

C1-C2 Worksheet: British company turns footsteps into electricity - 10 March 2026

Article

For years, urban renewable energy has run up against an awkward constraint: the very density that makes cities economically dynamic also makes them inhospitable to conventional green infrastructure. Streets hemmed in by tower blocks do not lend themselves to large-scale solar capture, while wind installations are often ruled out by space, noise and planning restrictions. Pavegen, a British company specialising in kinetic paving, is attempting to carve out a niche within that impasse. Its tiles harvest small bursts of electricity from pedestrian movement, and the company has framed the technology not as a silver-bullet replacement for the grid, but as a way of squeezing marginal gains from spaces that would otherwise remain energetically idle.

That modest claim is precisely what makes the idea harder to dismiss. Rather than banking on raw output alone, Pavegen has doubled down on a hybrid argument: the paving can generate power for low-energy applications, feed live data back to operators and turn sustainability into something the public can see under its own feet. In other words, the system is pitched as infrastructural theatre as much as infrastructure. Advocates say this broader value proposition could persuade municipalities to buy into schemes that would look unconvincing if judged solely by kilowatt hours. Sceptics, however, argue that such projects can be difficult to scale up, expensive to roll out and vulnerable to being written off as gimmicky once the novelty wears off.

Even so, the concept appears to be gathering pace because it sidesteps a false either-or. Cities do not need every intervention to be transformative in order for it to be worthwhile; sometimes the point is to iron out inefficiencies, chip away at waste and reframe public space as something more than a passive backdrop to movement. If energy-generating paving catches on, it will probably do so not through spectacular output, but through accumulated usefulness, symbolic visibility and the quiet appeal of systems that work in the background. In that sense, each footstep may amount to very little in isolation yet still add up to a persuasive urban logic.

True/False

Decide if each statement is True (T) or False (F).

1. The article suggests that dense urban design can make standard renewable systems less practical.
2. Pavegen is described as a company aiming to replace conventional electricity grids entirely.
3. The writer indicates that the project's appeal partly lies in making sustainability visible to the public.
4. Critics in the article mainly argue that kinetic paving produces excessive noise in city centres.
5. The phrase infrastructural theatre implies that the project has no serious practical value at all.
6. The article claims that only large-scale, transformative interventions are worth funding in cities.
7. The final paragraph suggests that modest efficiencies can become persuasive when their effects accumulate.
8. The article presents novelty as the main reason the paving is likely to succeed.

Phrase Match

Match the phrases (1-10) to the correct definitions (A-J).

Phrases (1-10)	Definitions (A-J)
1. run up against	A. to secure a small but distinct role or position
2. lend themselves to	B. to present something in a specific way
3. carve out a niche	C. to increase something so it operates more broadly
4. squeezing marginal gains	D. to become popular or widely adopted
5. doubled down on	E. to obtain small improvements that are individually limited
6. pitched as	F. to remove waste or inefficiency gradually
7. buy into	G. to encounter a difficulty or obstacle
8. scale up	H. to pursue a strategy with even greater commitment
9. iron out	I. to be naturally suitable for a particular purpose
10. catches on	J. to accept and support an idea or scheme

Synonym Match

Match the words (1-10) to the correct synonyms (A-J).

Words (1-10)	Synonyms (A-J)
1. awkward	A. flashy in a superficial way
2. inhospitable	B. inactive rather than active
3. idle	C. reject as unimportant
4. dismiss	D. partially enclosed or surrounded
5. unconvincing	E. not being used productively
6. gimmicky	F. unsuitable or unwelcoming
7. sidesteps	G. avoids dealing with directly
8. passive	H. combine or increase gradually
9. hemmed in	I. doubtful or unconvinced
10. accumulated	J. not persuasive or believable

Use the new language

Choose 5 new words or phrases from the worksheet and write your own sentence with each one.

Discussion Questions

Student A

1. Do you find the idea of turning footsteps into electricity ingenious or slightly gimmicky?
2. Which parts of daily city life seem energetically idle to you?
3. Would visible green technology make people more likely to buy into environmental policies?
4. What kinds of small improvements have added up in your own city over time?
5. Are symbolic environmental actions still worthwhile if their practical impact is limited?
6. Which public spaces in your area could lend themselves to this sort of experiment?
7. Do you think most people notice how urban design shapes daily behaviour?
8. What would persuade you that a project like this was more than infrastructural theatre?

Student B

1. Does the article successfully sidestep the criticism that low-output technologies are a distraction?
2. At what point does a niche innovation become scalable public infrastructure?
3. Should municipalities judge green projects by kilowatt hours alone, or by a broader civic calculus?
4. Is it intellectually honest to promote a technology partly for its symbolic value?
5. Why do some urban innovations catch on while others are written off as gimmicky?
6. Can marginal gains justify high upfront costs in public spending?
7. How far should cities go in reframing public space as productive infrastructure?
8. Does the language of innovation sometimes conceal quite modest practical results?

Answer Key

True/False: 1=T, 2=F, 3=T, 4=F, 5=F, 6=F, 7=T, 8=F

Phrase Match: 1=G, 2=I, 3=A, 4=E, 5=H, 6=B, 7=J, 8=C, 9=F, 10=D

Synonym Match: 1=I, 2=F, 3=E, 4=C, 5=J, 6=A, 7=G, 8=B, 9=D, 10=H