

EXPERT OPINION: MARIA CAMILA BEDOYA-TORO



**SUSSEX
INNOVATION**
Insight. Inspiration. Impact.

Programmes & Consultancy Manager Sussex Innovation

Previous roles including Professional of Alliances and Partnerships at COMFAMA and strategy at Estrategik Ventures, technical coordination for international organisations at Cooperación · Desarrollo · Gestión, and other roles within education and business.

Maria holds an MA in Environment, Development and Policy from the University of Sussex and a BSc in Business Administration from Universidad EAFIT in Colombia, with a specialism in Marketing Management.

A Sussex Deep Tech cluster: what could go wrong?

The previous article made the positive case for what a Deep Tech cluster could deliver across Sussex. This one does the opposite. Not because we've changed our minds, but because any economic strategy that doesn't account for its own risks isn't a strategy at all. It's a brochure.

Housing: the price of success

This is probably the most predictable risk and the hardest to manage. When high-value jobs concentrate in an area, housing costs follow. Brighton already has a median house price to earnings ratio above 12, making it one of the least affordable cities in England outside London. Parts of Mid Sussex and Lewes aren't far behind. Add a cluster of well-paid technical roles without a parallel increase in housing supply and existing residents get pushed further out before they see any benefit.

The constraint is structural. Around 40% of Sussex's land area falls within the South Downs National Park, where development restrictions are significant. Any deep tech spatial strategy needs to pair employment zone planning with genuinely affordable housing delivery in areas like Crawley, Burgess Hill, and Hastings, where there is both capacity and need.

This isn't a side note to the Deep Tech agenda. This is the Deep Tech agenda. If the people who maintain your clean rooms and calibrate your lab equipment can't afford to live within commuting distance, the cluster doesn't function.

Energy and waste: the hidden footprint

Deep Tech facilities are energy hungry. A mid-scale quantum computing lab requires continuous cryogenic cooling to maintain temperatures near absolute zero. Data centres supporting AI workloads consume vast amounts of electricity and generate significant heat. Advanced manufacturing processes produce specialist waste streams, chemical byproducts, and materials that can't go into standard recycling. The National Grid's Future Energy Scenarios report projects that data centre electricity demand alone could grow fivefold by 2035.

Sussex's grid infrastructure was not designed for this. Concentrating energy-intensive facilities in the Gatwick corridor or along the A27 without significant grid upgrades risks brownouts, planning delays, and genuine environmental costs. The waste question is equally serious: who regulates it, who processes it, and who pays? If we're going to build deep tech zones, the energy and waste infrastructure has to be designed in from the start, not retrofitted after the first complaints from neighbouring communities.

One potential solution to these challenges lies in directing investment towards clean energy, waste reduction and recovery initiatives in the region, many of which require a similar long-term outlook to other deep tech projects.

This isn't a silver bullet though; it will still require plenty of joined up thinking, and an honest assessment of what infrastructure is going to be needed and where.



The 2 sides of the same coin

Enrico Moretti's job multiplier, mentioned in the previous article, works both ways.

The five local service jobs created by each high-tech role tend to be lower-paid, less secure, and offer limited progression.

If the skills pipeline doesn't deliver genuine reskilling pathways, and if FE colleges in Eastbourne, Worthing and Hastings are not funded to develop technical curricula at the pace industry needs, Sussex risks replicating what happened in parts of the San Francisco Bay Area: a visible wealth gap between the people in the cluster and the people around it.

That creates resentment, political backlash, and ultimately undermines public support for the very investments the cluster depends on.

Extractive investment vs rooted growth

Not all inward investment builds local value. A multinational that opens a satellite R&D office in Sussex to access university talent looks good in a press release. But if the intellectual property, the senior leadership, and the profits all sit in another city or another country, the local benefit is thinner than headline figures suggest.

The Centre for Cities has documented this pattern in several towns that attracted large branch operations only to see them retrenched during downturns. Sussex needs to prioritise growing its own companies, not just hosting someone else's.

The fragility of devolution itself

English devolution has a patchy track record. Some combined authorities have secured meaningful fiscal powers; others have received little more than a rebrand. If Sussex's deal arrives heavy on symbolism and light on genuine budget transfer, the entire deep tech coordination strategy stalls at the starting line. And devolution can be reversed or simply deprioritised by a future government with different spending pressures. The mitigation is to move fast on physical infrastructure: once a lab building is built and a fibre network is laid, those investments persist regardless of which party holds power in Westminster.

My final thought

The worst version of this story isn't that we tried and failed. It's that we succeeded in building something valuable and forgot to make it fair.

None of these risks are reasons to stop. They are reasons to plan properly, consult honestly, and build accountability into the process from the beginning. At Sussex Innovation, that is the approach behind our upcoming **Deep Tech Accelerator**: supporting ventures that are rooted in Sussex communities, that create broad-based employment, and that take energy, housing, and inclusion seriously as design constraints rather than afterthoughts.

You can find out more about these programmes and how to get involved by [contacting our team](#), or subscribing to our monthly [Deep Tech Briefing email](#).