# Unit The future, e.g. electric cars; robots

e.g. electric cars; self-driving cars= autonomous driving ;

e.g. Tiny robots, e.g. genetic scanner

# Lexical resource

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|  | 乐观 | 悲观 |
| Noun | ['ɒptɪmɪzəm,'ɒptəmɪzəm]  optimism: a tendency to believe that good things will always happen 乐观；乐观主义  **[有理由保持乐观: There are grounds/cause for optimism.**  **乐观主义情绪: a mood/sense of optimism]**  •Recent results must give some **cause/grounds for optimism.** 近来的成绩一定会让人产生某些乐观情绪。  •**a sense of optimism** in the country一种乐观主义情绪  •I don’t share his optimism about our chances of success. 我对我们成功的希望不像他那样乐观 | ['pesɪmɪz ə m,'pesəmɪz ə m] pessimism  a tendency to believe that bad things will happen  悲观，悲观主义  •There is deep pessimism about the future. 对未来存在着极度悲观的情绪 |
| Adj | [‚ɒptɪ'mɪstɪk]  optimistic  1.believing that good things will happen in the future 乐观的；乐观主义的  •Andrew took a more optimistic view. 抱有更为乐观的想法。  •Bankers are **cautiously** optimistic about the country’s economic future. 持谨慎乐观的态度。  •We are still **relatively** optimistic that the factory can be saved.  • **乐观的估计: an optimistic estimate**  **V.S. 悲观的估计 a downbeat estimate**  2. **[over-optimistic: 过于有信心的. 过于乐观的]** thinking that things will be better, easier, or more successful than is actually possible  •**somewhat** over-optimistic expectations 有些过于乐观的期望 | [‚pesɪ'mɪstɪk◂,‚pesə'mɪstɪk◂] **pessimistic = downbeat**  expecting that bad things will happen in the future or that something will have a bad result 悲观的，悲观主义的  •Zhanglu’s always holding a pessimistic view of life. She’s **feeling downbeat and gloomy, with depressing mood.** From my perspective, she must find a way to liberate/release herself from the **pent-up emotion压抑的情感.**  •He remains deeply pessimistic about the peace process. 他对和平进程仍然十分悲观。  **pessimistically adv /-kḷɪ ; -kli /**  **🡺 downbeat /ˈdaʊnˌbiːt/**  V.S. upbeat  1. [ADJ](javascript:;)If people or their opinions are downbeat, they are deliberately casual and not enthusiastic about a situation. 悲观的  **[ 乐观的估计: an optimistic estimate**  **V.S. 悲观的估计 a downbeat estimate]**  e.g. **a downbeat estimate** of 1992's economic prospects.   ...一个对1992年经济前景的悲观评估  2. [ADJ](javascript:;)If you are **feeling downbeat = feel depressed and gloomy, and hold a pessimistic view about something** and without hopenot showing any strong feelings, especially not happy ones (尤指忧郁的无激情的〕悲观的消沉的  •  They found him in a gloomy, downbeat mood.   他们发现他心情沮丧而消沉。   * gloomy:   [ADJ](javascript:;)If people are gloomy, they are unhappy and feel downbeat and depressed, have no hope. 忧伤的, 阴郁的  •  Miller is gloomy about the fate of the serious playwright in America. 感到忧伤。 |
|  | ['ɒptɪmɪst,'ɒptəmɪst] optmist  MEANINGS 义项  someone who believes that good things will happen  乐观者，乐观主义者  [OPP](javascript:;) PESSIMIST  •He’s an eternal optimist (= he always believes that good things will happen ). 他是个永远的乐观主义者。 | ['pesɪmɪst,'pesəmɪst]  MEANINGS 义项  someone who always expects that bad things will happen  悲观主义者  [OPP](javascript:;) OPTIMIST  •Don’t be such a pessimist! 别这么悲观！ |
|  |  | **[ pessimistic V.S. downbeat V.S. gloomy]**   * [‚pesɪ'mɪstɪk pessimistic: expecting that bad things will happen in the future or that something will have a bad result 悲观的，悲观主义的 * If you are **feeling downbeat** = feel depressed and gloomy, with depressing mood; and hold a pessimistic view about something and without hope not showing any strong feelings, especially not happy ones (尤指忧郁的无激情的〕悲观的消沉的 * [ADJ](javascript:;)If **people are gloomy**, they are unhappy and **feel downbeat and depressed**, have no hope. 忧伤的, 阴郁的 e.g. Miller **is gloomy** about the fate of the serious playwright in America. 感到忧伤。   e.g. Zhanglu’s always holding a pessimistic view of life. She’s **feeling downbeat and gloomy**, with depressing mood. From my perspective, she must find a way to **liberate/release herself from the pent-up emotion压抑的情感.** |

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| In order to **hit our deadlines赶截止日期**, we work 12 hours a day.  V.S.  It’s been **2 hrs behind the schedule. 已经延迟了/晚了2个小时** |
| **[大惊小怪，小题大做; make a fuss]**  e.g. It’s really a bad behaviour …however anyway, I didn't want to **make a fuss**, so I decided to **wink at it.** 我不想小题大做，所以我决定**对(不好的事情)睁一只眼闭一只眼/只当没看见算了/视而不见**  e.g. It’s just a trivia; and there’s no need to **make a fuss.**  **//wink at sb: 眨眼睛（暗送秋波） V.S. wink at sth bad or illegal: to pretend not to notice something bad or illegal对(不好的事情; 犯法的事情)睁一只眼闭一只眼，假装没看见，视而不见，只当没看见算了** |
| e.g. **Once upon a time曾几何时**, there **was** a young, beautiful, but **aloof 高冷/冷淡/的**princess. |
| ETA: (estimated time of arrival) the time when a plane, ship etc is expected to arrive 〔飞机、舰船等的〕估计到达时间 | |
| contractual /**kən**ˈtræktjʊəl/   1. [ADJ](javascript:;)A contractual arrangement or relationship involves a legal agreement between people. 合同的   •  The company has not fulfilled certain **contractual obligations**.  这家公司还没有履行 **合同上的某些义务**。   1. [ADV](javascript:;)合同地   •  He is **contractually** bound to another year in Los Angeles.  他按照合同得在洛杉矶再呆一年。  e.g. I don't think we have any process to handle this.  But this is probably not something for the technical team - as it is presumably **contractual** /**kən**ˈtræktjʊəl/. Maybe Dawn or Thomas can advise, or OM. | |
| [ 稳步提高/只升不降; 使...稳步提高 ratchet up  ]  [PHRASAL VERB](javascript:;)If something **ratchets up** or **is ratcheted up**, it increases steadily by a **fixed** amount or degree, and seems **unlikely to decrease again.**  e.g. He fears that **economic inflation** will **ratchet up** as the year ends, esp. during this **strained紧张的** period when the **trade spat贸易口角战**  between U.S. and China is escalating.  他担心通胀会**只升不降**。  e.g. The **feud [fjʊd] (long-time angry, crack/rifts 长期的不和/积怨)** and long-time **rift/crack分歧不和** between U.S. and China **are ratcheted up** recently with the escalating **trade war/spat 贸易口角战.** Apparently, **resentments**  **[rɪ'zɛntmənt]仇恨** between two nations are starting to **fester**.  仇恨正开始逐步加剧/恶化 | |

# STOP

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| ## crack:   * If something hard cracks, or if you crack it, it becomes slightly damaged, with lines appearing on its surface. 使…破裂; 破裂 * 〔尤指用武力〕制裁；镇压(e.g. military coup, protest, demonstration): **crack down=suppress or repress (e.g. military coup, protest, demonstration**): to become more strict in dealing with a problem and punishing the people involved 严厉打击； * 破解 (难题、密码) If you **crack a hard problem or a code,** you solve it, especially after a lot of thought. e.g.  He has finally **cracked the system** after years of painstaking research.  最终**破译了该系统**。 * [V-I](javascript:;)(精神) 垮掉 If **someone cracks,** they lose control of their emotions or actions because they are under a lot of pressure. e.g.  She's calm, strong, and optimistic, and she is just not going to **crack**. She never feel downbeat (depressed or pessimistic) about anything. 决不会垮掉的。 * If you **crack a joke,** you tell it. 说 (笑话) e.g. He drove a Volkswagen, **cracked corny jokes**, and talked about beer and girls.  **//corny jokes 老套的笑话**   ## rift /rɪft/   1. [N-COUNT](javascript:;)A rift between people or countries is a serious quarrel or disagreement that stops them from having a good relationship. 不和 e.g.  The interview reflected **a festering rift** between the president and Congress. 日益加深的/加剧的不和。 2. [N-COUNT](javascript:;)A rift is a split, crack, or fissure that appears in something solid, especially in the ground. (尤指地面上的) 裂缝 e.g.  The earth convulsed uncontrollably, a rift opened suddenly and, with a horrid sucking sound, swallowed the entire pool.   ## `fissure`:  /ˈfɪʃə/  [N-COUNT](javascript:;)A fissure is a deep crack in something, especially in rock or in the ground. (尤指岩石)裂缝 |
| fraught /frɔːt/   1. [ADJ](javascript:;)**If [ a situation or action is fraught with problems, dangers, or risks]**, it is filled with them. (情形/行为) 充满了 (问题, 危险, 或风险) 的 e.g.  The earliest operations employing this technique **were fraught with dangers**.  手术充满了危险。 e.g. Frankly, this plastic surgery整形手术 **is fraught with dangers** and unpredictable risks. 2. [ADJ](javascript:;)If you say that a situation or action is fraught, you mean that it is worrisome or difficult. 令人担忧的 e.g.  It has been a somewhat fraught day. 这是令人颇为担忧的一天 |
| ['festə]  Verb) fester adj) festering   1. if an unpleasant feeling or problem festers, it gets worse because it has not been dealt with; [V-I](javascript:;)If you say that **a situation, problem, or feeling is festering = A problem/situation is aggravated by sb/sth,** you disapprove of the fact that it is being allowed to grow more unpleasant or full of anger, because it is not being properly recognized or dealt with. 〔不快的感觉或问题〕加剧，恶化   e.g. The **feud [fjʊd] (long-time angry, crack/rifts 长期的不和/积怨)** and long-time **rift/crack分歧不和** between U.S. and China **are ratcheted up** recently with the escalating **trade war/spat 贸易口角战.** Apparently, **resentments [rɪ'zɛntmənt]仇恨** between two nations are starting to **fester**.  仇恨正开始逐步加剧/恶化  e.g.  The interview reflected **a festering rift** between the president and Congress.  日益加深/加剧的不和 // A **rift/crack/fissure** between people or countries is a serious quarrel or disagreement that stops them from having a good relationship. 不和  e.g. The dispute and their **feud (长期的积怨)** can be traced back to **resentments [rɪ'zɛntmənt]怨恨**which have **festered** for centuries.  e.g. And if trade tensions continue to escalate, experts say that will only put more pressure on Beijing to step up easing measures. "The need for further stimulus is amplified by the **trade war/spat** escalating last week," wrote Katrina Ell, an economist at Moody's Analytics. "The task before Beijing to stabilize domestic demand amidst slower global growth and a **festering** trade war is not easy."  V.S. [ aggravate /ˈæɡrəˌveɪt/ ]   |  | | --- | | 1. If someone or something **aggravates a situation/illness/injury**, they make it worse. 使(情况/问题/病情症状)加重,使恶化 **[使情况恶化: aggravate the situation/problem = the situation/problem is festering; 使病情恶化: aggravate the disease = the disease is festering; Symptoms will aggravate gradually.  症状将逐渐加重]**   • Stress and lack of sleep can **aggravate your depression.**  紧张和缺少睡眠会**使情况恶化/加剧**  = Your depression will be **festering** because of over stress and lack of sleep. You must **pare down/cut back on your working hours** and **release/liberate yourself from the pent-up emotion**.  • Their money **problems were further aggravated** by a rise in interest rates. 他们的财务**问题更加严重**。  e.g. **Their money problem is further festering** because of a rise in interest rates.  • Building a new road nearby will only **aggravate the env situation**. 建造那条新路只会**使情况恶化**。  = The env situation will **fester** if the government decides to build a new road nearby.  e.g. Along with the condition development, above **symptom will aggravate gradually**.  症状将逐渐加重。  e.g. The implementation of euthanasia can **aggravate social complication** and may become one kind of social unstable factor.  施安乐死会 **加重<社会的复杂化>**  2. **[aggravate sb = annoy/irritate sb. 惹怒，激怒 sb.]**  e.g. What really **aggravates me** is the way she won’t listen. 让我大为生气的是她不听 |  1. If **rubbish or dirty objects fester**, they **go spoiled变质,** **decay** and smell stinky 〔垃圾等〕腐烂发臭(发恶臭的) 2. [V-I](javascript:;)If **a wound festers**, it becomes infected, making it worse. 〔伤口〕溃烂，化脓 **[ festering wound化脓的溃烂的伤]**   e.g.  The wound is festering, and gangrene has set in.   伤口在化脓，继而发生了坏疽  V.S. **红肿发炎的 inflamed throat**  V.S. fester V.S. **[ foster mother/father/parents ]** |
| # offset xxx money 抵消（掉价格的偏差）  offset /ˈɒfˌsɛt/  V-T If one thing is offset by another, the effect of the first thing is reduced by the second, so that any advantage or disadvantage is cancelled out. 抵消  e.g. The increase in pay costs was more than offset by higher productivity. 工资成本的增加远非更高的生产率所能**抵消的**。  e.g. He said that members of various trade associations have already been discussing whether there would be federal help to `**offset the costs**` of taking out offending equipment. "Because when all this equipment went in there was no talk of these issues," he said. "Would there be help to replace it?" |
| (个人间或群体间的〕长期不和，长期争斗，世仇  [fjuːd] feud  feud is an angry**, a resentment [rɪ'zɛntmənt]怨恨, crack/rift/fissure(裂缝, 分歧不和)** and often violent quarrel between two people or groups, esp. two competitors that continues for a long time  V.S**. resent, resentment 怨恨不满**  **[ resent at sth; resentment at sth; 对xxx充满了怨恨不满：harbour/bear resentment at sb/sth]**  [N-UNCOUNT 不可数名词](javascript:;)Resentment is bitterness and anger that someone feels about something esp feel unfair.  e.g. She **was filled with deep resentment at** being passed over for promotion.她感到很气愤。  e.g. He felt considerable **resentment** towards Sheila for making him work late. 希拉让他工作到这么晚，他很不满  e.g.  She expressed **resentment at** being interviewed by a social worker.  她对于被一个社会工作者面试表示了怨恨  e.g. The **feud [fjʊd] (long-time angry, crack/rifts 长期的不和/积怨)** and long-time **rift/crack分歧不和** between U.S. and China **are ratcheted up** recently with the escalating **trade war/spat 贸易口角战.** Apparently, **resentments [rɪ'zɛntmənt]仇恨** between two nations are starting to **fester**.  仇恨正开始逐步加剧/恶化 |
| **[给…留下深刻印象; 被xxx深深打动/留下深刻印象: you’re blow[n a]way by sth; sth blows you way]**  [PHRASAL VERB](javascript:;)If you say that **[ you are blow[n a]way by something, or if it blows you away ],** you mean that you **are very greatly and deeply impressed by** it. |
| **[slæʃ] slash=cut/axe**  1.[V] slash sth: to cut something violently with a knife, dagger匕首, axe斧头, sword  [sɔːd] etc 〔用刀、剑, 斧头等〕猛削，劈砍 [slash at/through]  •Someone had **slashed the tires**. 有人把轮胎割破了。  •The **leopard’s** /ˈlɛpəd/ claws **slashed** and penetrated through soft flesh. 豹的爪子扎入柔软的肉里。 // **[ (江山易改)本性难移: a leopard can’t change its spots]**  2. [T] **[ slash jobs; slash workforces; slash prices ]** To slash something such as costs or jobs means to reduce them by a large amount. to greatly/drastically reduce an amount, price etc – used especially in newspapers and advertising 〔用刀、剑, 斧头等〕猛削，劈砍 🡺引申为 (slash这个词尤用于报纸和广告) 大幅度削减 〔数量、价格等〕  • Car makers could be forced to **slash prices.**   汽车制造商可能会被迫 **大幅度降价**  • **The workforce has been slashed** by 50% in IBM . 劳动力已**大幅度削减**了 50%。  3. synonym:   * **pare down sth: reduce step by step;** e.g. Your depression will be **festering** because of over stress and lack of sleep. You must **pare down/cut back on your working hours** and **release/liberate yourself from the pent-up emotion**. * **cut back on (working hrs)** : e.g. I’ve got to **cut back on my working** hrs so I can **juggle my life, my work, and my study尽量兼顾.** * **slash sth: to greatly and drastically reduce an amount, price etc – used especially in newspapers and advertising大幅度削减 〔数量、价格等；尤用于报纸和广告**   3. **[ 割腕（自杀）: slash/cut sb’s wrists]** to cut the veins in your wrist**s** with the intention of **committing suicide**.  e.g. He came within two minutes of bleeding to death after **slashing his wrists**.  他割腕后不到两分钟就失血而死  4. .[N-COUNT](javascript:;)A slash is a sloping line that separates letters, words, or numbers, for example, in 340/2/K. 斜线号  **//V.S. [ sack sb= fire sb= dismiss sb ]**   * **sack sb./get the sack**   e.g. He **got the sack** for stealing. 他因偷东西而被解雇。  e.g. She claimed she’d been threatened with **the sack**. 她称自己受到过解雇的威胁   * **fire sb.** * **dismiss sb:** e.g. Employees can be dismissed for sending obscene emails. 员工发送淫秽电子邮件会遭到解雇 |
| **虚张声势, 吓唬人: bluff sb/blʌf/**   1. [N-VAR](javascript:;)**A bluff** is an attempt to make someone believe that you will do something to hurt them and make them scared when you do not really intend to do it. 虚张声势, 吓唬人   •  The letter was **a bluff.**  这封信是虚张声势。  •  It is essential to build up the military option and show that this is not **a bluff.** 证明这并不是 “虚张声势, 吓唬人”。   1. [V-T/V-I](javascript:;)If you **[ bluff or bluff sb ],** you make someone believe that you will do something when you do not really intend to do it, or that you know something when you do not really know it. 虚张声势, 吓唬人   •  Either side, or both, could be bluffing.  任何一方或者双方都可能是在虚张声势。  •  In each case the hijackers **bluffed the crew** using fake grenades. 每一次，劫机者都是用假手榴弹 “虚张声势, 吓唬机组人员”  •  You wouldn’t really tell her. You’re **bluffing!** 你不会真的告诉她吧，你在吓唬我！   1. [PHRASE](javascript:;)If you **[ call someone's bluff ],** you tell them to do what they have been threatening to do, because you are sure that they will not really do it. 要/让某人摊牌   •  The socialists have decided to **call the opposition's bluff**.  社会党人已经决定让反对党摊牌了。   1. bluff your way out of/through/past etc sb/sth (=go somewhere or succeed in doing something by deceiving someone)骗过某人出来/穿过/经过等；蒙混过关   •I hope we’ll be able to bluff our way past the guard. 我希望我们可以骗过保安。   1. bluff sb into (doing) sth = deceive sb into doing 骗某人做某事 2. [N](javascript:;)a bluff is a **steep, precipitous** promontory, bank, or cliff, esp. one formed by river erosion on the outside bend of a meander 峭壁; 陡岸 3. [ADJ](javascript:;)good-naturedly frank and hearty 直率的; **a bluff person**, usually a man, is pleasant but very direct and does not always consider other people 率直的，爽快的，豪爽的〔但有时不顾及别人〕 V.S. **a blunt person**: If you are blunt, you say exactly what you think without trying to be polite; you are speaking in an honest way even if this upsets people 说话不客气的，直言不讳的，耿直的〔但有时不顾及别人〕 e.g. He was a bluff no-nonsense administrator. 他是一个干脆豪爽的主管。 |
| **说到这儿, On that note, xxx = Speaking of which, xxx**  **Speaking of sth, xxx**  e.g. **Speaking of** the environment, we wanna buy a “green” car that uses the ethanol or hybrid gas as the fuel. |
| * wink at sb: 眨眼睛（暗送秋波, 传达某个…意思） * wink at sth **bad or illegal**: to pretend not to notice something bad or illegal对(不好的事情)睁一只眼闭一只眼，假装没看见, 视而不见，只当没看见算了     e.g. Well, it’s a bad behaviour. However, anyway, I didn't want to **make a fuss**, so I decided to **wink at it.** But finally, I regret. 我不想小题大做，所以我决定**对(不好的事情)睁一只眼闭一只眼/只当没看见算了/视而不见** |
| 天马行空的想像: blue-sky thinking  e.g. **What we need is blue-sky thinking 天马行空的想像 and we’ve got to push the envelope挑战极限.** **In other words/to paraphrase**, we must **think out of the box** and be creative. We must become an innovative person. And unless we **innovate** constantly, we cann’t **stay competitive**. |
| ## How to express “I doubt it”. Here are other ways to express doubt:   * I find it hard to believe. * That'll never happen.   e.g.   * **[感到不妙；感到有可疑之处, 感到有可疑之处: Smell a cat! ]** feel suspicious about sth because you find sth wrong or weird; have doubts about something * **[ 半信半疑: take it with a pinch of salt 捏的一小撮盐]:** not 100% believe it, have doubts somewhat e.g. I'm a little **pessimistic**. I **doubt** that we can ever stop cancer. It's a **scary** illness, **and we'll never know enough about it**. Hmm… **Speaking of** the **genetic scanner,** **I take it with a pinch of salt半信半疑. //说到这个 On that note/speaking of which** |
| n. 万灵药, 灵丹妙药heal-all ['hi:**lɔ**:l] **连读**= cure-all ['kjuə**rɔ**:l] **连读**  复数 heals-alls或heal-alls  [N-COUNT](javascript:;)A cure-all ['kjuərɔ:l] **连读** is something that is believed, **usually wrongly**, to be able to solve all the problems someone or something has, or to cure a wide range of illnesses.  e.g. He said the introduction of market discipline to the economy was not a magic **cure-all** ['kjuərɔ:l] **连读**  for its problems.  不是解决所有经济问题的灵丹妙药。  e.g. Investment is not a cure-all/heal-all for every economic problem. 投资并不是可以解决所有经济问题的万灵药。 |
| **[ 同意某人: give sb. the nod or give the nod to sb. V.S. 得到某人的许可get the nod from sb ]**  informal to give or be given permission to do something  e.g. We’re waiting for the boss to **give us the nod** on this issue. 我们在等老板同意此事。 |
| [**in other words/to paraphrase**]  e.g. **What we need is blue-sky thinking 天马行空的想像 and we’ve got to push the envelope挑战极限.** **In other words/to paraphrase**, we must **think out of the box** and be creative. We must become an innovative person. And unless we **innovate** constantly, we cann’t **stay competitive**. |
| **[There’s a growing trend/tendency of xxx 有xxx 增长的趋势 = We start to move towards xxx and leave away from xxx]**  **e.g. There’s a growing trend of 有增长的趋势**using **electric cars** in our future public transportation system.  Use electricity, instead of gasoline or petroleum**[pə'trəʊlɪəm] 石油**, as the supply energy to power vehicles. The electric vehicles/cars must be charged by batteries in an **electricity service station** by plugin the car to the special **power outlet电源插座** instead of **gas station**. |
| **decelerate /diːˈsɛləˌreɪt/=slow down V.S. accelerate= speed up**  1.[V-I](javascript:;)When a vehicle or machine decelerates or when someone in a vehicle decelerates, the speed of the vehicle or machine is reduced. 减速  •  ...the sensation of the train decelerating.  ... 火车减速的感觉。  2. [N-UNCOUNT](javascript:;)  •  The harder the brake pedal is pressed, the greater the car's deceleration.   刹车板踩得越紧，汽车减速越快。  3. [V-I](javascript:;)When the rate of something such as inflation or economic growth decelerates, it slows down. 减缓  •  Inflation has decelerated remarkably over the past two years.  过去两年里通货膨胀已经显著地减缓了。 |
| ## sprawl 摊开四肢躺着（在床上，沙发上）, 伸开四肢坐着**: spraw[l o]n a bed; spraw[l o]n a sofa**  if you `sprawl somewhere, like sprawl on the bed or sprawl on the sofa`, you sit or lie down with your legs and arms spread out in a careless, casual way.  e.g. I `sprawled on the bed` with my shoes off to `have a snooze=have a nap. 打个盹儿` |
| * pare down sth/pare sth down: to reduce sth **step by step** * cut back on (your working hrs) * slash sth/cut: to greatly reduce an amount, price etc – used especially in newspapers and advertising大幅度削减 〔数量、价格等；尤用于报纸和广告〕 **[ slash jobs; slash workforce; slash prices ]**   e.g. People can now **charge their electric cars** in the city **parking lot.** "We've built two **charging stations** for **electric cars**," said city engineer Randolph Schmidt. "If people use more clean electricity for cars and less dirty gasoline, we can decrease air pollution by **paring down(reduce)** the carbon dioxide emissions"  e.g. If the city changes to **natural gas (replacing coal),** air quality will improve because the amount of **carbon footprint** can be greatly **slashed,** including CO2 emission, GHG emission)  ## pare /pɛə/   1. [V-T](javascript:;)When you pare something, or pare part of it off or away, you **cut off its skin** or its outer layer **by using a sharp knife 〔强调用刀子〕**削去…的皮 **[ pare the potato; pare the apple]**   E.g. Pare the skin from the meat with a very sharp knife.   用一把非常锋利的刀削掉肉上的皮。  V.S. **peel the banana; peel the orange: to remove the skin from fruit or vegetables 剥去[削去]〔水果或蔬菜〕的皮** e.g. Peel and dice the potatoes. 把马铃薯去皮并切成丁。   1. **[pare down sth; pare sth down]** [V-T](javascript:;)If you pare something down or back, or if you pare it, you reduce it step by step . (逐步)削减  * **pare down sth:** (逐步)削减 * **cut back on (your working hrs)** * slash sth/cut: to **greatly** reduce an amount, price etc – used especially in newspapers and advertising〔用刀、剑等〕猛削，劈，砍 🡺 大幅度削减 〔数量、价格等；尤用于报纸和广告〕 **[ slash jobs during the Great Depression经济大萧条; slash workforce; slash prices; slash taxes ]**   e.g.  The governor's campaign fund could be **pared down** to $500.  活动基金可能会被削减到$500  e.g.  The luxury tax won't really do much to **pare down the budget deficit.**  削减预算赤字  e.g. Industrial output, which measures manufacturing, mining production and other sectors in China, grew 5.4% in April compared to the previous year, significantly lower than analysts had expected. It was also a sharp dip from last month, when growth came in at 8.5%. Analysts say the **slash** could prompt China to take more action to boost activity in the world's second biggest economy as[increased US tariffs](https://edition.cnn.com/2019/05/10/business/china-us-tariffs-trade/index.html)take effect after a breakdown in trade negotiations.  e.g. Beijing has already instituted [several measures](https://www.cnn.com/2019/03/04/business/china-economy-growth-2019/index.html) in recent months, like **slashing taxes** and increasing infrastructure spending, as economic growth [slumped to a near three-decade low](https://www.cnn.com/2019/04/17/intl_business/chinese-gdp-q1-2019/index.html). |
| **[ try sth out; try out sth; try out the car; try out the device]** [PHRASAL VERB](javascript:;)  If you try something out, you test it in order to find out how useful or effective it is or what it is like.  1) 测试 (性能. E.g. 车，船， 设备的性能; 试一下/一把(车,船,药)；  2) (poker, 麻将) 玩一把  •  I wanted to **try the boat out** next weekend.  去试一下这艘船。  •  Some owners wish they could **try out the sports car** in a race track.  试一下那辆车。  e.g.    /**/try it out** |
| ## snore /snɔː/   1. [V-I](javascript:;)When someone who is asleep snores, they make a loud noise each time they breathe. 打鼾/打呼噜   e.g. His mouth was open, and **he was snoring**.   打着鼾。   1. [N-COUNT](javascript:;)Snore is also a noun. 打鼾 [**have a loud snore ]**   e.g. Uncle Arthur, after **a loud snore**, woke up suddenly.  响亮地打了个鼾后，突然醒了过来。  ## sneeze /sniːz/   1. [V-I](javascript:;)When you sneeze, you suddenly take in your breath and then blow it down your nose noisily without being able to stop yourself, for example, because you have a cold. 打喷嚏 e.g. I get a serious cold and **keep sneezing** the whole day. See my **running nose 流鼻涕 and watery eyes.** 2. [N-COUNT](javascript:;)Sneeze is also a noun. 打喷嚏   e.g. Coughs and sneezes spread infections.  咳嗽和打喷嚏会传播传染病。   1. **[ sneeze at sth ] 嗤之以鼻, 轻视 = despise or contempt sb/sth** 2. [PHRASE](javascript:;)If you say that **something is not to be sneezed at**, you mean that it is worth your attention and shouldn’t be ignore. **Sth是不容小视的/不可以轻视的**   e.g. Although it’s just a small sum of money, **it’s not to be sneezed at.  (这笔钱) 是不容小视的**  ## snooze /snuːz/   1. [N-COUNT](javascript:;)A snooze is a short, light sleep, especially during the day. (尤指在白天的) 小睡   e.g. I **sprawled on the bed** with my shoes off to **have a snooze=have a nap**.  打个盹儿。  **//\* if you `sprawl somewhere, like sprawl on a bed or sprawl on a sofa`,** you sit or lie down with your legs and arms spread out in a careless, casual way. 摊开四肢躺着（在床上，沙发上）, 伸开四肢坐着 **\* Xi’an is sort of a sprawling city without a good development plan 没有计划的乱扩张.**   1. [V-I](javascript:;)If you **snooze**, you sleep lightly for a short period of time. 打盹   e.g.  Mark snoozed in front of the television. 马克在电视机前打起盹儿来。 |
| [kə'mjuːt]  commute  1.Verb) If you commute, you travel **a long** distance every day between your home and your place of work. 长途上下班，通勤  e.g. Oleksii **commutes to IBM office** every day by **maglev train磁力悬浮火车**  e.g. McLaren began commuting between ShangHai and HangZhou.  麦克拉伦开始在费城和纽约之间通勤。  e.g. He **commutes 20 kilometres** per day from home to his office.  2.Noun) A commute is the journey that you make when you commute. (每天)通勤的路程; 每天上班的路程  **[平均上班/通勤的路程: average commute; 早上上班/通勤的路程 morning commute]**  •  The **average commute** in Shanghai is over 40 miles a day.  洛杉矶 **平均上班/通勤路程** 每天超过60英里。  • My **morning commute** takes 25 minutes **or so/give or take**. 我 **早上上班/通勤路程** 要花25分钟。  [3. N-COUNT](javascript:;)通勤者 commuter  e.g.  There are **considerable** number of commuters **通勤者**using our **subways/tubes**.  有**相当多**的**通勤者**使用地铁  **//considerate =caring 体贴的；替他人着想的**  4. **[减刑至xxx 年: commute a sentence (to <years>) ]** technical to change the punishment given to a criminal to one that is less severe  e.g. His sentence of 10-year imprisonment **was finally commuted to three years** because of his quite good performance during his imprisonment 二十年的刑期被 **减刑至三年**。  🡺V.S. **reprieve: If someone who has been sentenced in a court is reprieved, their punishment is officially delayed or cancelled. (罪犯被判) 缓刑; 死缓; 撤销 (刑罚)**  **\* a criminal is reprieved**  **\* grant sb. a reprieve 给sb缓刑/死缓** e.g.  Fourteen people, waiting to be hanged for the murder of a former prime minister, have **been reprieved**.  5. **[ commute sth for/into sth]** technical to exchange one thing, especially one type of payment, for another 把某物改换为另一物〔尤指换一种支付方式〕  e.g. He **commuted** his pension from monthly withdrawal into **a lump sum**. 他把退休金从每月的领取方式**改为** **一次领清**〔尤指换一种支付方式〕  //一次付清(所有金额), 一次领清(所有金额);一次性全额领取,一次性支付: a lump sum V.S. one-off payment 一次性的支付 ; a one-off charge. …一次性收费 ([ADJ](javascript:;)A one-off thing is made or happens only once. 一次性的  //barter A for B: [贸易] 作物物交换 e.g. They **bartered** their grain **for** salt. 他们用谷物换取盐 |
| 各种各样的：of sorts  e.g. We expect devops to do operations, development, QA, and support. We expect offering management to do project management, release management, and even serve as technical leads **of sorts各种各样的.** |
| **[ a lump sum; a lump sum of xxx money; 一次性赔偿金: a lump sum of compensation]**  an amount of money given in a single payment一次付清(所有金额), 一次性支付(所有金额); 一次领清(所有金额); 一次性全额领取  e.g. When you retire, you’ll **get a lump sum of** £80,000.，**一次性得到**8万英镑。  e.g. He **commuted** his pension from monthly withdrawal into **a lump sum**. 他把退休金从每月的领取方式**改为** **一次领清**。 　　 // **[ commute sth for/into sth]** technical to exchange one thing, especially one type of payment, for another 把某物改换为另一物**〔尤指换一种支付方式〕**  e.g. He is so rich that he bought a big house by paying all **in a lump sum一次付清(所有金额)** rather than coming up with the **downpayment首付**first and then **taking out loans from banks**.  e.g. Per the **provisions** of the **insurance policy (保单),** all accident victims if they are **the assured 人寿保险的受保人**will receive loss of income payments; and **a lump sum of compensation/one-off compensation一次性赔偿金** goes to the families If someone is killed – at work, on the roads or on a mountain.  //a provision is a condition in an agreement or law 〔协议或法律中的〕规定，条款，条件  e.g. For now in xi’an, if you wanna buy a new house, you must pay all price of a house **in a lump sum 一次性全额付清**. Paying the **downpayment首付** and then the regular **monthly mortgage房贷的月供** doesn’t work now.  e.g. Alll accident victims receive loss of income payments and **a lump sum 一次性赔偿**goes to the families if someone is killed – at work, on the roads or on a mountain.  **V.S. [ a one-off thing ] is made or happens only once. 一次性的 ...a one-off charge: 一次性收费, one-off payment 一次性的支付** |
| catalyst V.S. analyst  1. (literal meaning) technical a substance that makes a chemical reaction happen more quickly without being changed itself催化剂，触媒  2. **(figurative meaning) something or someone that causes an important change or event to happen导致重大变化的事物[人]；促进因素**  e.g. They hope his election will act **as a catalyst for reform.** 他们希望他的当选会成为**改革的催化剂**。  3. DERIVATIVE 派生词 adj  catalytic /͵kætḷˋɪtɪk/ |
| 简单记下/草草的记下（写下xxx, e.g. 想法或念头）**jot down something (my ideas; my thoughts)**  e.g. **Jot down the thought or idea** and go back to what you were doing. 简单记下/草草的记下（写下xxx） 想法或念头，然后回去做你刚才做的事情。  e.g. I’ve got to **jot down my innovative ideas** for patent brainstorming later. |

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| --- |
| [ quantifier V.S. qualifier ]  ## quantity=>数量词quantifier /ˈkwɒntɪˌfaɪə/   1. [N-COUNT](javascript:;)In grammar, a **quantifier** is a word or phrase such as "plenty" , “a little”, “few” or "a lot" which you use to refer to a noun to show quantity数量词 2. `**a quantity of something`** without being precise = a lot of 3. Noun) You’re such **a quantifier (对于数量很计较的人) 精于计算的人**   ## quality, qualifier ['kwɒlɪfaɪə]   1. **A qualifier** is someone who has reached the necessary standard for entering a competition, especially by defeating other competitors 〔尤指击败对手〕取得参赛资格的人；合格者   e.g. He’s among the qualifiers for the Lancome Trophy at Paris. 他是巴黎兰蔻杯赛的入围者之一。 e.g. Verb) I’m qualified for Google.  2. **A qualifier is a game** that you have to win in order to be able to take part in a competition 资格赛，预选赛  e.g. **the World Cup qualifier** against the Netherlands 世界杯预选赛  3. technical a word or phrase that limits or adds to the meaning of another word or phrase 限定语，修饰语 |
| [PHRASAL VERB [ dry up ]](javascript:;)  1. If a supply of something (like funding) dries up, it stops. (供应) 停止  **[资金干涸; 资金(供应) 停止The funding dries up]**  e.g.  The main source of income for Thailand, tourism, is expected to **dry up** completely this summer because **of the aftermath of terrorist attacks** in Bangkok.  作为主要收入来源的旅游业预计将在今年夏天彻底 **枯竭**。  e.g. China’s funding dried up for Kenya’a controversial **maglev**. 资金干涸; 资金(供应) 停止  2. [PHRASAL VERB](javascript:;)If you **dry up** when you are speaking, you stop in the middle of what you were saying or start to **stammer/stutter口吃结巴**, because you cannot think what to say next. (讲话时) 语塞  e.g.  When he turned around and saw her, his conversation **dried up**.  他转过身来看见她时，他的谈话就出不来词儿了。  e.g. I’m so nervous during the presentation and I **dried up** several times and started to stammer/stutter and my mind is incredibly blank even though I did rehearsal lots of time before. |
| [ gripe V.S. grope]  ## gripe /ɡraɪp/ **gripe about sth总是不停地抱怨xxx** = complain about sth   1. [V-I](javascript:;)If you say that someone is **griping**, you mean they are annoying you because they keep on complaining about something. 总是不停地抱怨xxx e.g. She’s so annoying; she’s just **griping about** how low her salary is. But she never **step up efforts to** make a difference, like studying something new or trying best to get a promotion. No, she just keeps complaining. 2. [N-UNCOUNT](javascript:;)抱怨 griping  e.g. Still, the **griping** went on.  怨声仍旧不止  E.g. Can you please stop your **griping** 3. **the gripes old-fashioned sudden bad stomach pains胃绞痛**   ## grope for sth   1. [ **grope for sth (in darkness)** ]: If you grope for something that you cannot see esp. in darkness, you try to find it by moving your hands around in order to feel it. 〔在黑暗中〕摸索xxx e.g. Ginny **groped for her glasses** on the bedside table. 金尼在床头柜上摸着找眼镜。   e.g.  This room is so **gloomy**昏暗; and I’ve got to **grope for** the knob, turned it, and pulled the door open**摸索到门把手**  e.g. We **groped aroun**d in the darkness. 我们在黑暗中摸索   1. **[ grope for words; grope for proper solutions: 努力寻找〔恰当的言辞或正确的解决办法〕; 摸索恰当的言辞或正确的解决办法〕** ]   to try hard to find the right words to say or the right solution to a problem but without any real idea of how to do this  e.g. She hesitated, seeming to **grope for words.** 像是在**努力寻找恰当的词语**。   1. **[grope your way along/across etc]** to go somewhere by feeling the way with your hands because you cannot see 〔因看不见而用手〕摸索着走   e.g. I was groping my way blindly through the trees. 我像瞎子似的在树丛中摸索着往前走。  e.g. Ally groped steadily towards the door. 艾丽摸索着稳步朝门口走去。 |
| 挑战极限；接近甚至超越安全限度；越过底线: push the envelope  e.g. **What we need is blue-sky thinking 天马行空的想像 and we’ve got to push the envelope挑战极限.** **In other words/to paraphrase**, we must **think out of the box** and be creative. And unless we **innovate** constantly, we cann’t **stay competitive**.  e.g. I wanna **push the envelope** to do something no one has ever done before. 我想挑战极限, 做一些从来没有人做过的事情。 |
| 基因组genome /ˈdʒiːnəʊm**/    [基因图谱 genome map]**  [N-COUNT](javascript:;)In biology, a **genome** is the particular number and arrangement of chromosomes within the cells of an organism such as an animal or plant that distinguishes it from other types of organism.  •  ...the mapping of the human genome.   ...人类基因图谱。 |
| /juːˈbɪkwɪtəs/ ubiquitous: [ADJ](javascript:;)If you describe something or someone as **ubiquitous**, you mean that they seem to be everywhere. 无所不在的  e.g. No kidding. Coffee shops are **ubiquitous** in Seoul, esp. there’re lots of innovating and delicate ones( 精巧的; 精美的)  咖啡店在 Seoul 到处可见/无所不在  e.g. The food stall 摊位for LiangPi is **ubiquitous** in Xi’an. |
| /ˈlɛpəd/ leopard   * Literal meaning: [N-COUNT](javascript:;)A leopard /ˈlɛpəd/ is a type of large, wild cat. Leopards have yellow fur and black spots, and live in Africa and Asia. 豹 e.g. The leopard’s /ˈlɛpəd/claws slashed and penetrated through soft flesh. 豹的爪子扎入柔软的肉里。 * Figurative meaning**: [ (江山易改)本性难移: a leopard can’t change its spots ]** used to say that people cannot change their character or style of living/working  e.g. **I hate to say this, but I’m afraid** I cann’t agree with Guojun’s working style….she still remains lazy and not serious about his work. How to comment on her.. maybe a slang is proper “**A leopard cann’t change its spots**”. // 🡺 **“I hate to say this, but I’m afraid ….” Is used to soften your tone of voice 软化语气** |
| **[ pessimistic V.S. downbeat V.S. gloomy V.S. bleak ]**   * [‚pesɪ'mɪstɪk pessimistic: expecting that bad things will happen in the future or that something will have a bad result 悲观的，悲观主义的 * If you are **feeling downbeat** = feel depressed and gloomy, with depressing mood; and hold a pessimistic view about something and without hope not showing any strong feelings, especially not happy ones (尤指忧郁的无激情的〕悲观的消沉的 * [ADJ](javascript:;)If **people are gloomy**, they are unhappy and **feel downbeat and depressed**, have no hope. 忧伤的, 阴郁的 e.g. Miller **is gloomy** about the fate of the serious playwright in America. 感到忧伤。   e.g. Zhanglu’s always holding a pessimistic view of life. She’s **feeling downbeat and gloomy, with depressing mood.** From my perspective, she must find a way to liberate/release herself from the **pent-up emotion压抑的情感.**  ## downbeat /ˈdaʊnˌbiːt/  V.S. upbeat  1. [ADJ](javascript:;)If people or their opinions are downbeat, they are deliberately casual and not enthusiastic about a situation. 悲观的  •  ...**a downbeat assessment** 悲观评估 of 1992's economic prospects.   ...一个对1992年经济前景的悲观评估。  2. [ADJ](javascript:;)If you are **feeling downbeat = feel depressed and pessimistic** about something and without hope; not showing any strong feelings, especially not happy ones 尤指忧郁的无激情的〕悲观的消沉的  •  They found him in a gloomy, downbeat mood.   他们发现他心情沮丧而消沉。  e.g. Zhanglu’s always holding a pessimistic view of life. She’s **feeling downbeat and gloomy, with depressing mood.** From my perspective, she must find a way to liberate/release herself from the **pent-up emotion压抑的情感.**  3.Music: the movement a conductor makes to show when this note is to be played or sung  下拍〔乐队指挥表示要演奏或唱出某个音符时的手势〕  ## gloomy /ˈɡluːmɪ/ gloomier; gloomiest   1. [ADJ](javascript:;)If **a place is gloomy**, it is almost dark so that you cannot see very well. 昏暗的 e.g.  This room is so gloomy; and I’ve got to **grope for** the knob to open the door. // If you **grope for** something esp in darkness that you cannot see, you try to find it by moving your hands around in order to feel it. 在黑暗中〕摸索 2. [ADJ](javascript:;)If **people are gloomy,** they are unhappy and have no hope; they **feel pessimistic and downbeat**. 忧伤的(沮丧的;悲观的) e.g. Miller is gloomy about the fate of the serious playwright in America.  米勒对这位严肃的美国剧作家的命运感到忧伤。 3. [ADV](javascript:;)忧伤地沮丧地 e.g. He tells me gloomily that he has been called up for army service.  他沮丧地告诉我他已经被征召入伍 4. [ADJ](javascript:;)If **a situation is gloomy/bleak**, it does not give you much hope of success or happiness. (前景/形式)暗淡低迷的   e.g. a gloomy/bleak picture of a **sluggish economy** 疲软经济的一幅暗淡景象  e.g. The **economy remains sluggish疲软** and the outlook for next year is still **gloomy and bleak/downbeat**.  官员们称来年前景暗淡。  ## bleak /bliːk/   1. [ADJ](javascript:;)If **a situation is bleak/gloomy**, it is bad, it does not give you much hope of success and seems unlikely to improve. (前景/形式)黯淡低迷的 **[ a bleak/gloomy future; a bleak/gloomy outlook; a bleak/gloomy prospect ]** e.g. a gloomy/bleak picture of a **sluggish economy** 疲软经济的一幅暗淡景象   e.g. The **economy remains sluggish疲软** and the outlook for next year is still **gloomy and bleak/downbeat**.  官员们称来年前景暗淡。 e.g. The company still hopes to find a buyer, but **the future looks bleak and gloomy但前景黯淡/渺茫**   1. [N-UNCOUNT](javascript:;)黯淡 e.g.  The continued **bleakness** of the American job market was blamed.  美国就业市场的持续低迷被认为是其根源。 2. cold and without any pleasant or comfortable features 阴冷的；阴郁的 e.g. •a bleak January afternoon 一月里一个阴冷的下午; •The landscape was bleak. 景色一片凄凉。 |
| **[corny jokes 老套的笑话;老掉牙的笑话 ]**  If you **crack a joke,** you tell it. 说 (笑话) e.g. He drove a Volkswagen, **cracked corny jokes**, and talked about beer and girls. |
| [revel V.S. spree] //rival=opponent  **## revel; reveller pp: revelled reveled   pt: revelled reveled   pres part: revelling reveling**   * To revel: is to spend time dancing, eating, drinking etc, especially at a party （尤指在 party）狂欢作乐，纵酒 * [ phrasal verb ] **revel in sth: to enjoy something very much 陶醉于xxx，沉醉于xxx; 因xxx而陶醉/飘飘然**If you revel in a situation or experience, you enjoy it very much.   e.g.  Annie was smiling and laughing, clearly **revelling in the others’ attention. 陶醉/沉醉于其他人的瞩目** e.g. He **revelled in** his new-found fame. 新近成名**令他飘飘然**。   * reveller /ˈrɛvələ/  饮酒狂欢者; . 纵酒狂欢者: Revellers are people who are enjoying themselves in a noisy way, often while they are drunk, esp. in a party. **[一群饮酒作乐的人: a crowd of revellers ]** E.g. a crowd of revellers in that luxurious party   ...一群饮酒作乐的人   **## spree /spriː/ [ go on a spree ]**  [N-COUNT](javascript:;)If you spend a short period of time doing something (especially spending money or drinking alcohol) in an excessive and crazy way, you can say that you are going **on a particular kind of spree** 疯狂的放纵作乐，疯狂的放纵狂欢〔尤指花钱, 消费, 或喝酒〕  **[疯狂购物: go on a shopping spree; 痛痛快快地放纵地喝了一通: go on a drinking spree]**  •  Some people **went on a spending spree** in December to beat the new tax.  疯狂的(放纵)消费。  •They **went on a drinking spree** . 他们去痛痛快快地(放纵)喝了一通。 |

# Lexical\_SupplyEnergy

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| --- |
| ['eθən**ɒ**l, 'iː-] 乙醇(燃料) ethanol: the type of alcohol in alcoholic drinks, which can also be used as a fuel to power cars.  e.g. No cars in Brazil run on pure gasoline anymore. The government requires that all vehicles run on blended fuel of about one-quarter ethanol['eθən**ɒ**l, 'iː-] .  如今巴西不再使用单纯靠汽油驱动的汽车，政府要求所有机动车均采用含四分之一乙醇的混合燃料。 |
| |  |  | | --- | --- | | 电动汽车electric vehicles, electric car | 电动汽车electric vehicles, electric car = green cars, environmental friendly => **There’s a growing trend of 有增长的趋势**using **electric cars** in our future public transportation system.  Use electricity, instead of the traditional gasoline or petroleum**[pə'trəʊlɪəm] 石油**, as the supply energy to power vehicles. The most important part is that the electric vehicles/cars must be charged by batteries in an **electricity service station** by plugin the car to the special **power outlet电源插座** instead of **gas station**. | | **HEV** | **[ Hybrid electric vehicle, HEVs or just “hybrid cars” ]**  The following **renewable energies** can be used to produce electricity that would be used as an alternative supply fuel for vehicles.   * [**'eθənɒl, 'iː-] 乙醇(燃料) ethanol:** the type of alcohol in alcoholic drinks, which can also be used as a fuel to power cars * **hydropower水力发电** * **tidal energy潮汐能发电** * wind power * solar power * **biomass (['baɪə(ʊ)mæs]：** plant and animal matter used to provide power or energy生物量 | |
| **[power outlet电源插座]**  **e.g. There’s a growing trend of 有增长的趋势**using **electric cars** in our future public transportation system.  Use electricity, instead of gasoline or petroleum**[pə'trəʊlɪəm] 石油**, as the supply energy to power vehicles. The electric vehicles/cars must be charged by batteries in an **electricity service station** by plugin the car to the special **power outlet电源插座** instead of **gas station**. |

|  |  |
| --- | --- |
| V.S. | 石油 petroleum /pəˈt**rəʊlɪəm**/  V.S. 汽油 gasoline  ['ɡæsəliːn]   * [N-UNCOUNT](javascript:;)Petroleum is oil deposit that is found under the surface of the earth or under the sea bed. Petrol and kerosene are obtained from petroleum. 石油 * **kerosene /ˈkɛrəˌsiːn/** : Kerosene is a clear, strong-smelling liquid which is used as a fuel, for example in heaters and lamps. 煤油 * gasoline: a liquid obtained from petroleum/pəˈt**rəʊlɪəm**/, used mainly for producing power in the engines of cars, trucks etc汽油 |
|  | natural gas: /ˈnætʃrəl ɡæs/ gas that is found under the ground or the sea and that is used as a fuel  e.g. Natural gas powers all city buildings. |
|  | /koʊl/ coal  a hard black mineral that is found below the ground and burnt to produce heat  e.g. Burning coal causes pollution, a main **contributing factor** to the emission of greenhouse gas (GHG ).  V.S.  char /tʃɑː/    1.[V-T/V-I](javascript:;)If food chars or if you char it, it burns slightly and turns black as it is cooking. 烧焦; 烤焦 **[ 把外皮烤焦: char the skins]**  •  Toast hazelnuts榛子 on a baking sheet until **the skins char**.  直到外皮烤焦。  •  **Halve the peppers** and **char the skins** under a hot grill. 烤焦外皮。  2.[N-UNCOUNT](javascript:;)  •  The chops should be cooked over moderate heat to prevent excessive charring.   肉排应以中温烹制以防过分烧焦。  3. [V-T/V-I](javascript:;)to do housework, cleaning, etc, as a job 做家务小时工 **[charwoman]** |
|  |  |
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|  |  |

# Part 1) Environment

## Electric car: trend in future in the automotive industry



 **//I’m all for it.完全支持**



**//On that note/Speaking of which, xxx**







 **//try it out**

**Sure.**

|  |  |
| --- | --- |
| 电动汽车electric vehicles, electric car | 电动汽车electric vehicles, electric car = green cars, environmental friend => **having a growing trend of** 有增长的趋势using **electric cars** in our future public transportation system.  Use electricity, instead of gasoline or petroleum**[pə'trəʊlɪəm] 石油**, as the supply energy to power vehicles. The electric vehicles/cars must be charged by batteries in an electricity service station by plugin the car to the special **outlet电源插座** instead of **gas station**. |
| **HEV** | **[ Hybrid electric vehicle, HEVs or just “hybrid cars” ]**  The following **renewable energies** can be used to produce electricity that would be used as an alternative supply fuel for vehicles.   * ['eθənɒl, 'iː-] 乙醇(燃料) ethanol: the type of alcohol in alcoholic drinks, which can also be used as a fuel to power cars * **hydropower水力发电** * **tidal energy潮汐能发电** * wind power * solar power * **biomass (['baɪə(ʊ)mæs]** plant and animal matter used to provide power or energy生物量 |

## Ref: Unit 3 Environment\_GreenProduct.docx; Industry\_Automotive.docx

* Unit 3 Environment\_GreenProduct.docx (C:\Tracy\TW related\English\EF\2 EF oral topics - Script based on Level\EF L14)
* Industry\_Automotive.docx (C:\Tracy\TW related\English\EF\2 EF oral topics - Script based on Level\EF L17\_FieldSpecific\Industry English)

## Electricity service station –**Charging Stations for Electric Cars**



People can now **charge their electric cars** in the city **parking lot.** "We've built two **charging stations** for **electric cars**," said city engineer Randolph Schmidt. "If people use more clean electricity for cars and less dirty gasoline, we can decrease air pollution by **paring down(reduce)** the carbon dioxide emissions" //pare down sth; cut back on (working hrs); slash (price/jobs)

Tracy **commutes** 80 kilometers a day to her bank job in her **electric car**. "The city **charging stations** are wonderful. They show that the city cares about saving the environment around us," she said.

The city **is also serious abou**t improving water and air quality. Last year, the city stopped using coal. Now, natural gas **powers** all city buildings.

# STOP

## Self-driving cars= autonomous driving 自动驾驶

### ## [Related: GM: Self-driving/autonomous cars are our next big thing](http://money.cnn.com/2017/11/30/technology/gm-autonomous-cars-2019/index.html?iid=EL)

General Motors said Thursday that by the end of 2019 it will be mass-producing fully autonomous electric cars.

The cars will be used for a new GM ride-sharing service which, the automaker said, could ultimately be bigger than its current business of simply selling cars.

It's the first step toward a massive shift in its business -- moving away from selling cars to customers to selling rides in autonomous cars.

Today, GM ([GM](http://money.cnn.com/quote/quote.html?symb=GM&source=story_quote_link)) makes about $30,000 over the lifetime of every vehicle it sells, GM president Don Ammann said. But selling rides in driverless cars could mean that figure balloons to hundreds of thousands of dollars per car.

The profits per car could be big because electric cars will eventually cost less to make and, since they don't use gasoline, cost less to run. And since they're autonomous, GM won't have to pay drivers. All of these factors should bring down the cost enough to make the service much more attractive to customers than today's ride-sharing services.

GM is already [manufacturing self-driving Chevrolet Bolt EVs in relatively small numbers on an assembly line in Michigan](http://money.cnn.com/2016/12/15/technology/general-motors-autonomous-bolt/index.html?iid=EL). The cars GM ultimately makes for public use may not be based on the Bolt EV, though. GM also announced plans for a number of new electric cars over the next few years.

At the current rate of progress, GM's ride service should be ready for paying customers by the end of 2019, said Kyle Vogt, head of GM subsidiary Cruise Automation, which is developing and testing the cars along with GM engineers. The service will be rolled out on a city-by-city basis depending on demand and local regulations.

Cruise has been testing autonomous cars for some time around San Francisco, and has [had its own employees using themin a small-scale ride-hailing service](http://money.cnn.com/2017/08/08/technology/future/cruise-gm-ridesharing/index.html?iid=EL). The cars are also being tested in Arizona and Michigan, and the company [plans to test them soon in New York City](http://money.cnn.com/2017/10/17/technology/future/nyc-gm-autonomous-cars/index.html?iid=EL).

For now, GM is still relying heavily on profits from its trucks and SUVs, GM chief financial officer Chuck Stevens said. Those vehicles are currently very popular and profitable, and experts predict they'll be among the last to be hit by the shift toward electric and self-driving vehicles.

### ## For self-driving cars, car washes are a nightmare

<http://money.cnn.com/2018/02/22/technology/self-driving-car-wash/index.html>

The most cutting-edge cars on the planet require an old-fashioned handwashing.

Car washes have been automated for decades, but companies developing fully autonomous vehicles must rely on a human touch to keep their cars and trucks in working condition.

There are a range of problems with putting a self-driving vehicle through a traditional car wash, experts say.

For example, soap residue or water spots could effectively "blind" an autonomous car. A traditionalcar wash's heavy brushes could jar the vehicle's sensors, disrupting their calibration and accuracy. Even worse, [sensors](http://money.cnn.com/2018/02/07/technology/waymo-v-uber-technology/index.html?iid=EL), which can cost over $100,000, could be broken.

A self-driving vehicle's exterior needs to be cleaned even more frequently than a typical car because the sensors must remain free of obstructions. Dirt, dead bugs, bird droppings or water spots can impact the vehicle's ability to drive safely.

Avis, which has years of experience managing large fleets of rental cars, has been [tasked with cleaning](https://medium.com/waymo/well-oiled-and-squeaky-clean-partnering-with-avis-to-maintain-our-self-driving-fleet-2060a1620764) and refueling the self-driving van fleet of Waymo, the self-driving arm of Google's parent company. Avismodified three of its branches in the Phoenix area to tend to the Chrysler Pacifica vans.

"There are special processes that definitely require a lot more care and focus, and you have to clean[the vans] quite often," Avis chief innovation officer Arthur Orduña told CNN. "We give them the premium level of service that I don't think any vehicle globally is getting."

Orduña wouldn't reveal exactly how they're washing the vehicles. But other self-driving car companies such as [Toyota](http://money.cnn.com/2018/01/08/technology/toyota-pizza-hut-self-driving-delivery-cars/index.html?iid=EL), Aptiv, Drive.AI and Uberdescribed to CNN that they use microfiber cloths along with rubbing alcohol, water or glass cleaner for manual cleanings.

For snowy and icy conditions, Uber has a worker apply windshield washer fluid with a squirt bottle to its camera lenses. A puff of air is then used to remove whatever residue remains.

Toyota primarily uses rubbing alcohol on a cloth to clean camera lenses, but sometimes turns to cleaning wipes. But May Mobility, a self-driving startup based in Ann Arbor, Mich., relies on a cloth and water for the entire vehicle.

Meanwhile, some companies, such as Cruise, the self-driving group of General Motors ([GM](http://money.cnn.com/quote/quote.html?symb=GM&source=story_quote_link)), are building sensor cleaning equipment into their vehicles. This should alleviate some need for manual cleaning.

Startup Seeva is developing similar technology to clean autonomous vehicles' sensors. Seeva already offers a system that heats washer fluid to as hot as 160 degrees, and sprays it on surfaces to clean bugs, dirt or ice.

But because autonomous vehicles can have dozens of sensors, Seeva CEO Diane Lansinger doesn't imagine products like this will be able to clean every camera, radar or LIDAR, a laser sensor that most experts see as essential for self-driving vehicles.

"For self-driving technology to scale, we can't have engineers paid $150,000 a year, running around the vehicles and wiping them down," Lansinger said. "It's going to be quite awhile before we get away from the manual care."

### ## Automated Vehicles for Safety

<https://www.nhtsa.gov/technology-innovation/automated-vehicles-safety>

Driver assistance [technologies in today’s motor vehicles are already helping to save lives and prevent injuries](https://www.nhtsa.gov/equipment/safety-technologies).

A number of today’s new motor vehicles have technology that helps drivers avoid drifting into adjacent lanes or making unsafe lane changes, or that warns drivers of other vehicles behind them when they are backing up, or that brakes automatically if a vehicle ahead of them stops or slows suddenly, among other things. These and other safety technologies use a combination of hardware (sensors, cameras, and radar) and software to help vehicles identify certain safety risks so they can warn the driver to act to avoid a crash.

The continuing evolution of automotive technology aims to deliver even greater safety benefits and – one day – deliver Automated Driving Systems (ADS) that can handle the whole task of driving when we don’t want to or can’t do it ourselves.

### ##The driverless future: the road to new opportunity?

<http://www.advisian.com/en/global-perspectives/the-driverless-future---the-road-to-new-opportunity?gclid=EAIaIQobChMI1PHK7qP_2gIVAiUrCh1XRQJ5EAEYASAAEgKXdPD_BwE>

With developments in GPS accuracy, data ownership, vehicle connectivity, cyber security and ethical decision making, driverless vehicles are just around the corner for Australia. Current regulations have been scrutinised with respect to safety, licensing and certifications, interactions with enforcement and others in the anticipation of new driverless technology. While most discussions around driverless vehicles focus on the technology, there are larger challenges to address in order to adequately prepare ourselves for the driverless world. A number of these issues were raised at Roads Australia’s ‘National Stakeholder Briefing on Driverless Rollout in Australia’ in February.

Imagine a driverless future where people call a driverless vehicle from their smart phone, arranging cost effective door to door transportation by use of an app. This vehicle could be part of a fleet, each performing multiple trips per day. It is likely that these car fleets would offer a form of cheap and convenient transport so attractive that it could lead to the decline of private car ownership. With this concept in mind it is easy to see how the advent of driverless vehicles will impact far more than just the driver.

## First condition

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| Use a first conditional statement to communicate what will result if some event happens. First conditional sentences have two clauses. One clause has the word **if +** a condition. The second clause is the **result clause**. It has a verb in the future with the modal **will**. |

|  |
| --- |
| **If** we **buy** an electric car, it **will help** improve the environment, like the air and water quality.  **If** the city **changes** to natural gas (replacing coal), air quality will improve because the amount of **carbon footprint is slashed, i**ncluding CO2 emission, GHG emission)  **If** I **save** my money, I **can buy** an electric car next year. |
|  |

## Pronouncing the suffix '-ion'

Education transportation information

## Save electricity, to be green/environmentally friendly

MATT: Hey, Alexis, should I turn off the computer in your office? It wastes electricity.  
ALEXIS: Oh, yes, thanks. I'm so bad at remembering things like that.  
MATT: No problem. Actually, I think you're changing .  
ALEXIS: Really? How?  
MATT: You've been remembering to turn off your lights.  
ALEXIS: I have? Great! And I've been getting better with my cellphone charger, too.  
MATT: What do you mean?  
ALEXIS: Well, I turn it off when the phone is charged.  
MATT: Cool. Our electricity bill's going down , so we're doing something right.  
ALEXIS: Wonderful.  
MATT: Right. I'll go turn off that computer.  
ALEXIS: Thanks. See you later, Matt.

# STOP

# Part 2) Future technology

## Ref: Unit 1 Science and technology.docx

(C:\Tracy\TW related\English\EF\2 EF oral topics - Script based on Level\EF L16)

e.g. GM: genetic modification

## Tiny robots, like genetic scanner (a tiny robot):a future predication of tech that I can talk



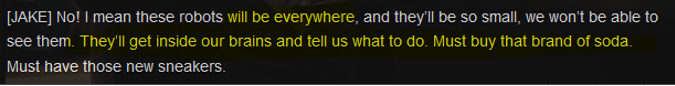


// [PHRASAL VERB](javascript:;)If you say that **[ you are blown away by something, or if it blows you away ],** you mean that you are very impressed by it. 给…留下深刻印象; 深深打动









//ubiquitous: /juːˈbɪkwɪtəs/ : [ADJ](javascript:;)If you describe something or someone as ubiquitous, you mean that they seem to be everywhere. 无所不在的 e.g. Seriously, coffee shops are ubiquitous in Seoul. 到处可见





e.g.

REPORTER: Excuse me, ma'am. Could you answer a question for The News Daily?  
WOMAN: Sure.  
REPORTER: What do you think the future will be like ?  
WOMAN: Well, I recently read an article about DNA. Scientists have created a computer (like a tiny robot) made of DNA. Scientists will put the computers in our bodies. The DNA computers will help give us medicine, which is pretty cool. But **on the other hand,** the computers could read our mind, even can attack our bodies. That's scary ! So, I guess that I don't know if the future will be good or not



## Predicting

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| Use the modals **will** and **be going to** to predict what is going to happen in the future. | | |
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|  | Robots **will** take care of the elderly. |  |
|  |  |  |

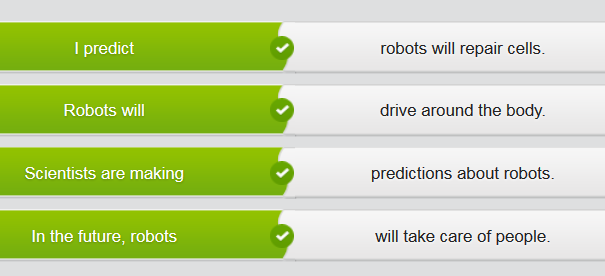
|  |  |  |
| --- | --- | --- |
|  | Doctors **are going to** have **medical scanners** they can hold in their hands. |  |
|  |  |  |
| You can add **think that** to say what you guess will happen in the future. | | |
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| --- | --- | --- |
|  | I **think that** robots will do more of our work. |  |
|  |  |  |
| You can also use the verb **predict** to make predictions. | | |
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| --- | --- | --- |
|  | Scientists **are predicting** that fewer people will die from cancer. |  |
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| Use the expression **in the future** to emphasize that you're talking about a time far beyond the present. | | |
|  |  |  |

|  |  |  |
| --- | --- | --- |
|  | **In the future**, people will wear their technology, not carry it.  V.S. **Once upon a time曾几何时**, there was a young, beautiful, aloof 高冷的girl. |  |

## Predication about robots



Thi[n a]rm

## Expressing surprise, amazement

You can say **That's surprising!** and **That's amazing!** to express surprise or amazement. Here are some other expressions for surprise or amazement

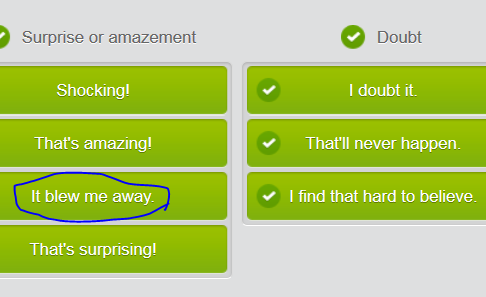
That medical scanner **blew me away, which impressed me deeply.**

I can't believe it!

## Express doubt

You can say **I doubt it** to express doubt. Here are other ways to express doubt

* I find that hard to believe.
* That'll never happen.
* **Smell a cat! = 感到有可疑之处, feel suspicious about sth, have doubts about stj**
* **Take it/that with a pinch of salt: not 100% believe it, have some doublts 半信半疑 //pinch my face/arm**



## Attitude

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| When people talk about the future, they may have a variety of opinions.  When people have an optimistic attitude, they will use positive words. | | |
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|  | I'm very **optimistic**. It's going to be **amazing**! **Friendly** robots will do our work, and life will be **easier**. |  |
| When people have a pessimistic attitude, they may express doubt and use negative words. | | |
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|  | I'm **pessimistic**. I **doubt** that we can ever stop cancer. It's a **scary** illness, and we'll **never know e**nough about it. Hmm… **Speaking of** that **genetic scanner,** **I take it with a pinch of salt.** // **not 100% believe it, have some doublts 半信半疑 //说到这个 On that note/speaking of which,** |  |
| When people are not sure, they will express **uncertainty** (uncertainty). | | |
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|  | I'm **not sure**. I really **don't know** what will happen. |  |
| For doubt, speakers may also use modals of possibility, like **may**, **might** or **could**. | | |
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|  | Robots **might** help us, but the environment **could** be a problem. |  |

## Talking about future technology-robots

You are talking to a friend who has just read an interesting article about the future.

Robots **might** help us, but the environment **could** be a problem.

# STOP

# Part 3) Be creative to stay competitive in business

## Blue sky thinking天马行空的想像, push the envelope = think out of box and be creative

**//What we need is blue-sky thinking and we’ve got to push the envelope. In other words/to paraphrase, we must think out of the box and be creative**







You sound worried? **//fret about sth = worry about sth**





We really need **blue sky thinking天马行空的想像** , in other words, **think out of the box** and be creative, **and then push the envelope.**

















We really need **blue sky thinking天马行空的想像** , in other words, **think out of the box** and be creative, **and then push the envelope.**









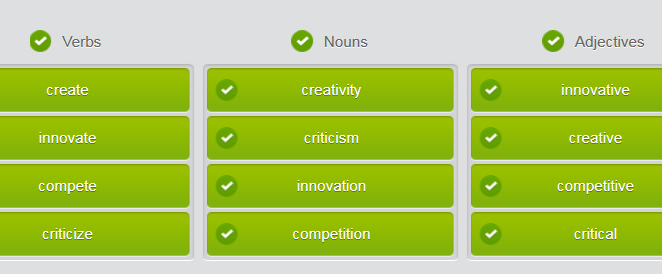
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| **Words forms for business** | | |
|  | | |
| Word endings, or **suffixes** (suffixes), can help you identify whether the word is a **verb** (verb), **noun** (noun) or **adjective** (adjective). | | |
|  | | |
| **Verb suffixes** | | |
| The suffixes **-ate**, **-ize** and **-ete** can indicate that the word is a verb. | | |
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|  | cre**ate** | create |
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|  | critic**ize** | criticize |
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|  | comp**ete** | compete |
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innovative



Innovation is a critical factor in our success.

To get new customers, we need to innovate.

I love this ad! See what a little creativity can do?

I propose that we create something innovative

## Mobile app telling when you're out of milk or eggs

|  |
| --- |
| Our innovative new software — Mo Shop  I want to tell you about our new software. Mo Shop is going to be great for us because it will kill the competition. It's an **innovative** way to shop with your mobile phone. People have criticized us for being so traditional; we've finally developed something that will make people's lives easier. Here's just one example of our developers' **creativity**: With Mo Shop, your phone will tell you when **you're out of** milk or eggs and pay for it at your nearby supermarket. Then the store will deliver it to your home. Amazing, right?  Let's talk soon.  Mariko |

## Unless = if not

**First conditional with 'unless'**

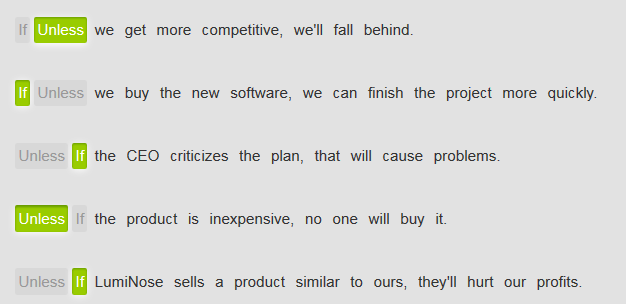
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| Sentences with **unless** indicate something that will happen if another event does not happen. Use **unless +** a present tense clause. Then add a main clause with **will**. | | | |
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|  | **Unless** the team can follow the schedule, development **will** fall behind. |  |  |
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|  | **Unless** we innovate constantly, we **won't** stay competitive. |  |  |
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| Sentences with **unless** have the same meaning as **if +** negative verb. | | | |
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|  | **If** I **don't** work hard, I'll lose my job. | |  |
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|  | **Unless** I work hard, I'll lose my job. |  |



## Express purpose

 In order to develop ...

 so that we can hit our deadlines

 just to do sth

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| Use **to +** the base verb to express purpose. | | |
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|  | We need more time **to brainstorm**. |  |
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|  | We developed the product **to make** shopping easier. |  |
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| You can use **in order to**, before or after the main clause, to express purpose in more formal business situations. | | |
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|  | **In order to** **generate** **sales**, we created these new advertisements. |  |
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|  | We created these new advertisements **in order to** **generate sales**. |  |
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| You can also use **so that** to express purpose. It can also come before or after the main clause. | | |
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|  | We changed the schedule **so that** we now have time for innovation. / in order to have time xxx |  |
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|  | **So that** we have time for innovation, we changed the schedule. |  |

We need downtime **so that** we can plan future projects.

We need some time **in order to** brainstorm new ideas.

Let's work late today so we can leave early tomorrow.

We need to take breaks in order to be more creative.

In order to **hit our deadlines赶截止日期**, we work 12 hours a day.

# Part 4 ) Life in the future













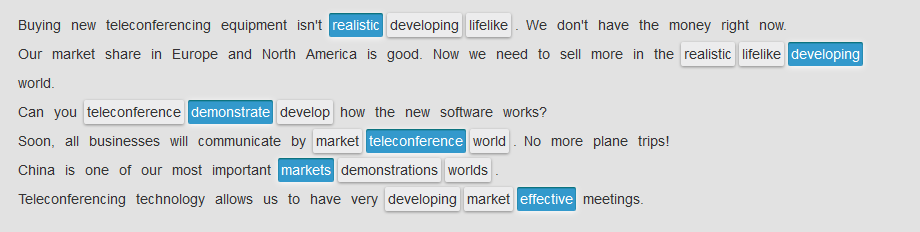
That’s great, I suppose.







Exactly what I was thinking.



## Quantifiers 数量词'more,' 'less' and 'fewer'

Quantity=> quantifier /ˈkwɒntɪˌfaɪə/

[N-COUNT](javascript:;)In grammar, a quantifier is a word or phrase such as "plenty" or "a lot" which you use to refer to a quantity of something **without being precise**. It is often followed by "of," as in "a lot of money." 量词; a word or phrase such as ‘much’, ‘few’, or ‘a lot of’ that is used with a noun to show quantity数量词

* lots of, a lot of
* plenty of xx
* **tons of xxx = loads of xxx = bulk of xx 大量的 = considerable**
* hands of xxx
* much, more, most;
* few, fewer, fewest 可数名词 V.S. little, less, least 不可数名词

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| Use **more** with a noun to talk about an increase in the amount or degree of something. | | |
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|  | In the future, **more people** will work from home. |  |
|  |  |  |

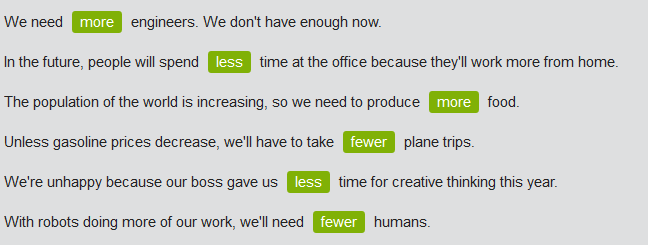
|  |  |  |
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|  | We'll do **more business** with Africa. |  |
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| Use **fewer** with plural, countable nouns to talk about a decrease in the number of something. Countable nouns are nouns that we can use with numbers. For example, we can say **one hour** or **two hours**. Countable nouns have plural forms, like **cats** and **houses**. | | |
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|  | People will work **fewer** hour**s**. |  |
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|  | In the future, **fewer people** will travel on business. |  |
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| Use **less** with an uncountable noun to talk about a decrease in the amount of something. Uncountable nouns are nouns that are not used with numbers. For example, we do not count **gasoline**. Liquids and abstract nouns, like **work**, are usually uncountable. | | |
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|  | Soon, we'll use **less gasoline**. | . |
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|  | We have **less work** this year. |  |



## Life in future

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| 1. The speakers at the Bright Ideas conference last year gave optimistic ideas about the future. I liked what Henrik Mayer said. He believes that technology will provide more **health services** to people who live far from hospitals. If a sick person has a mobile phone, the doctors will use **teleconferencing technology** to help sick people by phone. This seems **realistic**, and it will help people have fewer health problems in the future. |
|  |  |
| 2. I read a university report that said that **developing countrie**s, the US and Europe **strongly** disagree about pollution laws. The report said that **developing countries** will create more pollution than other countries because they have fewer laws about air and water quality. The report is very **pessimistic**, but I think it is also **realistic**. I believe that world leaders need to meet and discuss this, or we will have terrible environmental problems and **dare consequences** in the future, which may be a **slippery slope**. |  |

3. A German CEO says that Africa will be a huge market for computer businesses. The CEO believes that African economies will grow by 100% by the year 2050. I am also **optimistic** about Africa, but it's not realistic that the economy will grow 100% in such a short time. Africa needs fewer laws that hurt business before the economy will grow that quickly.

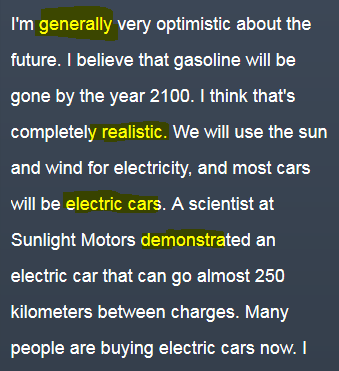
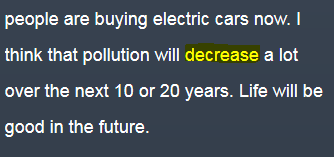
## Write about the future

e.g. electric cars; self-driving cars/autonomous driving

e.g. Tiny robots, e.g. genetic scanner

Write a paragraph about the future. What do you believe will happen in the future? Are you optimistic or pessimistic?

Type in the input box. Write 60-100 words. Use your own words where possible.

Generally, I'm optimistic about introducing tiny robots of cutting-edge technology into the health system in future. Basically, I believe that most basic health checks can be done by robots. For example, the highly sophisticated tiny robots can be injected to humans' body and commuting between cells. The robot can accurately and efficiently tell a disease by scanning your cells. The usage of tiny robots can greatly facilitate patients to do self-check regularly, especially who is living far from the hospital. In a nutshell, I firmly believe that with the advent of tiny robots, human's life will become much easier.

# Stop) CNN related news about xxx