

讲义

Christmas Innovation

圣诞创新

Advances in Santa Tech

圣诞老人科技的进步

New technology is helping Santa Claus come to town more efficiently

新技术帮助圣诞老人更高效地进城

选自：The Economist Dec 23rd 2023 edition Leaders

Dear shareholders of Father Christmas (FC) Global Inc, 'tis the season for management to update you on the state of the business. Growth in demand continues to be ho-ho-hum. That other implausible global delivery maestro, the stork, has been slacking, so our global customer base has expanded by just 130m infants this year, down from 144m in 2012, bringing the total addressable market to just over 2bn under-15-year-olds. We thus made 2023 the “year of efficiency”, like Meta but jollier.

亲爱的各位圣诞老人全球公司的股东们，又到了管理部门的述职时间了。目前需求增长依然疲软。另一位令人难以置信的全球送货员——鹤鸟——一直在偷懒，因此今年，我们的全球儿童客户量只增加了1.3亿，低于2012年的1.44亿，这使可触达市场人群，即15岁以下儿童总数略高于20亿。因此，我们将2023年定为“效率年”，就像Meta一样，但比它更快乐。

【词汇】

1. 'tis /tɪz/ short form it is 是的
2. ho-hum /,həʊ ,həʊ 'hʌm/ adj. You can use ho hum when you want to show that you think something is not interesting, remarkable, or surprising in any way.沉闷乏味的;无聊的;平淡无奇的
例：The music is generally terrific but the scripting and acting are a bit ho-hum.
音乐总体来说很棒，但编剧和表演就有点平淡无奇。
3. implausible /ɪm'pləʊzəbl/ adj. not seeming reasonable or likely to be true 似乎不合情理的；不像真实的

例：It was all highly implausible.

这毫无道理。

4. **maestro** /'maɪstrəʊ/ n. often used as a way of addressing somebody, showing respect 常作呼语，表尊敬

例：The winning goal was scored by the maestro himself.

制胜的一球是大师自己拿下的。

5. **stork** /stɔːrk/ n. a tall white bird with long legs and a long beak (白) 鹤，在古希腊,人们相信 stork 是由天使带来婴儿的代表，在欧洲，stork 也被认为是婴儿带来喜悦的象征。

6. **slack** /slæk/ v. 六级/雅思/考研/专八 to work less hard than you usually do or should do 懈怠；怠惰；偷懒

例：He was accused of slacking and taking too many holidays.

他被指责工作不努力，休假太多。

7. **addressable** /ə'dresəbl/ adj. (of a problem or situation 问题或情况) that can be addressed 可处理的；可解决的；可对付的

例：Let's start with the more easily addressable issues.

我们先从较容易处理的问题着手。

8. Total addressable market(TAM): 可触达市场，TAM = 新产品（新服务）可触达的客户数量 × 单价

假设像任天堂推出一款新游戏，塞尔达荒野之息 2，此时市场上有 8000 万台 Switch 主机，假设其中有一半用户购买，那就是 4000 万份，每一份 60 美元（对齐荒野之息 1），那荒野之息 2 的 TAM 就有 24 亿美元，任天堂可据此做为决策的前置条件，比如说规划开发游戏成本，规划宣发预算等等；

9. **jolly** /'dʒɔːli/ adj. 四级/托福/GRE/考研 happy and cheerful 愉快的；快乐的；高兴的

例：The manager was fat and jolly.

那个经理胖胖的，乐呵呵的。

In particular, we invested heavily in our technological capabilities, to **streamline** operations, avoid supply-chain **bottlenecks** and contain costs. Start with **logistics**. We are **ramping up** use of sidewalk robots, **drones** and **hypersonic** jets. This provides a convenient way to put Donner, Blitzen and the rest of the **herd** out to **pasture**, while **burnishing** our **ESG credentials** by **dispelling** complaints about animal

尤其需要注意的是，我们在技术能力方面投入巨资，以简化运营、避免供应链瓶颈并控制成本。先来看看物流方面。我们正在推广人行道机器人、无人机和高超音速喷气式飞机的使用。这为将雷和闪电（圣诞老人的最后两只麋鹿）和其他动物放归牧场提供了便利，同时还能消除人们对虐待动物的批评言论，从而提高我们的 ESG 信誉。

cruelty.

【词汇】

1. **streamline** /'stri:mleɪn/ v. to make a system, an organization, etc. work better, especially in a way that saves money

使（系统、机构等）效率更高；（尤指）使增产节约

例：The production process is to be streamlined.

生产流程还需改进。

2. **bottleneck** /'bɒ:tlnek/ n. anything that delays development or progress, particularly in business or industry (尤指工

商业发展的) 瓶颈，阻碍，障碍

例：to create/eliminate bottlenecks in the manufacturing process

在制造过程中创建/消除瓶颈

<同义替换> obstacle

3. **logistics** /lə'dʒɪstɪks/ n. GRE/专八 the business of transporting and delivering goods 物流

例：A logistics firm was hired for the deliveries.

雇用了一家物流公司进行交货。

4. **drone** /drɒn/ n. GRE/专八 an aircraft without a pilot, controlled from the ground, used for taking photographs,

dropping bombs, delivering goods, etc. 无人驾驶飞机

例：Unmanned drones have replaced pilots for many of the missions in aerial warfare.

无人驾驶飞机已取代空战中许多任务的飞行员。

5. **hypersonic** /haɪpə'sɒnɪk/ adj. relating to sound frequencies above about a thousand million hertz. 极超音速的，

远超过音速的

6. **herd** /hɜ:rd/ n. a group of animals of the same type that live and feed together 兽群；牧群

例：a herd of cows/deer/elephants

一群牛 / 鹿 / 象

7. **pasture** /'pæstʃər/ v. 六级/雅思/考研/专八 land covered with grass that is suitable for feeding animals on 牧场；

牧草地

例：high mountain pastures

高山牧场

8. **burnish** /'bɜ:rnɪʃ/ v. 托福/GRE to work hard in order to improve something 努力改善

例：He missed no opportunity to burnish his image.

他时刻不忘美化自己的形象。

<同义替换> improve

9. **credentials** /krə'denʃlz/ n. Someone's credentials are their previous achievements, training, and general background, which indicate that they are qualified to do something. 资格;资历

例：I can testify to the credentials of the clientele.

我可以证明委托人的资质。

10. **dispel** /di'spel/ v. 雅思/GRE/专八 to make something, especially a feeling or belief, go away or disappear 驱散，消除（尤指感觉或信仰）

例：His speech dispelled any fears about his health.

他的发言消除了人们对他身体健康的担心。

【短语及其他】

1. **ramp up** : to make something increase in amount 使...的数量增加

例：The company quickly ramped up production to meet the demand.

该公司迅速提高了产量以满足需求。

2. **ESG** : ESG refers to the environmental, social, and governance factors that investors measure when analyzing a company's sustainability efforts from a holistic view. ESG 是三个英文单词的首字母，分别是 environment（环境）、social（社会）、governance（治理）。目前主要运用于投资领域，是从环境、社会、公司治理三个非财务维度来评价企业的指标，评估企业（投资对象）在促进经济可持续发展、履行社会责任等方面的贡献。

Satellite production sites near big population centres are being equipped with additive-manufacturing tools, popularly known as 3d printers. Like Alstom, a French maker of trains, which boasts of having printed 150,000 spare parts at its depots around the world, we are making our toy locomotives locally. This helps us avoid supply disruptions, such as those causing some competitors problems in the Red Sea. It will also help us avoid overstocking stocking-fillers. Our green footprint is benefiting from advances in the circular economy. Toys that end up broken by Twelfth Night—which in some years is most of them—are increasingly being

人口分布密集的中心附近的卫星生产基地正在配备增材制造工具，俗称 3D 打印机。法国火车制造商阿尔斯通（Alstom）宣称其在世界各地的仓库打印了十五万个零备件，跟他们一样，我们也在本地制造玩具火车头。这种策略帮助我们避免供应中断的问题，比如那些导致一些竞争对手在红海地区遇到的问题。这也有助于我们避免库存过多的问题。我们的碳足迹得益于循环经济的发展。越来越多的玩具在主显节前就已经坏掉了，而在某些年份，大部分玩具都是如此，这些玩具被回收利

recycled into raw materials for the 3d printers.

用，成为 3D 打印机的原材料。

【词汇】

1. **depot** /'di:pəʊ/ n. a place where large amounts of food, goods or equipment are stored (大量物品的) 贮藏处，
仓库
例：an explosion at an arms depot
发生在军火库的爆炸
2. **locomotive** /,ləʊkə'məʊtɪv/ n. a railway engine that pulls a train 机车；火车头
例：steam/diesel/electric locomotives
蒸汽 / 内燃 / 电力机车
3. **disruption** /dɪs'rʌpʃn/ n. a situation in which it is difficult for something to continue in the normal way; the act of stopping something from continuing in the normal way 扰乱；使中断；打乱
例：We aim to help you move house with minimum disruption to yourself.
我们的宗旨是帮您搬家，并且尽量减少给您带来的不便。
4. **overstock** /,əʊvər'stɔ:k/ v. to buy or make more of something than you need or can sell 库存过多(货物)；进(货)过多
例：The inventory showed that the store was overstocked.
清单显示商店存货过多。
5. **stocking-filler** /'stɔ:kɪŋ fɪlər/ n. a small present that is put in a Christmas stocking 圣诞袜小礼物
例：This book is a light-hearted Christmas stocking filler.
这本书是个能让人轻松愉快的圣诞小礼物。
6. **circular** /'sɜ:rkjələr/ adj. moving around in a circle 环行的；绕圈的
例：a circular tour of the city
环城游览

【其他】

1. **Twelfth Night** : the evening of January 5th, the day before Epiphany, which traditionally marks the end of Christmas celebrations 主显节前夕，显现节前夕 (1 月 5 日夜，传统上标志着圣诞节期的结束)

【长难句】

Like Alstom, a French maker of trains, which boasts of having printed 150,000 spare parts at its depots around the world, we are making our toy locomotives locally.

句子的主干部分为：we are making our toy locomotives locally，意思是：我们也在本地制造玩具火车头

Like Alstom, a French maker of trains, which boasts of having printed 150,000 spare parts at its depots around the world 为状语, 其中 like Alstom 为状语, 表示向阿尔斯通一样, a French maker of trains 为同位语, 补充说明 Alstom; which boasts of having printed 150,000 spare parts at its depots around the world 为定语从句, 修饰 Alstom。整句话的意思是: 法国火车制造商阿尔斯通 (Alstom) 宣称其在世界各地的仓库打印了十五万个零备件

Our new Santa App for IOS and Android offers computer-aided design software for fully **customisable** gifts. This took inspiration from the system launched in May by Nike for its trainers, and lets us make individualised items at little or no added cost. Forget scientist Barbie: we can do "**irritating** nine-year-old Jane Smith from Brighton" Barbie. Parents will love it.

我们新推出的圣诞老人应用程序 (有 ios 和 Android 版) 提供计算机辅助设计软件, 可完全定制个性化礼物。这是从耐克在 5 月份时为其运动鞋推出的专属平台中汲取的灵感, 让我们可以在增加很少成本或者不增加的情况下制作个性化的礼物。忘掉科学家芭比娃娃吧: 我们可以制作“来自布莱顿的烦人的九岁名为“简·史密斯”的芭比娃娃呢。家长们一定会喜欢的。

【词汇】

1. **customisable** /'kʌstəmaɪzəbl/ adj. able to be made or changed in ways that suit individual people or tasks 可定制的: 能够以适合个人或任务的方式进行制作或更改

例: The app is fully customizable and allows users to create their own word lists.

该应用程序是完全可定制的, 并允许用户创建自己的单词列表。

2. **irritating** /'ɪrɪteɪɪŋ/ adj. 专八 annoying, especially because of something somebody continuously does or something that continuously happens 使烦恼 (尤指不断重复的事情)

例: I found her extremely irritating.

我觉得她极其令人恼火。

<同义替换> annoying

Technology is **curbing** other costs, starting with labour—a blessing in a time of worker shortages. Because 3d printers work **autonomously**, productivity per remaining **pixie** has surged. Shortages among service **elves** are being **allayed**

技术正在缩减其他成本, 首先是劳动力成本, 这是工人短缺时代的福音。由于 3d 打印机可以自主工作, 因此每位在岗的工人工作效率都在大幅提升。在我们专有的聊天机器人 Clausgpt 的帮助下, 客服工人的短缺问题得到

with the help of Clausgpt, our **proprietary chatbot**. It can **parse** incoming **correspondence** and field complaints. Not loving little Jimmy's new drum kit? We hope Clausgpt suggests earplugs, not violence.

Virtual AI **avatars** of Father Christmas reduce the **strain** on our chief executive. Ozempic, the hot obesity drug of 2023, reduces the strain on his health-insurance bill. It also lowers our key-man risk, which independent analysts now put below that for Elon Musk or Sam Altman.

了缓解。Clausgpt 可以分析收到的信件，处理投诉。比如说，对于这个问题：不喜欢小吉米的新鼓吗？我们希望 Clausgpt 建议用户使用耳塞，而不是暴力解决。

圣诞老人的虚拟形象可以减轻 CEO 的压力。Ozempic 是 2023 年流行的治疗肥胖症的药物，可以减轻他的健康保险费用负担。这也降低了我们公司重要人员的风险，目前独立分析师认为我们的关键人物风险比埃隆·马斯克或萨姆·奥尔特曼（OpenAI 的 CEO）低。

【词汇】

1. **curb** /kɜ:rb/ v. to control or limit something, especially something bad 控制，抑制，限定，约束（尤指不好的事物）

例：He needs to learn to curb his temper.

他得学着控制自己的脾气。

<同义替换> suppress

2. **autonomously** /ɔ:'tɔ:nəməsli/ adv. in a way that involves a person being able to do things and make decisions without help from anyone else 自主的；有自主权的

例：Many elderly people want to live autonomously.

许多老人想自主生活

3. **pixie** /'pɪksi/ n. (in stories) a creature like a small person with pointed ears, who has magic powers (传说中的) 小精灵，小仙子，小妖怪

例：The pixies shot in every direction like rockets.

小精灵们像火箭一样四处乱飞。

4. **elf** /elf/ n. (in stories) a creature like a small person with pointed ears, who has magic powers (故事中的) 精灵，小妖精

例：Dobby has no master. Dobby is a free elf.

多比没有主人。多比是个自由的精灵。

5. **allay** /ə'leɪ/ v. **专八** to make something, especially a feeling, less strong 减轻（尤指情绪）

例：to allay fears/concern/suspicion

减轻恐惧；减轻忧虑；减少怀疑

<同义替换> alleviate

6. **proprietary** /prə'praɪətəri/ n. GRE relating to an owner or to the fact of owning something 所有的；所有权的

例：The company has a proprietary right to the property.

公司拥有这笔财产的所有权。

7. **chatbot** /'tʃætbo:t/ n. a computer program that can hold a conversation with a person, usually over the internet 可

以与人进行对话的计算机程序，聊天机器人

例：Wakili is basically a bot, it's a chatbot.

Wakili 是一个机器人，是一个聊天机器人。

8. **parse** /pɑ:rs/ v. to divide a sentence into parts and describe the grammar of each word or part (对句子) 作语法分

析；作句法分析

例：These sentences merit parsing with care.

这些句子值得仔细斟酌。

9. **correspondence** /,kɔ:rə'spɔ:ndəns/ n. the activity of writing letters 通信；通信联系

例：We kept up a correspondence for many years.

我们保持了很多年的通信联系。

10. **avatar** /'ævətɑ:r/ n. a picture of a person or an animal that represents a particular computer user, on a computer

screen, especially in a computer game or on social media (尤指电脑游戏或社交媒体中的) 用户头像

例：They wanted to become more like their avatars.

他们想变得更像虚拟形象。

11. **strain** /streɪn/ n. 四级/雅思/托福/考研 mental pressure or worry felt by somebody because they have too much

to do or manage; something that causes this pressure 压力；重负；重压之下出现的问题（或担忧等）

例：Television newsreaders come under enormous strain.

电视新闻播报员处于极大的压力之下。

To limit production costs, we have adopted the open-source risc-v architecture for microchips, which these days feature in most of our products (and everybody else's). This lets us avoid paying licence fees

为了限制生产成本，我们采用了开源 risc-v 微型芯片架构，如今我们的大部分产品（以及其他所有人的产品）都采用了这种架构。这样，我们就不用支付半导体许可证费用；

for semiconductors; Nvidia and its shareholders don't need any more presents this year. With the promised **phase-out** of coal, just agreed at the UN's climate **summit**, the **lumps** for the badly behaved should become cheaper, too. Superbrats may even get two lumps.

英伟达及其股东今年不需要更多的礼物了。随着联合国气候峰会上刚刚达成的逐步淘汰煤炭的共识，不良企业就会以更低的价格买到煤块。更加不良的企业甚至会因此付出代价。

【词汇】

1. **feature** /'fi:tʃər/ v. to have an important part in something 起重要作用；占重要地位

例：Olive oil and garlic feature prominently in his recipes.

橄榄油和大蒜在他的食谱中是重要的材料。

2. **phase-out** /'feɪzəʊt/ n. the fact of stop using something gradually in stages over a period of time 逐步废除

例：However, the industry may have to pay a higher price for tobacco once the phaseout begins.

不过，一旦开始逐步停止烟草种植后，烟草业可能必须为烟草支付更高的价格。

3. **summit** /'sʌmɪt/ n. 六级/雅思/托福/考研/专八 an official meeting or series of meetings between the leaders of two or more governments at which they discuss important matters (政府间的) 首脑会议；峰会

例：a summit conference

峰会

4. **lump** /lʌmp/ n. a piece of something hard or solid, usually without a particular shape (通常为无定形的) 块

例：This sauce has lumps in it.

这调味汁里有结块。

【其他】

1. **risc-v** : RISC-V (pronounced "risk-five") is an open source instruction set architecture (ISA) based on established reduced instruction set computing (RISC) principles. RISC-V (发音为“risk-five”)是一个基于精简指令集(RISC)原则的开源指令集架构(ISA)。

In the spirit of Christmas **disclosure**, we wish to highlight a number of risks to our business. Some of our new technologies are dual-use, so government export controls threaten **deployment**. The spread of solar panels, already covering 4m residential roofs in our biggest market, America, is making landings

本着圣诞节的精神，我们一再强调我们业务的一些风险。一些新技术具有双重用途，因此政府的出口管制会威胁到这些技术的应用。在我们最大的市场--美国，太阳能电池板已经覆盖了400万户居民的屋顶，它的普及正在使圣诞老人着陆出现潜在危险。房屋

treacherous. Efforts to **insulate** homes and **substitute** heat pumps for fireplaces are leading to access problems.

And we cannot count on Amazon and Alibaba, our chief rivals, to remain on regulators' **naughty lists** for ever. But we firmly believe that these risks are under control. In the worst-case **scenario**, we can always **fall back on** miracles.

隔热和用热泵代替壁炉导致传输通道出现问题。

我们也不能指望主要竞争对手亚马逊和阿里巴巴会永远留在监管机构的"淘气名单"上。但我们坚信，这些风险都在可控范围之内。在最坏的情况下，我们还是可以指望奇迹的出现。

【词汇】

1. **disclosure** /dɪs'klɔʊər/ n. the act of making something known or public that was previously secret or private 揭露；透露；公开

例：The court ruled to prevent public disclosure of the contents of the documents.

法院裁定，禁止公开披露文件内容。

2. **deployment** /dɪ'plɔɪmənt/ n. the act of using something effectively 有效地利用；调动

例：the deployment of resources/staff

资源/人员的部署

3. **treacherous** /'treɪtʃərəs/ adj. 托福/GRE/专八 dangerous, especially when seeming safe 有潜在危险的

例：The ice on the roads made driving conditions treacherous.

路上的冰对驾车构成了隐患。

4. **insulate** /'ɪnsəleɪt/ v. 六级/雅思/GRE/考研/专八 to protect somebody/something from unpleasant experiences or influences 使免除（不愉快的经历）；使免受（不良影响）；隔离

例：Until now the industry has been insulated from economic realities.

到目前为止，该行业一直与经济现实隔离。

<同义替换> immune

5. **substitute** /'sʌbstɪtju:t/ n. a person or thing that you use or have instead of the one you normally use or have 代替者；代替物；代用品

例：a meat substitute

肉食替代品

6. **scenario** /sə'næriəʊ/ n. a description of how things might happen in the future 设想；方案；预测

例：Let me suggest a possible scenario.

我来设想一种可能出现的情况。

【短语】

1. **naughty lists** : According to Christmas folklore, a list kept by Santa Claus of children who have been naughty, and who will therefore not be given as many presents. 一份记录那些行为不端、调皮捣蛋的人的名单，通常用于圣诞老人来决定哪些孩子应该得到礼物。

2. **fall back on** : to go to somebody for support; to have something to use when you are in difficulty 求助于；借助于；转而依靠

例：I have a little money in the bank to fall back on.

我在银行还有一点钱，需要时可以动用。

【长难句】

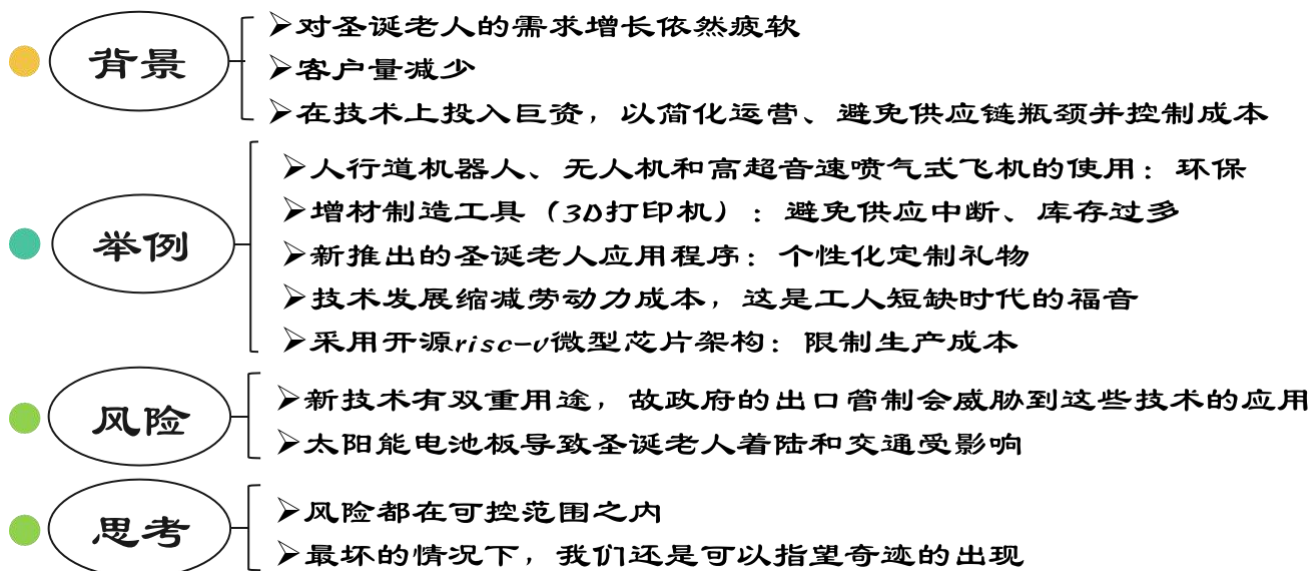
The spread of solar panels, already covering 4m residential roofs in our biggest market, America, is making landings treacherous.

句子的主干部分为：The spread of solar panels is making landings treacherous.意思是：太阳能电池板的普及正在使圣诞老人着陆出现潜在危险

already covering 4m residential roofs in our biggest market, America,为后置定语，修饰 solar panels, America 为同位语，解释说明 our biggest market. 意思是：已经在我们最大的市场美国覆盖了 400 万户居民的屋顶

总结

1) 文章架构



2) 同义替换

✓ 小精灵

pixie

Because 3d printers work autonomously, productivity per remaining pixie has surged.

由于 3d 打印机可以自主工作，因此每位在岗的小精灵的工作效率都在大幅提升。

elf

Shortages among service elves are being allayed with the help of Clausgpt, our proprietary chatbot.

在我们专有的聊天机器人 Clausgpt 的帮助下，小精灵的短缺问题得到了缓解。

其他：fairy

例：a good/wicked fairy

善良的仙子；邪恶的精灵

✓ 限制；抑制

curb

Technology is curbing other costs, starting with labour—a blessing in a time of worker

shortages.

技术正在缩减其他成本，首先是劳动力成本，这是工人短缺时代的福音。

limit

To limit production costs...

为了限制生产成本...

其他： control/constrain

例: It is essential for businesses to control costs.

对于企业而言，控制成本至关重要。

3) 一词多义

✓ **pasture**

✓ 文章原句：This provides a convenient way to put Donner, Blitzen and the rest of the herd out to pasture... 这为将雷和闪电（圣诞老人家的最后两只麋鹿）和其他动物放归牧场提供了便利...

✓ 释义：

① **land covered with grass that is suitable for feeding animals on** 牧场；牧草地

high mountain ~

高山牧场

② **pastures [plural] the circumstances of your life, work, etc.** 生活状况；工作条件；个人发展的机遇

I felt we were off to greener ~ (= a better way of life).

我觉得我们在迈向更好的生活。

✓ **strain**

✓ 文章原句：Virtual AI avatars of Father Christmas reduce the strain on our chief executive. 圣诞老人的虚拟形象可以减轻 CEO 的压力。

✓ 释义：

① **mental pressure or worry felt by somebody because they have too much to do or manage; something that causes this pressure** 压力；重负；重压之下出现的问题（或担忧等）

You will learn to cope with the stresses and ~ of public life.

你要学会应付公众人物生活的紧张和辛劳。

② **an injury to a part of your body, such as a muscle, that is caused by using it too much or by twisting it** 劳损；拉伤；扭伤

muscle ~

肌肉劳损

③ **a particular feature of the character of a person or group, or a quality in their manner** 个性特点；性格倾向；禀性

He had a definite ~ of snobbery in him.

他这个人明显有一股势利小人的气味。

4) 仿写训练

✓ 描述使用某种技术的目的与好处

✓ 文章原句：

To limit production costs, we have adopted the open-source risc-v architecture for microchips, which these days feature in most of our products (and everybody else's). This lets us avoid paying licence fees for semiconductors.

✓ 句型及表达：

To..., we have adopted ..., which feature in... 为了……，我们采用了…，这也运用在…。

This lets us avoid ... 这让我们避免了……

✓ 仿写示例：

To enhance our productivity, we have adopted a new project management tool, which utilises state-of-the-art automation technology and consistently features in all our branches worldwide. This lets us avoid time-consuming manual tasks and streamline our work processes.

✓ 仿写作业——描述使用节能技术的目的与好处

为了减少对环境的影响，我们采用了新的节能技术，这种技术在太阳能电池板和 LED 照明中广泛应用。这让我们避免了过多的能源消耗，确保了更可持续的运营。

5) 主题词总结

今日主题——圣诞老人	
1. Santa Claus	圣诞老人
2. Father Christmas	圣诞老人
3. obesity	肥胖症
4. the spirit of Christmas	圣诞节精神
5. pixie	小精灵