

# RISKY BUSINESS

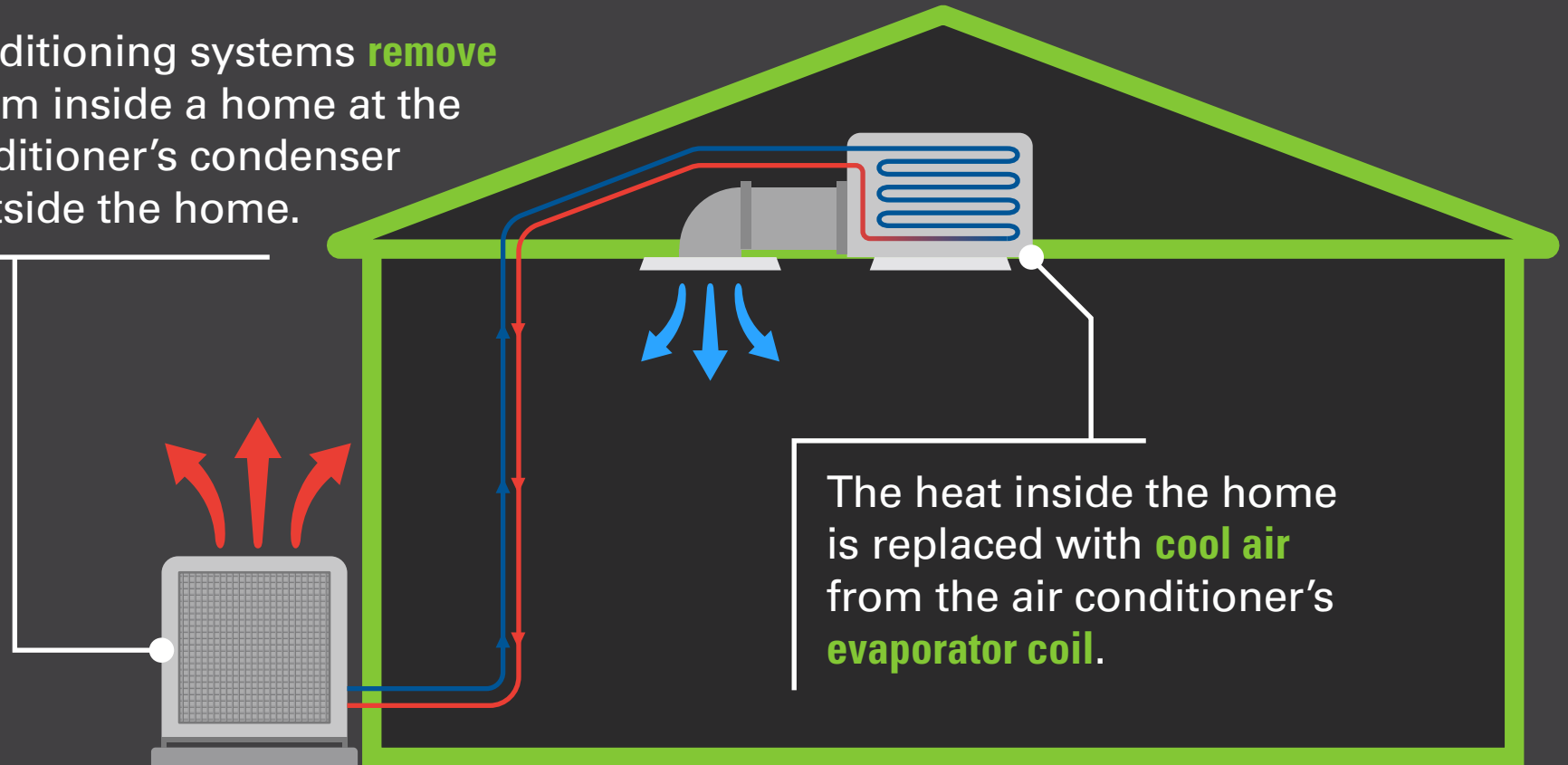
What You Need To Know About...



## Air Conditioning Units

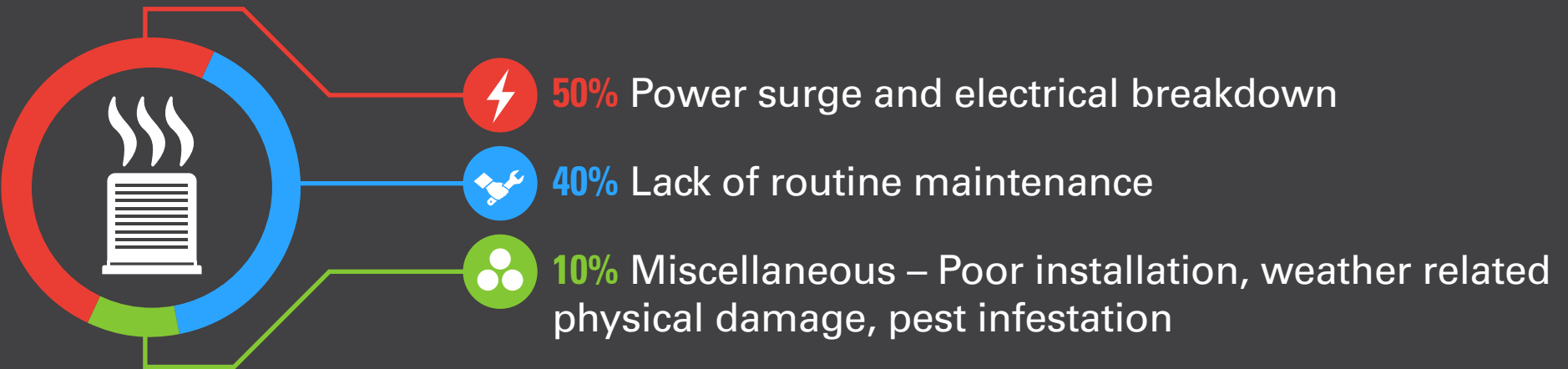
### HOW THEY WORK:

Air conditioning systems **remove heat** from inside a home at the air conditioner's condenser coil outside the home.



The heat inside the home is replaced with **cool air** from the air conditioner's **evaporator coil**.

### HOW THEY BREAK DOWN:



### HELPFUL AIR CONDITIONING FACTS:

18% of annual household electricity use is for air conditioning.<sup>4</sup>



Changing a dirty **air filter** can decrease energy use by up to **15%**.<sup>5</sup>



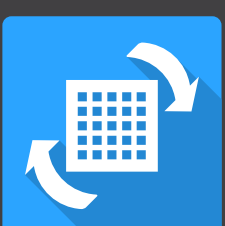
90% of all homes in the United States have **air conditioners**.<sup>3</sup>



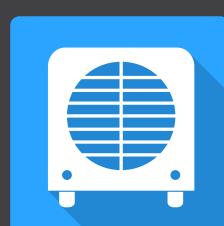
Air conditioners have a **lifespan of 10-20 years**, depending on the type of air conditioner being used.<sup>6</sup>

### MAINTENANCE TIPS:

Put a **maintenance checklist** in place.<sup>7</sup>



Change the air filter **every month**



Allow at least **2 feet of clearance** around the condenser unit for sufficient air flow



**Clean** the evaporator coil and condenser coil



Have a licensed **HVAC contractor** check the electrical connections every 3-5 years

### EMERGING TRENDS:



Many air conditioning equipment manufacturers have developed **apps** that allow the homeowner to **adjust and control their air conditioner remotely** using a laptop or smartphone.

In the **next wave of technology** development, manufacturers will advance smart technologies to **interface** their systems with the national electric grid, allowing air conditioning units to be **regulated according to geography and changing weather conditions**.<sup>8</sup>

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#### References

- <sup>1</sup> <http://www.asme.org/engineering-topics/articles/technology-and-society/global-cooling-the-history-of-air-conditioning>
- <sup>2</sup> <https://www.lancasterbrothers.com/lancaster-brothers-heating-cooling-blog/10-quirky-air-conditioning-facts-that-will-blow-your-mind/>
- <sup>3</sup> <https://www.eia.gov/todayinenergy/detail.php?id=31312>
- <sup>4</sup> <https://energy.gov/energysaver/maintaining-your-air-conditioner>
- <sup>5</sup> <https://energy.gov/downloads/energy-saver-101-home-cooling-infographic>
- <sup>6</sup> <https://energy.gov/energysaver/maintaining-your-air-conditioner>
- <sup>7</sup> <http://www.asme.org/engineering-topics/articles/technology-and-society/global-cooling-the-history-of-air-conditioning>