经济学人外刊精读讲义-Global Sensing: Breeze Tech and the Race to Detect Fires

↑来源: The Economist – Jan 4th 2025

★主题:不止一家公司盯上了森林火灾,这场"智能感知竞赛"正全球开打

之前我们讲到一家公司用100美元一个的传感器实现火灾预警,这篇延续上文思路,讲的是另一家德国公司如何全球化布局、技术精准升级,并与美国企业联合扩张。整段语言的特点是:全球合作+多国落地+技术细节+数据表达,句式规范、逻辑清晰,非常适合用于科技合作、环境治理、国际项目成功案例类写作段落。

◎原文

A handful of other companies around the world have had similar successes with analogous technology. Together with N5 Sensors, an American firm, Hamburg-based Breeze Technologies has installed sensors across forests in California. Their highly sensitive detectors are deployed at intervals of between two and five kilometres and can smell wildfires from within five to 15 minutes after the initial burn, says Robert Heinecke, the company's boss. These sensors also measure polluting particulate matter (PM2.5 and PM10) in the air. Their results have been confirmed in projects throughout America, Canada, Germany and Peru.

≫ 原文节选

- 1. Hamburg-based Breeze Technologies has installed sensors across forests in California.
- 2. Their highly sensitive detectors are deployed at intervals of between two and five kilometres and can smell wildfires from within five to 15 minutes after the initial burn.
- 3. Their results have been confirmed in projects throughout America, Canada, Germany and Peru.

🧠 中文翻译

- 1. 总部位于汉堡的Breeze Technologies公司已在加州森林部署了传感器。
- 2. 它们的高灵敏度探测器每两至五公里部署一套,在起火后的5至15分钟内即可感知火情。
- 3. 这些传感器的结果已在美国、加拿大、德国和秘鲁的项目中得到验证。

🔍 拆句分析

结构表达	语法说明	写作用途提示
Hamburg-based Breeze Technologies	地名修饰作定语,强调 "总部"	用于说明国际机构或企业背景时
deployed at intervals of between X and Y	被动结构 + 范围型间隔表 达	描述设备布设策略/资源投放策 略时
can smell wildfires from within X minutes after Y	动词+时间副词+触发条件	强调反应时间/技术灵敏度,适 合应用场景描写
their results have been confirmed in…	被动结构 + 多地列表	常用于"国际验证/多地区试验" 描述,适合数据支撑写作

등 应试适配

项目	句型1	句型2	
	Hamburg-based Breeze Technologies has installed sensors across forests in California.	Their results have been confirmed in projects throughout America, Canada, Germany and Peru.	
功能用途	引入项目背景、强调国际属性	描述技术优势 + 证据支持,提升可信度	
应用场景	科技企业介绍、项目扩张、市场调 研	科技应用、数据研究、政策验证	
替代表达	city-based / globally partnered / has operations in…	been peer-reviewed / confirmed by pilot trials	

■词汇讲解

单词 / 短语	中文解释	写作用途提示	
a handful of	少数,一小部分	表"不是很多但值得注意",引导案例或 趋势句常用	
analogous	类似的,可比的	替代 similar 的高阶词,适合科技/系统 对比段落	
Hamburg-based	总部位于汉堡的	地理+企业关系表达,适合项目类描述 引入	
intervals of between X and Y	两个数字之间的区间 部署	表"动态覆盖策略"的经典结构	
initial burn	最初起火点	适合环境类话题中的"源头性事件"表达	
particulate matter (PM2.5 / PM10)	可吸入颗粒物(污染 指标)	用于环保、空气监测场景,术语类词汇 可迁移性强	
throughout + 地名列表	遍布多个地区	表"广泛验证"或"落地推广",适合结 果论证段落	

★ 表达亮点

• Hamburg-based Breeze Technologies

→ 可迁移为: Beijing-based startup / London-headquartered firm,强调公司背景与全球身份。

• can smell wildfires from within five to 15 minutes after the initial burn

→非常具体、数据化、动态型表达,用于强调技术效率、反应时间、精度水平。

- have been confirmed in projects throughout…
- → 被动语态搭配项目验证,提升说服力,适合成果结论型段落结尾。

≤ 写作模仿

• [Company], a [City]-based firm, has deployed [devices] across [region].

EcoSens, a Vienna-based firm, has deployed air-quality monitors across eastern Europe.

• Their [results/data] have been validated in trials across [countries].

Their performance indicators have been validated in projects across India, Brazil, and Kenya.

★ 话题适用建议

话题	可迁移方式	
科技出海/国际合作	展示非美科技企业与发达国家合作模式	
环境监测	描述传感器、系统、数据平台跨国落地实施情况	
写作议论文	强调"某方案已在多地应用+取得可验证成果"时的段落结尾句型	

◎ 互动练习

任务1 | 判断句子是否正确,若不正确,请改写

句子:

This sort of deployment can smell wildfires within 15 minutes before the initial burn.

请判断:是否语义通顺?是否逻辑合理?

若有错误,请将其改写为准确句式。

任务2 填空写作训练

Their sensors have been deployed at intervals of	and have been validat	ted in
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☑ 例: ···2km··· trials across four African countries.