



#TILCARBON

# Can **carbon** support the clean energy transition?

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# DEXMAT

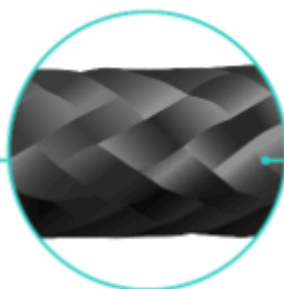
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## Yes! Galvorn cables could save \$100K per mile

DexMat and Prysmian—the world leader in cable manufacturing, energy solutions, telecom cables and systems industry—are co-developing new Aluminum-Carbon Nanotube (ACNT) power cables.



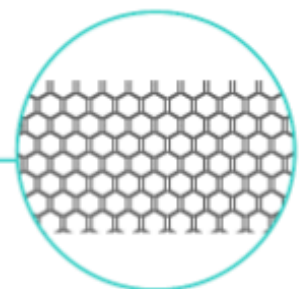
Aluminum  
Carbon Nanotube (ACNT)



Strand  
(1mm)



Fiber  
(10µm)



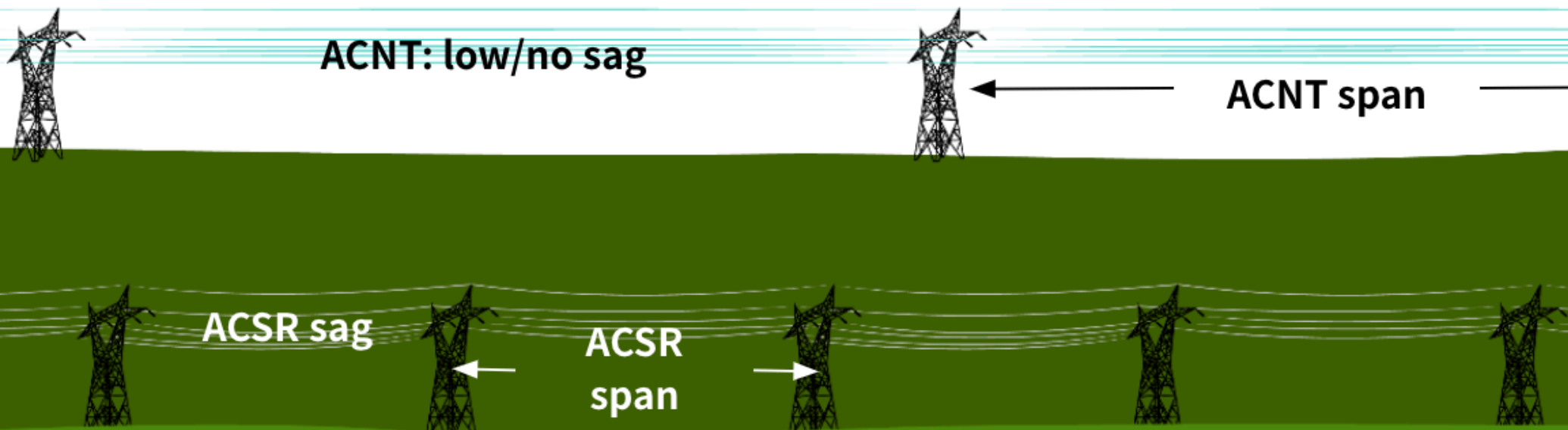
Carbon Nanotube  
(2nm)

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# Lighter, stronger conductors with Galvorn

Funded by a \$1.1 million U.S. Department of Energy grant, ACNT cables replace the incumbent steel or carbon fiber core with Galvorn to have improved thermal and electrical conductivity, reduce weight, and increase breaking and tensile strengths. It minimizes the number of cable support towers needed and reduces the total cost to taxpayers.



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**NREL estimates up to 91,000 miles of new interregional transmission lines will be needed by 2035.**



ACNT: low/no sag



ACNT span



ACSR sag



ACSR span



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# \$9.1 BILLION, anyone?

**91,000 miles x \$100,000 / mile = \$9,100,000,000 in savings**

Saving \$100,000 per mile while deploying 91,000 miles of new transmission lines saves a total of \$9.1 billion. And this doesn't account for the additional savings from reduced line losses, improved reliability, etc.

\$9.1 billion saved is \$9.1 billion that can be invested to solve other challenges in our clean energy transition.