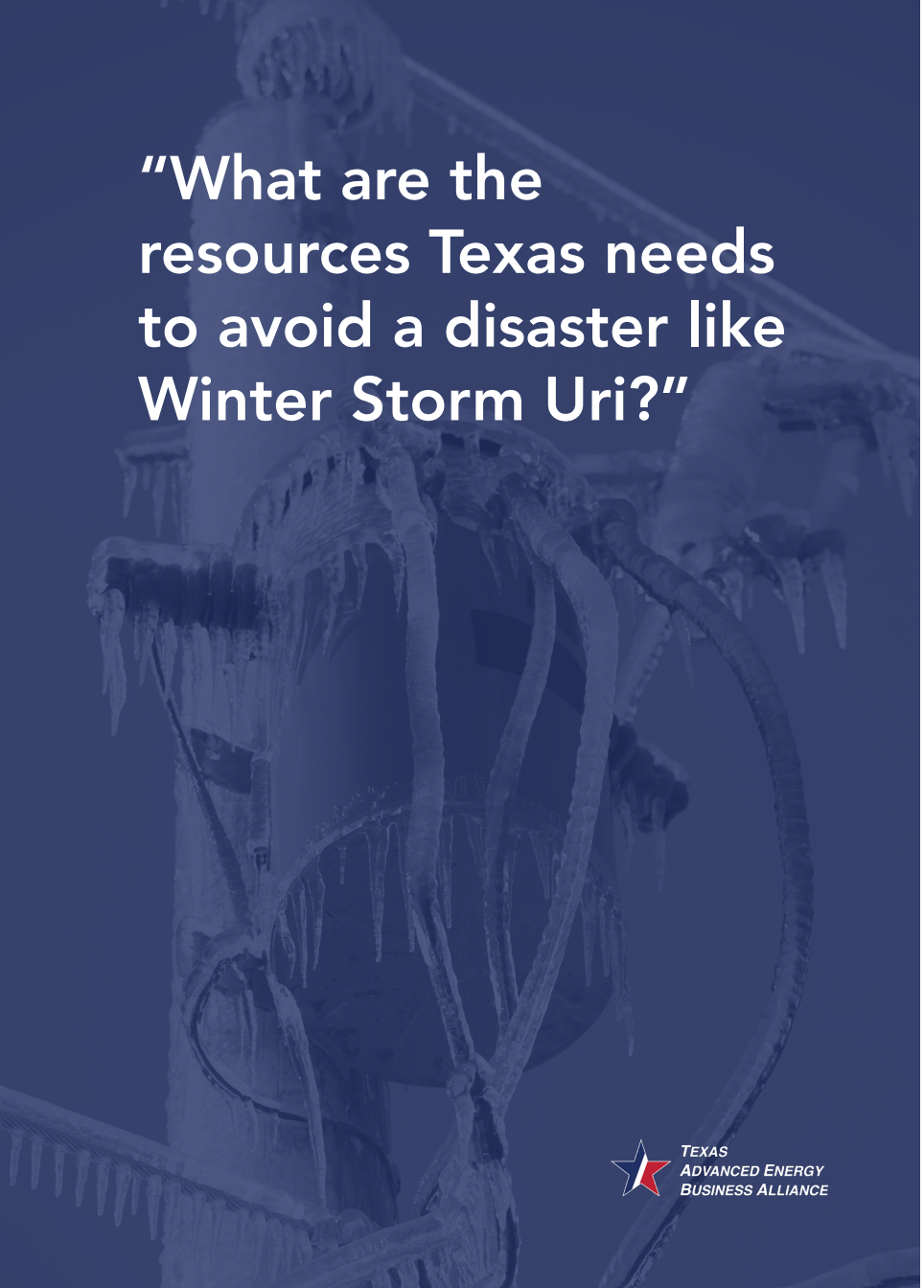
"How does advanced energy help folks who are struggling to pay their electric bills?"

Texas Advanced Energy Business Alliance

Advanced energy technologies help folks meet their energy needs while saving them money. Utility energy efficiency programs – including weatherization efforts – reduce household energy use and lower electric bills. Programs that encourage customers to reduce demand at critical moments help customers take control of their energy bills while contributing to the stability of the grid. Efficiency upgrades also reduce reliance on expensive new utility infrastructure, saving ratepayers money.

SUPPORTING INFORMATION:

- The cheapest energy is the energy you don't need. The average cost for utility-sponsored energy efficiency measures is only 3 cents per kWh, and saves much more.
- Texas was the first state to adopt an energy efficiency resource standard (EERS), but ranks #29 for EE policy effectiveness, with annual energy savings below the national average.
- 65% of Texans agree that decision makers should do more to encourage energy efficiency, and 62% say that leaders should invest in efficiency before building new power plants.



"What are the resources Texas needs to avoid a disaster like Winter Storm Uri?"

TEXAS ADVANCED ENERGY BUSINESS ALLIANCE

During Winter Storm Uri, all generation resources had issues – especially those dependent on natural gas. In fact, wind resources outperformed natural gas. Residents with solar plus storage were able to keep their lights on, demonstrating how distributed energy resources can maintain reliability in extreme weather. Large-scale batteries, which store excess energy for when it's needed most, are seeing major market growth in Texas thanks to their reliability benefits.

SUPPORTING INFORMATION:

- Enduring its hottest May ever, strong performance by wind and solar in Texas helped meet record electricity usage, (40% of total demand), while keeping costs low in the face of skyrocketing gas and coal prices.

- Older thermal power plants faced with unseasonably high temperatures are increasingly struggling to remain online, underscoring the importance of diverse renewable energy sources.

- Diversity of energy resources is important to Texans. 71% agree that the state should be encouraging businesses to develop different energy resources, including solar and storage.

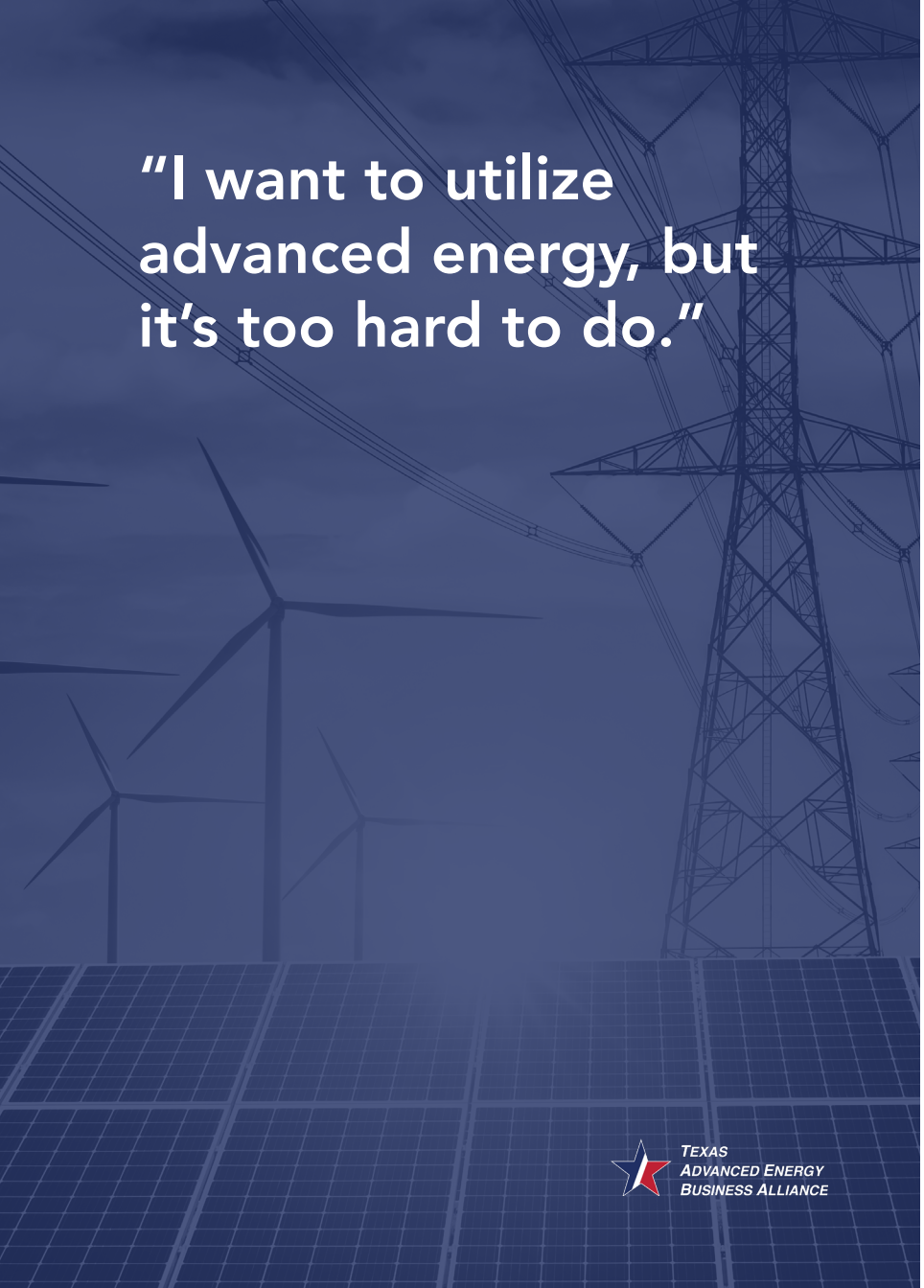
"Electric vehicles are too expensive."

Texas Advanced Energy Business Alliance

Electric vehicles (EVs) are becoming less expensive to buy even as they boast longer ranges. EVs are also cheaper to operate and maintain than traditional vehicles. Additionally, EVs share the cost of existing electric infrastructure, driving down costs for all electricity ratepayers. Many EVs now have vehicle to grid capabilities, allowing them to send power back to the grid in times of critical need. This means that EVs could keep the lights on and save money in extreme weather – if we can change existing rules preventing these services from being used.

SUPPORTING INFORMATION:

- Bloomberg New Energy Finance projects that EVs will reach up-front price parity – without subsidies – with gasoline-powered vehicles by the mid-2020s.
- It costs less than half as much in an EV to travel the same distance as a conventional vehicle.
- 71% of Texans agree that state leaders should require compensation for EV owners who send power back to the grid in times of need.



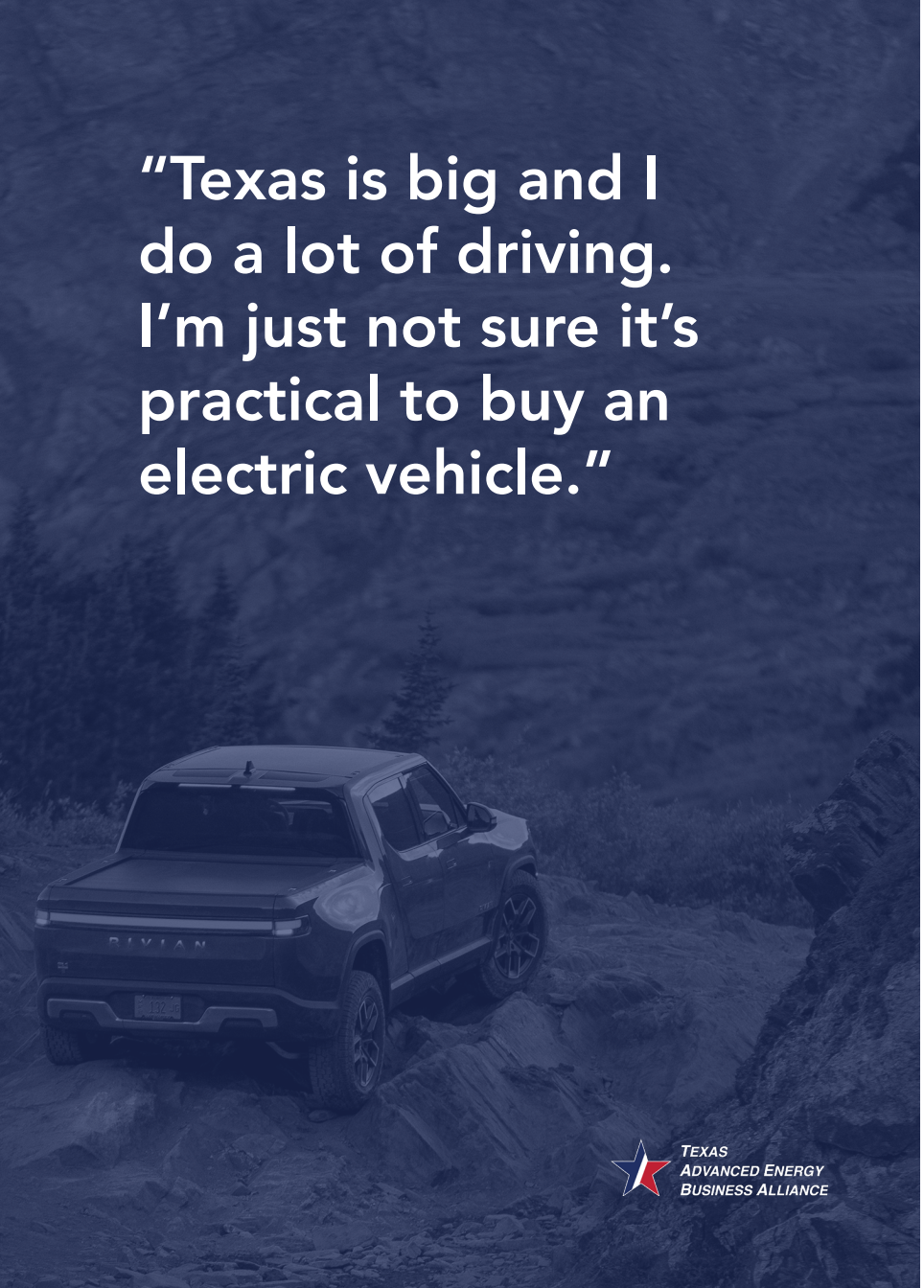
Technological advances, cost reductions, and increased customer interest in energy freedom have spurred growth in adoption of distributed energy resources. These include onsite generation (e.g. rooftop solar), energy efficiency and demand response, batteries, and electric vehicles. But legislative proposals to support their use lost out in 2021. It needs to be easier for customers to invest in DERs that offer savings and reliability, without facing onerous requirements or discriminatory fees.

SUPPORTING INFORMATION:

- By better integrating DERs including battery storage and demand response measures, Texans could realize $5.47 billion in value over the next decade.

- 76% of Texans agree that customers should be allowed to provide energy back to the grid as needed, and should be compensated for doing so, like any other energy source.

"Texas is big and I do a lot of driving. I'm just not sure it's practical to buy an electric vehicle."



TEXAS ADVANCED ENERGY BUSINESS ALLIANCE

Electric vehicles (EVs) are becoming cheaper and boasting longer ranges, and with pick-ups from Tesla, Rivian, Ford, and GMC, Texans have plenty of EV choices. EVs are cheaper to operate and maintain than traditional vehicles, and EV owners that drive more save more, since charging is much cheaper than gas. A robust charging network is critical to ensuring EVs drivers can go wherever they please. The federal government has allocated over $400 million to get Texas going on building one.

SUPPORTING INFORMATION:

- Typical EV battery range averages around 200 miles, with top manufacturers reaching upwards of 300 miles.
- 90% of the car trips we make are under 100 miles, meaning that today's average EV has over double the necessary range to meet every day driving needs.
- As of June 2022, the average price per gallon of gas is over $5. The cost for the equivalent eGallon of electricity is $1.08.

"What can advanced energy do to attract business to our state and grow our economy?"

TEXAS ADVANCED ENERGY BUSINESS ALLIANCE

and Apple seek to purchase renewable energy to meet ambitious sustainability goals, the Texas market has emerged as a runaway favorite.

Strong resource potential, a competitive retail and wholesale market structure, early investment in transmission infrastructure to facilitate renewable energy buildout, and favorable tax and siting policies are all critical to attracting this investment to the state.

SUPPORTING INFORMATION:

- Since corporate procurement began increasing 10 years ago, Texas accounts for 39% of total wind capacity purchased by commercial and industrial (C&I) customers nationwide.

- In 2019, Texas provided nearly 40% of the renewable capacity contracted by C&I customers, two thirds of which was solar.

"How can advanced energy help Texas prepare for another extreme weather event?"

TEXAS ADVANCED ENERGY BUSINESS ALLIANCE

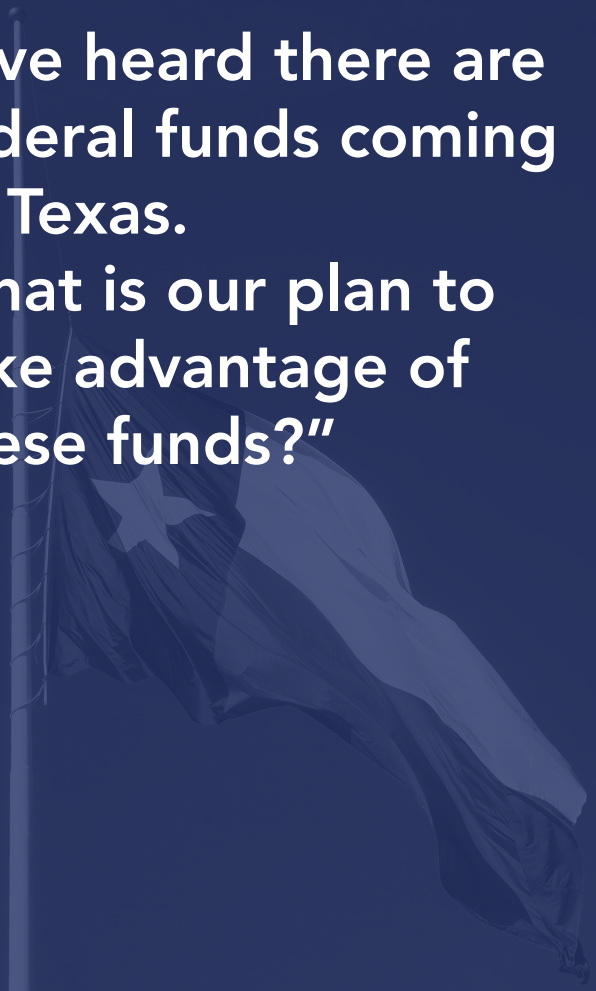
Demand is half the energy equation, and should be half the solution to problems like Winter Storm Uri. Energy efficiency technologies provide the same services using less energy, decreasing strain on the grid without compromising comfort. Demand response measures, including smart thermostats that can be called upon to reduce stress on the grid, also contribute to resilience.

Advanced energy technologies like combined solar and storage allow individuals to keep the lights on when the grid fails. Local generation and storage technologies can increase community resilience during extreme weather events.

SUPPORTING INFORMATION:

- Over 8 in 10 Texans lost power, running water, or suffered damage to their homes during Winter Storm Uri.
- 90% of Texans agree that state officials should do more to ensure that the grid can withstand extreme weather events.
- 62% agree that Texas leaders should invest in reducing energy use before building new power plants.

"I've heard there are federal funds coming to Texas. What is our plan to take advantage of these funds?"

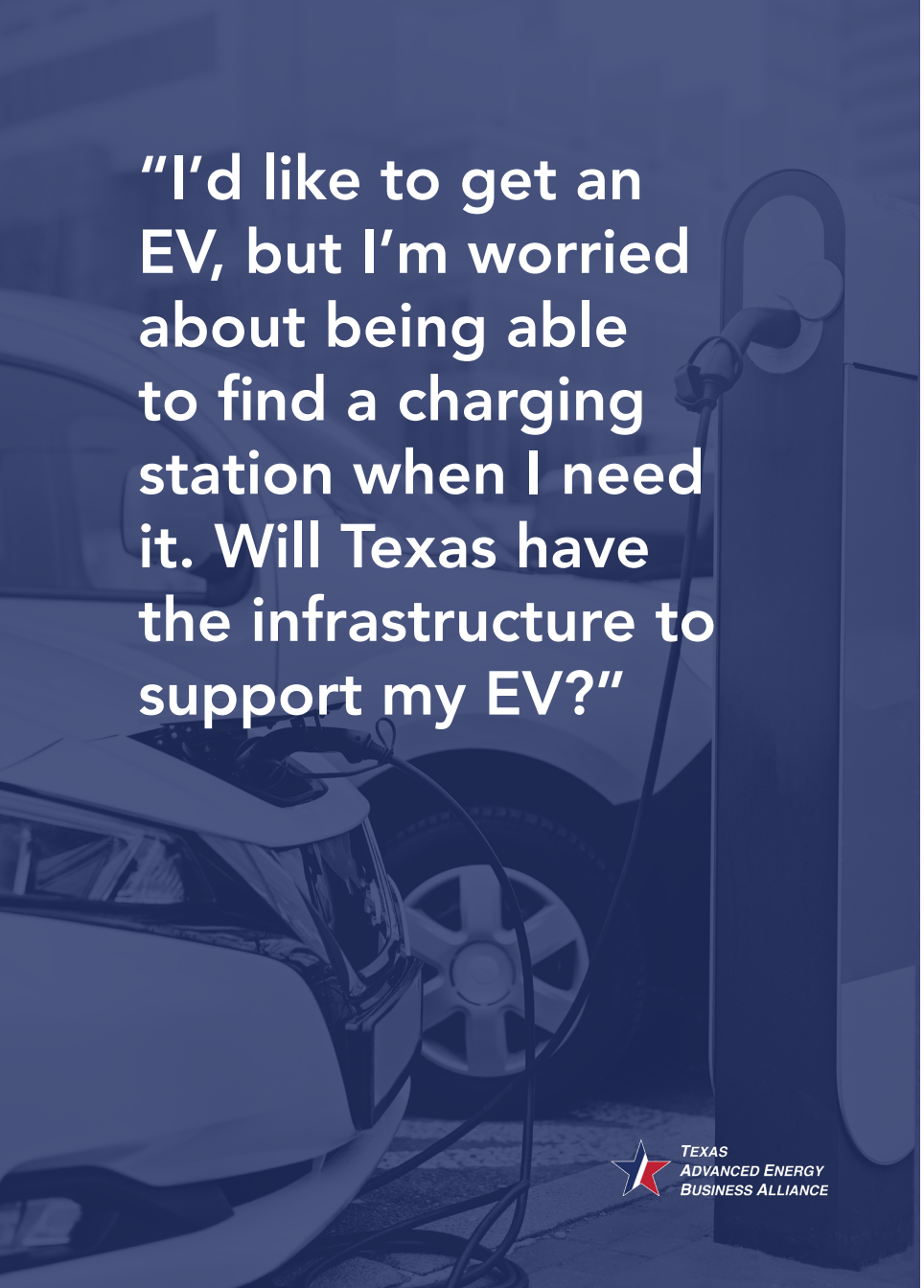


TEXAS ADVANCED ENERGY BUSINESS ALLIANCE

With the federal Infrastructure Investment and Jobs Act (IIJA), Texas will be eligible for billions of dollars in energy efficiency, electric vehicle charging infrastructure, grid resilience, rural energy infrastructure, transmission, workforce training, and manufacturing funding. It is critical that Texas leaders develop a plan for these funds that takes full advantage of these opportunities for improvement.

SUPPORTING INFORMATION:

- Federal investment in advanced energy is estimated to deliver six times the return on investment of Texas's public expenditure, adding value to the economy, creating jobs, and providing revenue to state and local governments.



"I'd like to get an EV, but I'm worried about being able to find a charging station when I need it. Will Texas have the infrastructure to support my EV?"

TEXAS ADVANCED ENERGY BUSINESS ALLIANCE

Federal infrastructure funds are coming to Texas via the Infrastructure Investment and Jobs Act. A comprehensive plan for transportation electrification will ensure that Texas receives $408 million over a period of five years to support the expansion of a statewide EV charging network, as well as access to over $2.5 billion in competitive funding for additional EV infrastructure.

SUPPORTING INFORMATION:

- 58% of Texans support increasing state funding of EV chargers, to ensure the presence of charging stations in every part of the state.
- 88% of Texans agree it is important to have a comprehensive plan determining how federal infrastructure funds will be used prior to receiving them.

"How can Texas foster market competition and be welcoming to energy entrepreneurs?"

Texas Advanced Energy Business Alliance

Texas can foster competition by removing barriers to the implementation of localized energy technologies (such as rooftop solar and microgrids) that facilitate a more flexible, affordable, and reliable electrical system. These untapped resources can provide back-up power during extreme weather and reduce the need for costly grid upgrades. Customers that invest in these technologies should be allowed to both provide grid services—like sending energy back to the grid at critical times—and be fairly compensated for them.

SUPPORTING INFORMATION:

- Current rules prevent these technologies from achieving full market participation, which could deliver $5.47 billion in savings over the next 10 years.
- 76% of Texans agree individuals should be able to provide electricity back to the grid in times of need, and be compensated for it.