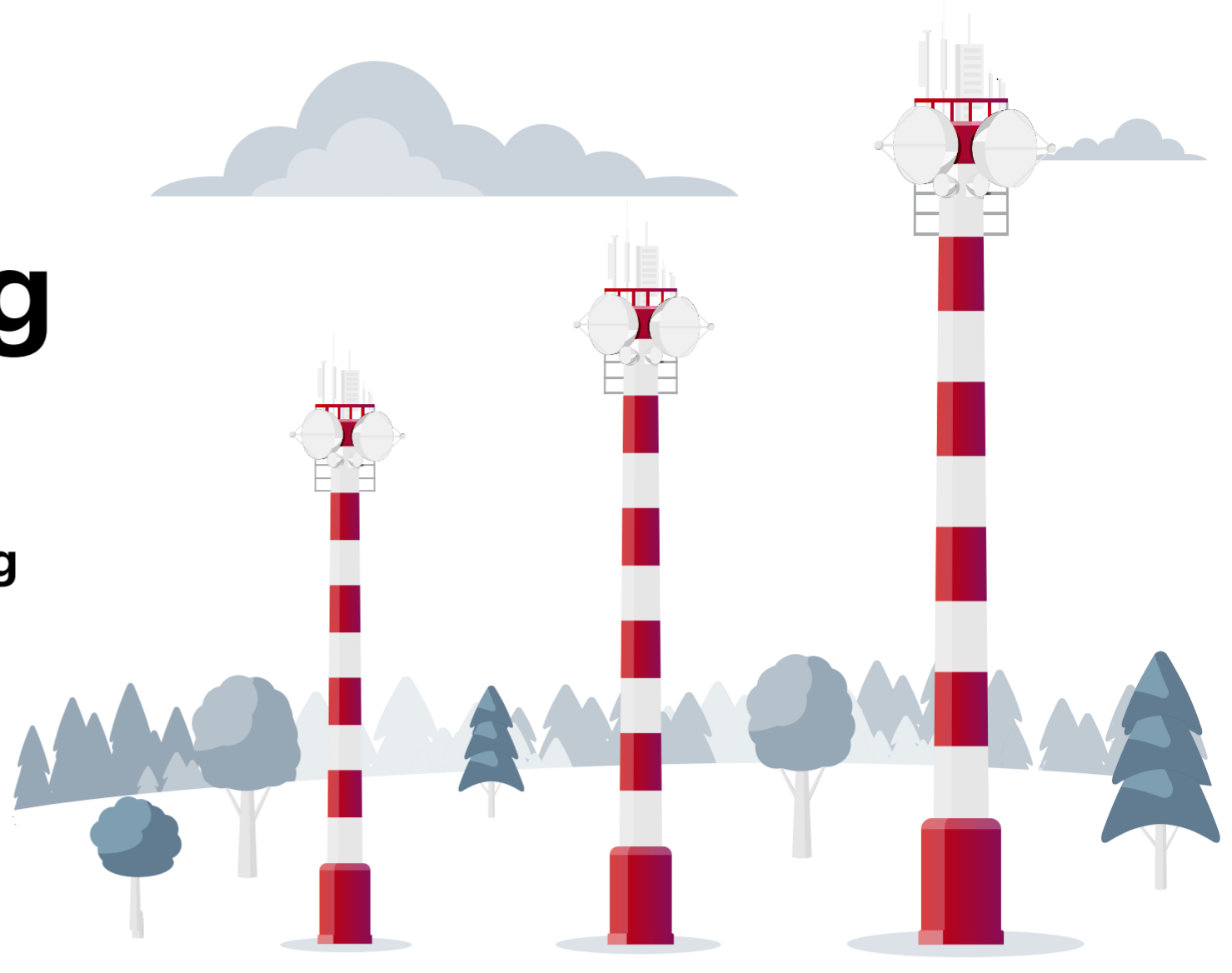


Telcos' New Energy Imperative

Telecom executives are focusing on nine steps to counter rising energy costs and reduce emissions.

Energy costs are ballooning

Energy usually has accounted for just **3%–4%** of a typical telco's spending, but now that's **doubling or tripling** for some operators




9 actions to control energy costs and reduce emissions


IMPROVE SUPPLY

1

Procurement: Protect against price volatility by hedging energy spending, striking long-term power purchase agreements, and competitively sourcing energy, which can also help move power grids to green agreements

Potential financial impact: Hedge up to **90%** of next year's energy spending


 **Less than 1 year**



2

Storage: Adopt smart batteries as network towers' backup power source, which can also support sustainability initiatives and generate revenue from peak/off-peak load shifting


Potential financial impact: **10%–20%** cost savings

 **1–3 years**

3

Internal production: Invest in telco-owned renewable energy, such as solar cells or micro wind turbines installed on or near tower sites


Potential financial impact: Up to **30%** of energy from internal production and partners

 **Less than 1 year (solar) to more than 3 years (wind)**

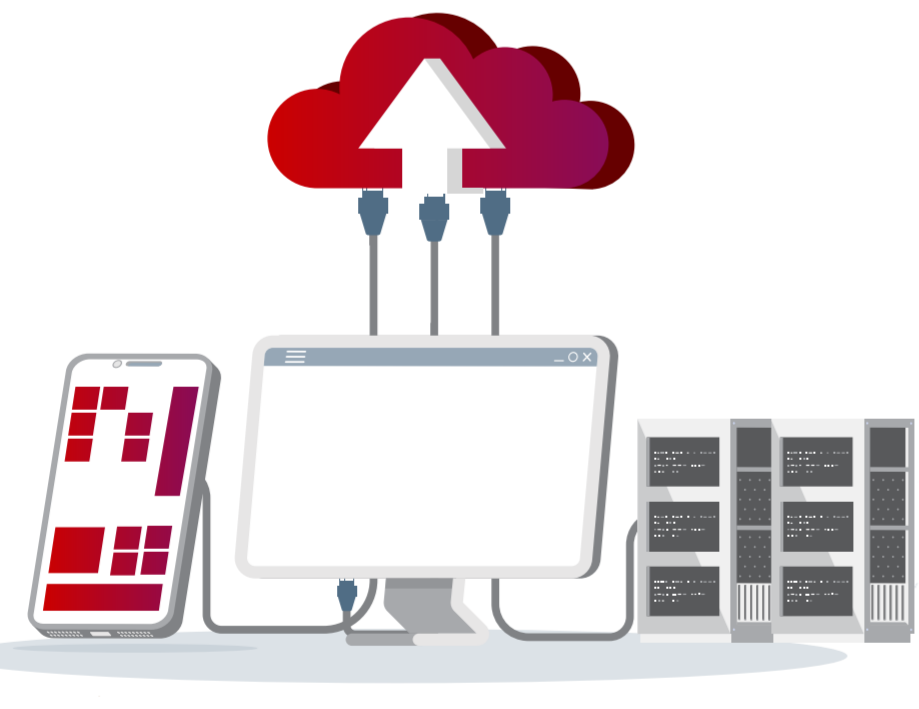
4

Third-party production: Form partnerships for additional renewable energy; often requires long-term purchasing commitment

Potential financial impact: Up to **30%** of energy from internal production and partners

 **1–3 years**


DECREASE DEMAND



5

Equipment: Switch to more energy-efficient equipment (e.g., outdoor base transceiver stations) and migrate data to public cloud providers


Potential financial impact: **40%** operational cost savings

 **More than 3 years**

6

Legacy decommissioning: Accelerate shutdowns of legacy networks and shift network controls from hardware to software to increase efficiency


Potential financial impact: **40%–50%** decrease in power consumption

 **More than 3 years**

7

Standby modes: Turn off noncritical services during nonpeak operating hours, but beware trade-offs in customer experience and technical challenges


Potential financial impact: **5%** energy savings

 **Less than 1 year**

8

Passive cooling/heating: Design sites for energy recovery, such as heating offices using energy generated by data center operations


Potential financial impact: **3%–5%** energy savings

 **1–2 years**

9

Temperature control: Reduce facility energy usage by matching temperature settings with equipment warranty specifications

Potential financial impact: **20%–30%** savings on cooling costs

 **Less than 1 year**