

BRANSON'S LUCK

The business world's high roller is betting everything on biofuels.

BY MICHAEL SPECTER

Richard Branson likes to pretend that business is his hobby; he sees himself as a modern version of a nineteenth-century British adventurer—Phileas T. Fogg, unbound. Rather than travelling around the world in eighty days, however, he appears to be trying to find eighty ways to do it. In 1986, Branson, the founder of the Virgin Group of companies, crossed the Atlantic in the fastest time ever recorded, on his boat the Virgin Atlantic Challenger II. The next year, the Virgin Atlantic Flyer, history's largest hot-air balloon, became the first to travel the same path. Bad weather and technical glitches forced him to abort several attempts at becoming the first to fly a balloon around the world without stopping. But in 1991 Branson soared over the Pacific Ocean from Japan to the Canadian Arctic, again establishing records while travelling at speeds of more than two hundred miles per hour. Branson may well hold another record: the number of highly publicized near-death experiences. He has been pulled from the sea five times by helicopters (and once from a frozen lake). During one of his attempts to circle the globe, Branson crashed into the Algerian desert. During another, in 1998, the Chinese Air Force threatened to shoot his balloon out of the sky as it crossed the Himalayas. It took Britain's best diplomats to keep him aloft and alive. Not long afterward, he crashed into the Pacific. Branson, who has now bet much of his fortune on developing ecologically benign sources of fuel, was asked recently if his swashbuckling persona wasn't simply an advertisement for his airline, Virgin Atlantic. "The P.R. experts actually have said that as an airline owner the last thing I should be doing is heading off in balloons and boats and crashing into the sea," he replied. "And they have a point. When I went over on the Virgin Atlantic Flyer, our airline took a full-page ad

which said something like 'Come on, Richard, there are better ways of crossing the Atlantic.'"

There is luck, and then there is Richard Branson's luck. In 1977, he took an inadvertent spin on a sort of tricycle that had huge wings and an outboard motor—it was called a pterodactyl flying machine. It had been flown only once, but the inventor, a man named Richard Ellis, was seeking investors. He thought immediately of Branson, who saw the machine, jumped on, and started to pedal. Before he knew what was happening, Branson found himself hundreds of feet in the air. He still has no idea how he made it down alive; the next week, Ellis also decided to give it a whirl. He plunged to the ground and died on impact. Branson has even survived a shipwreck. In 1974, he went with his first wife, Kristen Tomassi, to Cozumel, to try and patch up a marriage that had suffered from numerous affairs on both sides. The area has some of the world's best marlin fishing, and one day they and another couple decided to hire a deep-sea boat. Two miles out, a severe storm began to pound the boat; after a frightening hour or so, the wind and rain subsided, but Branson and his wife concluded that they were in the storm's eye. Convinced that the boat could not withstand another attack, they urged the others to try to swim with them to safety. Nobody was willing to join them. "We stripped off to our underwear and the fisherman gave us a plank of wood from the bottom of the boat," Branson recalled. Somehow, despite ten-foot waves, the couple fought their way to shore. Neither the boat nor its occupants were ever seen again.

The adventure didn't save the marriage. Tomassi ran off with the singer Kevin Ayers and moved to Hydra. Branson followed them, but he couldn't win her back. Yet, as he noted in his autobiography, "Losing My Virginity," the

marriage may well have failed for an even more fundamental reason. "Kristen and I had a bizarre sexual allergy to each other," he wrote. "Whenever we made love a painful rash spread across me which would take about three weeks to heal. We went to a number of doctors but we never resolved the problem. I even had a circumcision to try to stop the reaction."

Branson leaves the ground as often as possible—on kite boards, parasails, gliders, bungee cords, wind boards, wake boards—and soon, if all goes as planned, he intends to add rocket ships to his repertoire. He also likes to ski, and this winter he took his family to Zermatt. (He and his second wife, Joan, have two children: Holly, a twenty-four-year-old medical student, and Sam, twenty-one, who has recently begun to work with Virgin Media.) On February 23rd, Branson's cell phone rang while they were at dinner. He ignored it. Branson is almost absurdly accessible—he treats his e-mail address like a business card, offering it to anyone who asks (and to many who don't). But, when he goes on a family holiday, he tries to step off the grid. The phone kept ringing, though, and eventually he decided that he had better see who it was. "With most people, when the phone rings at odd hours their first thought is: Oh, I hope the children are all right," Branson told me a few days later. "But, if you happen to have an airline, well, then, there is another call you also fear."

It was indeed bad news, but not from Virgin Atlantic. The trouble was in a different arm of Branson's transportation empire: a nine-carriage Virgin Pendolino train, en route to Glasgow from London's Euston Station, had derailed on a remote hillside in Cumbria with more than a hundred passengers on board. Initial reports were spotty, but the train, travelling at nearly a hundred miles an hour, had slid down an em-



From the Sex Pistols to cellulosic butanol: "I never thought my life would go in this direction," Richard Branson remarked.



"I can't help but think that things might have turned out differently if we had never met."

bankment and flipped onto its side. Branson drove through the night, reaching Zurich at 6 A.M., just in time to catch the first flight to Manchester. From the airport, he went directly to see passengers and crew members in the hospital. A number of people were seriously injured. He also met with the relatives of the only fatality, an eighty-four-year-old woman. When Branson arrived at the scene of the wreckage, he was astonished by its magnitude. "It was as if somebody had picked up some Dinky Toys and dropped them all over the English countryside," he told me. "It was shocking that anyone at all came out alive. We have transported sixty million people in one form or another since we started Virgin Atlantic. Our airlines have a one-hundred-per-cent safety record. The train company had as well. I'm the sort of person who cries at a happy film," he said, swallowing hard. "I cry at a sad film. . . . Of course, I knew this kind of day would come. I have prepared myself for it. But you can't know in advance of a tragedy how you are going to act. You just can't know."

Reporters were surprised to see Branson at the crash site before the cause had been determined. "It was really the bare

minimum one can do in a situation like that," he said. "If my children or family had been in that crash, I would have expected the owner of the train to get there as quickly as possible, find out what was going on, and see how he could help." It soon became clear that track-maintenance workers had failed to secure several bolts at a crucial junction, and National Rail officials acknowledged that they—and not Virgin—were to blame. Police surveying the destruction said that only a "miracle" had prevented greater loss of life. The reason was actually more prosaic: Branson's trains were built with safety specifications drawn from Virgin's experience in the aircraft industry. There were no sharp edges on seats or tables. Not a single window broke, and the coaches remained linked, despite the force of the crash. "The one positive thing that came out of it is that the money we spent on building those trains was well worth it," Branson told me.

That night, Branson led every newscast, which wasn't surprising. His talent for public relations is as well documented as his fetish for personal and financial risk. Together, they have made him one of the richest men in England.

Still, rarely has a fatal accident proved so beneficial to any company: Branson called the driver a hero for staying at his post; he also invited the press to tour the factory to see how the manufacturer built safety into each carriage. Virgin e-mailed every customer, explaining what had happened and how the accident would affect schedules, and expressing condolences to the family of the woman who died. "I don't know what other C.E.O. you would have seen rushing to a crash that way," Bernd Schmitt told me. Schmitt is the executive director of the Center on Global Brand Leadership, at Columbia Business School. "He couldn't have planned a better response; other guys would have buried their heads in a spreadsheet. But that is one of the reasons the Virgin brand works as well as it does: Branson doesn't plan these things at all. He just does them."

Virgin ranks among the largest privately owned corporations in Europe. The group has fifty-five thousand employees working in more than two hundred loosely federated companies, which include not just Megastores and airlines—in addition to Virgin Atlantic, there are Virgin Nigeria and the Australian carrier Virgin Blue, as well as a private airline and a helicopter service—but also Virgin Limousines and Limobikes, Virgin Money, Virgin Active (health clubs), and Virgin Games (gambling). There are Virgin companies that sell cosmetics, condoms, comics, picnics, and wine. There is one that owns spas and game preserves, another that arranges balloon trips, and even one called Virgin Brides. In February, Branson, concerned about the future availability of stem cells for children who may one day need them, started Virgin Health Bank, which will store cord blood for use later in life. I once asked Branson to describe how he decides to start a business. "It's just basically what interests me," he said. "When I was younger, we had Virgin Night Clubs. Now we have Virgin Health Clubs." He shrugged. "I guess Virgin Funerals are inevitable."

One of Branson's newest companies, Virgin Galactic, plans to become the first to offer regularly scheduled trips into the cosmos. Five vessels are under construction, and Virgin has already col-

lected full fares—roughly two hundred thousand dollars each—from more than a hundred and seventy-five passengers. (One man cashed in two million Virgin Atlantic frequent-flier miles for his seat.) The initial trips, in 2009, will last two and a half hours and take customers sixty-eight miles into space. Eventually, though, Branson envisages rocket travel across the globe—thirty-minute flights, for instance, between New York and Sydney—as well as to space hotels and to the moon. He also has his hands full on earth. His newest conglomerate, Virgin Media, is in a highly public struggle with Rupert Murdoch's Sky Broadcasting Group for control of Britain's digital and cable riches. On February 8th, Branson turned up at Covent Garden, slung the high-end stripper Dita Von Teese over his shoulder, and spirited her off to a hansom cab pulled by two black horses. They arrived at a glass-enclosed living room that had been placed next to the Royal Opera House. There Branson spent the rest of the day promoting the new company by watching only Virgin Media cable programs and communicating with the "outside world" solely through Virgin's mobile phones and Internet connections.

He had come to London for another reason as well. Until about a year ago, Branson thought it unlikely that global warming posed consequential problems for the planet. Then Al Gore paid him a visit and Branson quickly succumbed to his slide show. Branson doesn't dabble. If he is in, he is in all the way. Last September, at Bill Clinton's annual Global Initiative meeting in New York, Branson announced that for the next ten years he will divert all profits from his transportation businesses—mostly airplanes—to develop renewable alternatives to carbon fuels. The pledge should amount to three billion dollars—though Branson (who is worth twice that) says that he will make good on the promise even if profits falter. It is by far the biggest such commitment that has yet been made to fight global warming. In February, with Gore at his side, Branson went further, announcing the Virgin Earth Challenge, the largest philanthropic prize ever offered: twenty-five million dollars to anyone who helps impede climate change without seriously disrupting our way of life. The prize-winner will have to find a

way to scrub billions of tons of carbon dioxide from the earth's atmosphere. Many people doubt that it can be done, however, and the announcement elicited dreary predictions about the future of the planet. Branson, ever the optimistic entrepreneur, likened the prize to cash inducements that have led to some of history's most notable achievements in navigation, exploration, and industry. "I believe in our resourcefulness and in our capacity to invent solutions to the problems we have ourselves created," he told me. "We are facing a crisis, but I reject the idea that we have already passed the point of no return."

That afternoon, I met Branson for lunch at the Roof Gardens, in Kensington (another Virgin property). He had hardly slept, and was struggling to make it through the day. At fifty-six, in slightly frayed jeans and an untucked shirt, with a straggly goatee and shaggy blond hair unkempt to perfection, Richard Branson looks like the richest stuntman on earth; but that kind of fun apparently has its limits, and lately he has been talking as if he may have reached them. "The ballooning and boating helped put Virgin on the map on a global basis," he told me. "I certainly regret none of it. But there are quite a lot of important things going on right now on this planet and I don't really want to kill myself in a stupid way. It didn't seem to matter as much when I was young. I had everything to lose and I wasn't reticent to lose it. But if the ques-

tion is how would I wish to be remembered, I guess I would have to say not as somebody who spent his life in a balloon."

Richard Branson has always lived by Wilde's adage that "there is only one thing worse than being talked about, and that is not being talked about." In his case, there is nothing to fear. In 2002, the British Broadcasting Corporation asked its viewers to select history's hundred greatest Britons. He ranked eighty-fifth, comfortably ahead of Sir Walter Raleigh and King Henry II. He even got more votes than Bono, though not as many as Jane Austen or Lawrence of Arabia. The following year, Channel 4 held its own poll, for the hundred "Britons we love to hate." This time, the audience was told to choose only among the living; Branson—along with Tony Blair, Queen Elizabeth II, and David Beckham—was one of the few to make both lists. "My hat is off to Sir Richard Branson," one woman wrote to a local newspaper after the train crash. "I wish that man was running the country." It is a surprisingly common sentiment, and has been for years, but so is this: "Are you kidding me?" one man replied when the letter went up on the newspaper's Web site. "He comes across to me as a publicity-seeking sleaze."

What other knight of the realm would appear, waterskiing, on "Baywatch," or as a guest star on "Friends"? (He and his son, Sam, also turned up as harried passengers in "Casino Royale,"



"It's basically 'The Tragedy of King Lear' but with animated penguins."

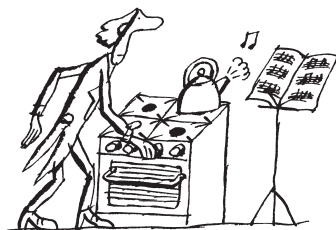
cameos they earned by lending the producers a jet. Fittingly, Branson had a small role in the 2004 remake of "Around the World in Eighty Days.") In person, Branson is notably soft-spoken and deferential. In fact, the best way to describe him is shy. Utter the word "Virgin," however, and there doesn't really seem to be anything he won't do. Branson shakes every hand that appears in front of his face, and I once saw him pose for the same picture with a mortified teen-ager four times because the boy's mother couldn't figure out how to work her cell phone. ("I just want to tell you that in Saline County, Kansas, we adore you," she said. "Have you heard of Saline County?" Branson shrugged and said, "Isn't that where the Yellow Brick Road ends up?") Not long ago, Branson invited the MTV show "Cribs" for a tour of Necker Island, his private hideaway in the British Virgin Islands. His American television series on Fox, "The Rebel Billionaire: Branson's Quest for the Best," barely limped through a season—the opening credits played over the theme "Live and Let Die" ("The name is Branson," he says, while the camera flashes to the wing of one of his planes. "Sir Richard Branson.") Naturally, the program was compared to "The Apprentice," whose star, Donald Trump, couldn't resist gloating when it failed. "Richard Branson, your ratings speak very loudly, and you just got fired!" he said, before going on to trash Branson personally. "I don't believe he's a billionaire," Trump, who has often been accused of exaggerating his own fortune, said. "I wish him a lot of luck in the businesses. But, I can tell you, on television he's a total failure." In some respects, Branson is the anti-Trump. There are no monumental Branson Towers in London; in fact, his name appears on no building at all. At Virgin, Branson's nickname is Dr. Yes, largely because he has never been able to bring himself to fire people, and often has trouble saying no to even the most ridiculous and unsolicited ideas.

Branson simply doesn't possess the shame gene that governs so much of upper-class British life. He was knighted in 1999, and three years later, as a guest at Queen Elizabeth's Golden Jubilee, he found himself laughing quietly at the irony of his metamorphosis—first hippie

entrepreneur, then Thatcher-era yuppie, and, finally, socially conscious leader of Cool Britannia—because he doesn't think he's changed a bit. "I remember being with the Sex Pistols riding down the Thames on a boat in 1977," he said. "And they were singing, 'God save the Queen, her fascist regime,' and everybody getting arrested. Then, twenty-five years later, there I am sitting next to the Queen at Buckingham Palace, having been knighted. And I couldn't help thinking, I wonder if she can remember what I was doing on the day of her Silver Jubilee."

The Queen may have warmed to Branson, but much of the rest of the Wellington-boot crowd has not. They consider him "common" and—even more horrific—eager to earn money. Yet Branson's popularity is such that when Apple Computer ran its "Think Different" ads in England his photograph appeared along with those of Einstein and Gandhi as one of the people who shaped the twentieth century. As a man who is both rapaciously capitalistic and intemperately candid, he seems to belong more in Oprah's world than in Churchill's. "There are some things about the British that obviously have never appealed to me," he said. "I was watching tennis the other day and looking at all those guys in their blazers in the Royal Box. It just made me shiver. I feel more comfortable amongst Americans oftentimes. Britain is changing, but there is still a fairly fuddy-duddy establishment."

Branson was raised in Surrey and educated as a proper, upper-middle-class British boy; he attended Stowe, among whose other graduates—they are called Old Stoics—have been David Niven, Prince Rainier, and Christopher Robin Milne. From an early age, he and his two sisters were taught that the alternative to standing on their own feet would be disaster. "My mother was determined to make us independent," he has written. "When I was four she stopped the car a



few miles from our house and made me find my own way home across the fields. My youngest sister Vanessa's earliest memory is being woken up in the dark one January morning because Mum had decided that I should cycle to Bournemouth that day." Branson was eleven and Bournemouth was a fifty-mile ride. "She did things then that if she did them now she would be arrested," Branson told me recently. I asked him if he thought his flamboyance and love of the spotlight were in any way attempts to hold his parents' attention. "I don't think in psychiatric terms," he replied quickly, ending the discussion. He has always been close to his parents and intends, in two years, when his father turns ninety, to accompany him into space.

Branson had no interest in school and was a famously bad student. "Richard is highly intelligent but educationally dyslexic," his longtime lieutenant Will Whitehorn told me. "It has freed him to live by his gut reaction to things, and that has served him well. I was brought up in a more academic environment—to find there was always a reason why something can't happen. Richard hates it when people tell him that. He isn't hamstrung by academic disputes. He finds them tedious." Branson is like a musician who cannot read music but has perfect pitch. He never finished school or attended university; when he left Stowe, his headmaster told him, "You are either going to be a millionaire or going to jail." Branson did both. He opened a health center in the crypt of a church in central London in 1968. Soon he was prosecuted under the 1917 Venerable Diseases Act, which was intended to prevent charlatans from working as doctors. The center dispensed advice and not medicine, however, so the charges were dropped.

His next indictment, under the 1889 Indecent Advertisements Act, was in 1977, when the Sex Pistols released their only album, "Never Mind the Bollocks Here's the Sex Pistols," on the Virgin Records label. "Bollocks" was considered an unforgivably rude word," Branson said. The playwright and lawyer John Mortimer successfully defended him by producing an expert witness to demonstrate that the word "bollocks" was derived from an Anglo-Saxon term and could be used to refer to

REMAINDER OF A LIFE

If I were told:
By evening you will die,
so what will you do until then?
I would look at my wristwatch,
I'd drink a glass of juice,
bite an apple,
contemplate at length an ant that has found its food,
then look at my wristwatch.
There'd be time left to shave my beard
and dive in a bath, obsess:
"There must be an adornment for writing,
so let it be a blue garment."
I'd sit until noon alive at my desk
but wouldn't see the trace of color in the words,
white, white, white . . .
I'd prepare my last lunch,
pour wine in two glasses: one for me
and one for the one who will come without appointment,
then I'd take a nap between two dreams.
But my snoring would wake me . . .
so I'd look at my wristwatch:
and there'd be time left for reading.
I'd read a chapter in Dante and half of a *mu'allaqah*
and see how my life goes from me
to the others, but I wouldn't ask who
would fill what's missing in it.
That's it, then?
That's it, that's it.
Then what?
Then I'd comb my hair and throw away the poem . . .
this poem, in the trash,
and put on the latest fashion in Italian shirts,
parade myself in an entourage of Spanish violins,
and walk to the grave!

—Mahmoud Darwish

(Translated, from the Arabic, by Fady Joudah.)

a priest. The witness even turned up in court wearing clerical garb. The judge, to his dismay, was forced to dismiss the charges, saying, "Much as my colleagues and I wholeheartedly deplore the vulgar exploitation of the worst instincts of human nature for the purchases of commercial profits by both you and your company, we must reluctantly find you not guilty."

Branson made his defining fortune through Virgin Records, which he founded as a mail-order retailer in 1970 to raise money for a magazine called *Student*, which he was running. A postal strike threatened to destroy the mail-

order business, so he opened a record shop on Oxford Street. It didn't take him long to see that it would make more sense to record music than to buy it, so he built a studio and signed the first Virgin artist, Mike Oldfield. It was a classic piece of Branson luck: the opening song on Oldfield's album, "Tubular Bells," became the theme to "The Exorcist"—which helped it sell five million copies. For a long time, Oldfield earned Virgin more money than all its other acts combined. Relying too heavily on one artist is not much of a business plan, though; the Sex Pistols had been dumped by two labels, and nobody else was willing to

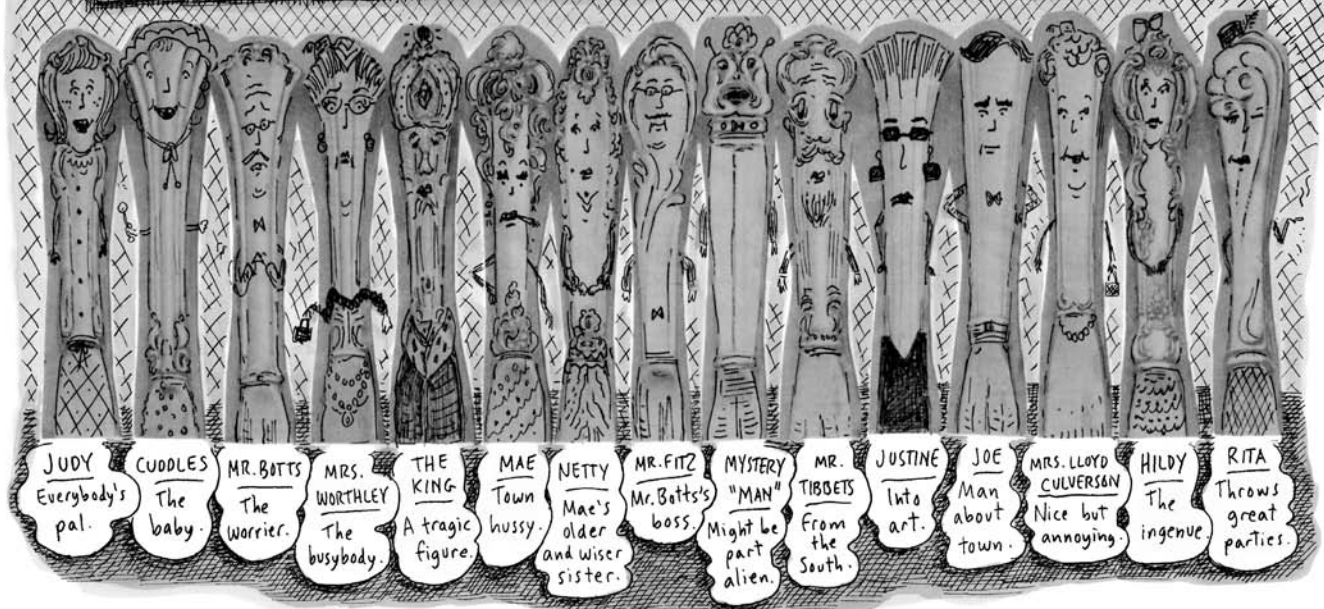
sign them. They were repulsive and seemed to spend as much time shooting up and throwing up as they did playing music. But their outrages made news and, oddly, they brought Branson credibility that allowed him to sign people like Steve Winwood, Boy George, and Peter Gabriel.

Branson likes to enter a market controlled by a giant—British Airways, say, or Coke, or Murdoch. Then he presents himself as the hip alternative. (Usually it works, but not always. Virgin Cola, which was launched in 1994, was a disaster, though "we are still No. 1 in Bangladesh," Branson told me recently.) Virgin Atlantic Airways got its start, in part, because Branson was pissed off that a flight he was planning to take to Puerto Rico had been cancelled. After finding a company that would charter a jet for two thousand dollars, he divided the price by the number of seats, borrowed a blackboard, and wrote, "Virgin Airways, \$39 single flight to Puerto Rico." As he recalls it, "I walked around the terminal and soon filled every seat on the plane."

Virgin started flying in 1984, on one route with one leased jetliner. "At that time, the airline industry was even worse than it is now," he told me. "You were lucky if you got a piece of warmed-over chicken dumped on your lap. People were treated like cattle; it wasn't necessary or good business." Virgin became the first airline to equip every coach seat with video displays and the first to offer in-flight massage and manicure services. Good service gets you only so far, though. The airline business is brutal—Branson likes to say that the easiest way to become a millionaire is to start as a billionaire and buy an airline. Nonetheless, he is about to start a new one in the U.S.—Virgin America, which will at first serve San Francisco, Los Angeles, and New York. "When we began, more than twenty years ago, we were competing with thirteen airlines across the Atlantic," he said. "Of those thirteen, twelve have gone into bankruptcy or Chapter 11. There is only British Airways and ourselves flying who have not. A lot of those carriers were enormous: Air Florida, Pan Am. But it shows in the end that most people seek out quality over a really ghastly service, which is what most American airlines provide."

British Airways didn't take kindly to

FLATWARE FOLLIES



R. Chart

its new competitor. In 1990, after Branson completed a highly publicized mercy mission to Iraq to bring home hostages of Saddam Hussein, B.A.'s chairman, Lord King, told his top aides to "do something" about Virgin and its chief executive. That edict began an extensive secret war against Branson and Virgin which came to be known as the "dirty tricks" campaign. British Airways lied to Virgin's customers, tampered with its databases, and spread false rumors about Branson himself. Branson sued, and in 1993 B.A., facing certain defeat in court, conceded that it had taken those actions and apologized publicly. Branson received a libel judgment of six hundred and ten thousand pounds, which he distributed among his staff; it became known as the B.A. bonus. The airline was also assessed court fees that ran into the millions; King was forced to retire early, and in disgrace. The incident cemented Virgin's reputation as the little guy always willing to take on Goliaths; it's an image that persists, despite the fact that Virgin stopped being the little guy long ago.

(Nor has the bad blood subsided; two weeks ago, when British Airways began showing "Casino Royale" on its flights, the airline removed Branson from his scene, and obscured the fin of a Virgin jet.) "It's a hell of a lot more fun being in the David role," Branson said. The victory came at a cost, though. Many of Branson's other businesses were in financial peril during the nineteen-eighties. Fighting British Airways cost a fortune, so in 1992 Branson sold Virgin Music's record label, publishing arm, and recording studios to Thorn EMI, for a billion dollars.

"It was a very difficult decision," Branson told me. "I had just signed the Rolling Stones, and I had spent a lot of my life trying to do that. Virgin had become the biggest independent record company in the world. It was exploding on all fronts, and these were people who I had been working with since I was a teenager. . . . So it was certainly not something I wanted to do.

"I never have regrets," he continued. "They just don't seem to solve anything. But it is true that when I got this billion-

dollar check it wasn't an easy day for me. I had just talked to the staff and explained what was happening and I was running down the street with tears streaming down my face. Then I passed a newspaper kiosk and I saw all the headlines: 'BRANSON SELLS FOR A BILLION.' I remember thinking, Well, this will make an incredibly strange picture if anyone should catch it."

Necker Island sits atop seventy-four acres of rock in the dazzling blue center of the British Virgin Islands. It is surrounded by coral reefs, equipped with every type of water board, kite, and sailboat known to man, and staffed by a professional tennis coach, a chef, a full-time masseuse (who previously had worked for Virgin Atlantic in its Upper Class cabin), yoga instructors, and several dozen other staff members. From the edge of the infinity pool at the Great House, one can gaze across thickets of roses, iris, and rhododendron, into the azure sea and out toward Virgin Gorda. Flamingos strut around the pond. Branson bought Necker in 1972, for a hun-

dred and thirty thousand pounds, when it had nothing on it but a couple of palm trees; over the years, he has transformed the island into the kind of place that any man with a few billion dollars and an acute understanding of pleasure would appreciate. He recently bought its nearest neighbor, Moskito Island, for ten million dollars, and plans, with a combination of windmills, solar energy, and tidal power, to make both islands independent of fuel that burns carbon.

These days, Branson is on Necker more than anywhere else; but when he is not it becomes a resort, available to groups willing to pay forty-six thousand dollars a day. (Spa treatments are not included.) The island is a favorite of celebrities—the long list includes Steven Spielberg, Bill Gates, Kate Moss, and, most famously, Princess Diana—because it affords at least some privacy. (When Diana was there with her sons, the paparazzi assault on the beaches—by land, sea, and air—was so vigorous and intrusive that Branson worked out a deal: one day, the Princess presented herself briefly for a few thousand pictures; then the photographers had to disappear.)

The morning I arrived (by boat, though most guests use the heliport), Branson's wife, Joan, was eating breakfast in the great room with several of her friends. She and Branson have been married for more than seventeen years, and have been companions for thirty. They met in 1976, when her then husband was recording an album in the Virgin Studios. "I make up my mind about someone within thirty seconds of meeting that person," Branson wrote later, "and thus I fell for Joan from the moment I saw her." A reserved but pleasant woman—"sensible, pragmatic Glaswegian" is the phrase Branson almost always uses to describe her—she serves as his principal source of gravity. Once, at a Microsoft conference, Bill Gates asked the crowd if there was even one person left who never used the Internet. Joan had to grab Branson's hand to keep him from raising it. It was Joan who suggested the Virgin Earth Prize.

The great room is lit with ecologically friendly light bulbs that hang from a series of huge, intricately patterned ostrich eggs. The Bransons' children,

Holly and Sam, are often with them on the island, and when they are apart Branson speaks to them nearly every day. Branson, who rises early, had just finished a Pilates lesson. "In the last few weeks, I have discovered something that I have always laughed at my friends for doing," he volunteered sheepishly. "Yoga and Pilates. I feel great from it, and if I want to continue to be active when I am ninety I am going to need to rely on both of them." Pilates was the first event of a day that included water sports and a tennis match, and which eventually resembled a mini-Olympics. "Fancy a sail?" he asked after breakfast. It was more of a command than a question, and we were soon racing toward Beef Island in a Hobie Cat, its pontoons slapping the water fiercely as we tried to keep up with two boats carrying friends of his. They quickly moved far ahead of us. Branson looked irritated and then assumed his more common "Hey, it's only rock and roll" expression: "If you are first, it's a race," he explained, as we tried desperately to come about and catch the wind. "If not, it's just sailing." We were forced to abandon our plan to circle a nearby island, because it was getting close to mealtime and Branson wasn't about to miss his traditional British Sunday lunch: roast beef, turnips, greens, and several types of potatoes.

Since his first encounter with Gore, Branson has become obsessed with developing alternative sources of energy. His new venture, Virgin Fuels, is not so much a company as a fund that seeks to invest in projects that will produce environmentally benign fuel. Branson has a pattern with his businesses: he is intensely involved at the beginning, and then, as a leadership team finds its stride, he loosens the reins. This time, though, he shows no sign of inching away. "There are days when we speak three times," Shai Weiss, the company's C.E.O., told me. "Richard definitely believes in delegating, but this is not just another business for him." Virgin Fuels has committed more than four hundred million dollars, for research into the feasibility of using enzymes and genetically modified organisms to produce clean fuels. Bran-

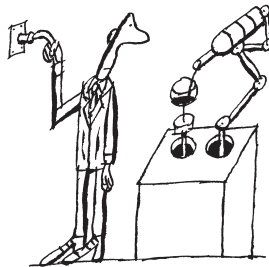
son's initial focus, however, has been on ethanol and butanol. "These technologies are further along than some others, so it makes sense to me to invest in them," he said. "You might as well tick the winning boxes first."

Branson is agnostic about which fuels to support, as long as they are commercially and ecologically viable. Today, of course, his companies—and his fortune—are largely propelled by oil, a finite resource whose availability can only diminish. Government regulations—even in the United States—are also making oil increasingly costly. Biodegradable products like corn and sugar, on the other hand, are renewable sources of energy, and you don't have to get them from Iraq, Russia, or Saudi Arabia. When biofuels are manufactured in sufficient quantities, they should be far cheaper than oil, and Virgin Fuels will benefit directly from any technologies it develops, which means that the company could earn large profits from its investment. "Isn't it surprising to you that there are no biofuels billionaires?" Branson asked, making it clear that he intends to become the first. "If there has ever been a market that needs new products, this is it.

"Let us just assume that somebody does win this prize," he continued. "That could result in us not all having to radically change our lives. Personally, I think there are a lot of aspects of our basic lives that are pretty shitty anyway. Sitting alone in a car with dirty fuel spilling all around you. There must be a better way. The economic sacrifices we

are going to have to make to stop global warming are massive, and we must hedge on that. If somebody wins this prize, there is just the possibility that at that stage, and at that stage only"—he paused for a moment—"well, this is a dangerous thing to say, because I don't want anyone to think we don't have to change. But there is enormous economic benefit to the world if we could find a technological solution."

The mere concept of mixing philanthropy with profit infuriates many environmental activists. Branson's motives have been questioned almost as often as his generosity has been praised. "And



then Richard Branson came along with his 'Environmental Windfall' of \$3 billion and his promise to clean up global transport," Keith Farnish wrote on his Earth Blog not long ago. Farnish described it as a "wonderfully spun P.R. stunt" that will have almost no effect on the emission of greenhouse gases. Tony Juniper, of Friends of the Earth, said, "Richard Branson is not embarking on a program of philanthropy here and giving away money to good causes. What he is doing is reinvesting money from his business into a different kind of business for the future." In fact, few serious scientists believe that climate change can be addressed in any meaningful way simply by seeking technological solutions; fundamental changes in human behavior will be necessary.

Branson acknowledges the criticisms, but he doesn't accept a paradigm that holds profit and technology to be incompatible with a cleaner world. "Even if we never burned another gallon of gasoline, the earth would continue to warm for decades," he pointed out. "So doesn't that suggest that we ought to at least try to find a way to remove some of the carbon we have already produced?" Ultimately, he believes as a first principle that if a project isn't commercial it isn't going to work. "As for why I am giving my money away in this manner, obviously it would

have made more sense to make investments in lots of sectors, and not just one," he said. "But we all do things for different reasons. Sometimes it's a mixture of what one would consider to be selfless and selfish. A lot of this comes down to how you are brought up. If you are in a position to help, I think you should do so. And I happen to think using our skills in business is the best way for us to be effective. That is what we try to do with Virgin Unite"—Virgin's charity, which focusses on entrepreneurial solutions to problems that range from AIDS in Africa to homelessness in the United States. "I don't want to get dramatic and say, 'Now I have found my calling,'" Branson told me. "But I have to pinch myself if I think back to the height of the Sex Pistols and here I am talking about cellulosic butanol. I never thought my life would go in this direction."

Branson had his first significant encounter with climate change when he read a book called "The Skeptical Environmentalist," by Bjorn Lomborg, a Danish academic who has long challenged the widely held belief that human activity places an unbearable burden on the environment. "What he argues is that we are headed toward another ice age, and all global warming is doing is slowing up that process," Branson said. "It made sense to me, but it might have

also simply made comfortable reading because I am in the airline business."

Converts tend to be the most fervent zealots, however, and Branson has been converted completely. "If this is the problem that a lot of us think it is, then it is far worse than the First World War and the Second World War combined," he said. "Worse than any war we have ever faced. And you would have thought that world leaders would be meeting with an enormous sense of urgency. And they are not. Yet, even if we are all wrong, you would still have thought that somebody out there would be trying to develop alternatives to our reliance on the Middle East."

On his own property, Branson is deploying multiple sources—wind power, solar energy, and biodiesel—in an attempt to eliminate carbon emissions. Both islands will be more heavily dependent on wind and solar power during the winter. Excess energy will be used to produce and store desalinated water. Branson currently spends nearly four hundred thousand dollars a year on fuel for Necker alone—much of the cost includes the expense of importing diesel. He expects his investment to pay for itself in less than six years. He also hopes to persuade the rest of the British Virgin Islands to follow his lead. "This is a demonstration project," he said. He was wearing a T-shirt inside out and cutoff shorts, and was drinking an iced tea. We were staring out toward the heliport, which will soon have a wind turbine next to it—one of six that he plans to place on the island. "We want to show that becoming carbon-neutral won't cost money, that it will actually make economic sense. That is the only way you will get most people to change their habits.

"This is really not just about us," he added. "The Caribbean needs to get out in front here. If the Arctic goes in the next decade, which is likely, that means Greenland could melt—at least, the ice on top of it. With that we could see a gigantic rise in sea levels. So it is in the self-interest of all islands on the earth to set an example, because they will be among the first affected."

Despite the Bush Administration's tepid response to the threat posed by global warming, cities and states have introduced dozens of measures aimed at producing (and requiring) more energy-



"Toughness isn't something you look for in a mother."

efficient vehicles, buildings, and appliances. Studies have shown that even seemingly small conservation efforts can have a dramatic impact on the environment. Australia, for example, may soon require the use of compact fluorescent light bulbs, which expend seventy-five per cent less energy than incandescent bulbs. That shift alone is expected to reduce the country's carbon emissions by four million tons every year. (There are forty-five light bulbs in the average American home; reducing that number by just one would be equivalent to removing nearly a million automobiles from the road.)

Conservation can take us only so far, however. Each year, the world's demand for coal, oil, and gas to power factories, cars, and homes increases—and no plan to reduce emissions is likely to succeed unless it includes a major commitment to developing clean, renewable sources of energy. Despite recent increases in the production of ethanol and in the purchase of hybrids, the fundamental relationship between oil and prosperity remains unbroken. And so does a system of subsidies that discourages investments in alternatives. "I can't think of an example in human history of a bad technology having been replaced by another product whose only improvement was a social good," Daniel Kammen told me when we met recently in his office at the University of California at Berkeley, where he founded the Energy and Resources Group at the Goldman School of Public Policy. Branson has hired Kammen and Daniel Prull, one of his graduate students, to devise a scheme to eliminate carbon emissions on Necker. New technologies arise out of ingenuity, sophistication, and need, Kammen argues, not necessarily because they are good for the planet. "Look at iPods," he said. "They play music. But they do it in a useful, remarkably portable, digital way that serves many purposes—which is why they have spread through our world like a virus. We need to do that with alternative fuels; but, when you look at what most people are advocating, the changes—more use of wind power, and solar energy, for example—are simply not radical enough to create this contagion effect."

The airline industry provides a particularly graphic illustration of the lim-



its of incremental change. Aircraft are responsible for just two per cent of the world's daily burden of greenhouse emissions, but that figure belies their true impact. Eighty-five thousand commercial aircraft take off and land each day, a number that is growing by five per cent a year. At that pace, by 2050 there will be twice as many flights as there are now. That increase is largely a reflection of global prosperity and of the opportunity that comes with it. But the environmental costs are acute: a single flight across the Atlantic can generate more carbon dioxide than an average motorist would produce in a year of driving. Furthermore, that carbon is released exactly where some scientists believe it does the most harm, because each molecule of CO₂ created by burning gas or coal takes half of its hundred-year lifetime to rise from a smokestack or an exhaust pipe into the stratosphere.

Carbon dioxide released at thirty thousand feet has many effects, and none are salutary. Greenhouse gases slow the process known as the thermohaline cycle, which governs the density of salt in oceans and helps determine the temperature of the polar regions. Too much carbon warms the cycle, and that, in turn, melts sea ice, dramatically affecting fish populations and coral reefs. "This is a problem we have no plan in place to solve," Branson told me. "I have

tried to experiment with slowing down flights and having them fly at lower altitudes." The benefits of these measures are not large, and it's hard for just one airline to alter the air-traffic system. Earlier this year, Virgin began using tugs to move planes onto runways at some airports, rather than the aircraft's engines. That change alone, on a flight between Heathrow and J.F.K., eliminates the need for two tons of fuel. Two weeks ago, Branson announced that next year, on a Boeing 747, Virgin would make the first commercial flight powered by clean-fuel technology.

Daniel Kammen's office is home to the pragmatic, hardheaded faction of the green movement. He is not romantic about saving the earth, and neither are many of his colleagues at Berkeley, who are only too aware that people need incentives to change their behavior. The Berkeley team helped write the legislation that has made California the most environmentally aggressive state with regard to cutting carbon emissions.

"It is hard to stress fully enough Richard's importance right now," Kammen told me. "What is still lacking here is what I call the 'third wave' of environmentalism. The first wave was Rachel Carson: recognizing the problem, and understanding that we need to protect the environment. That led to Stage 2:

the system of regulations and taxes that helped make it possible to implement the Clean Air Act, the Clean Water Act, and other vital legislation." They all worked very well, and the environment improved immensely. But regulation has its limits. "Kyoto is not going to save us," Kammen said. "No global treaty is going to be sufficient. We also need a couple of big actors." Political decisions like implementing carbon taxes, lowering speed limits, and raising mileage requirements for motor vehicles will all be essential. "What we need more, though, is a charismatic megaphone," Kammen said.

"Richard is willing to say, 'This affects my airlines, my trains, and my income,'" he continued. "And he knows how to get people to pay attention to him. Of course, the environmental movement contains some of the last true puritans, and those people call him selfish, because he will clearly earn money if this works. But, for God's sake, so what? The man is willing to pull the trigger. I know other people who are just as affluent and they are totally constipated about what to do. Richard is not. He will move from one interesting risky proposition to another. Some will fail—just as some of his businesses have failed. But he keeps moving forward."

At present, Kammen explained, the national power grid flows in one direction, from big central utilities to the consumer. That prevents people with solar panels, say, or windmills from selling excess energy back into the system. "The model we want for the energy market is more like eBay," Kammen told me. "Sell what you don't use to somebody who wants it. If I can sell power to my utility by demonstrating that I regularly put power into the grid at 4 P.M. on a hot summer day—when demand goes up and it costs the most—that is worth knowing. We could have a rating system, just as they do on eBay, that would let people judge us with confidence as we sell our excess. Renewable sources of energy would go from being the last thing a utility wants to take on board to being the first, because it would cost the utility next to nothing." If California and other states adopted policies that strongly support plug-in hybrid automobiles, there would be

much more demand for clean electricity at night (so people could charge their cars at times when energy was less expensive to use). That would provide a huge incentive for people to install wind farms on their real farms.

Ethanol is usually made from corn blended with gasoline, and it accounts for more than ninety-five per cent of the biofuels under development in the United States (which is less than five per cent of the total energy produced). To harvest and refine the corn requires considerable energy (which itself burns fossil fuels). The savings are marginal. There are other ways to make ethanol, though; one of the most promising—cellulosic ethanol—comes from woody plants and grasses. Cellulosic sources can be fermented into ethanol by simply using energy generated by the rest of the plant. This process adds only small amounts of greenhouse gases to the atmosphere, because the plants' emissions are balanced by the carbon dioxide that is absorbed as they grow. Substituting cellulosic ethanol for gasoline should reduce greenhouse emissions by as much as ninety per cent.

Ethanol is heavy, though, and its density could make it difficult to use in airplanes. Butanol might work, but it is not well enough understood to be used in jet fuel anytime soon. There are more experimental and, perhaps, more promising approaches: scientists are seeking to use the tools of molecular biology, as they have with crops, to produce genetically modified fuel. "I am so excited about the possibilities of really engineering something that will make a dramatic difference," Branson told me when we were on Necker Island. "It is the biggest type of gamble, perhaps. But that is exactly what we need the most."

Branson mentioned his interest in the work of Amyris Biotechnologies, which got its start in the laboratories of Berkeley and has been concentrating on three synthetic molecules: one to replace gasoline, one that works like diesel, and another to make jet fuel.

Synthetic biology—a new field that combines biology, genetics, and engineering—seeks to create and alter organisms so that they can then produce drugs and make other compounds that would help us to move away from our

dependence on petroleum products. Amyris has already used such tools to address one of the world's most pressing problems; its first product is a package of genes from three different organisms that, when inserted into yeast, help make artemisinin, the world's only truly effective malaria treatment. Currently, the drug has to be extracted from the sweet-wormwood plant, which is indigenous to China and Vietnam. It is difficult to manufacture in sufficient quantities, particularly at a cost low enough to serve the hundreds of millions of people who need it each year.

I drove across the Bay Bridge one morning to speak with John G. Melo, Amyris's C.E.O., at his office in Emeryville. Melo told me that the company's synthetic version of ethanol is based on sugar. Using sugarcane is cheaper and more environmentally benign than using corn, and would place almost no carbon in the atmosphere. "Initially, we had not thought about jet fuel," Melo said. That changed after Branson made his announcement at the Clinton meeting last fall. Jet fuel must function at thirty degrees below zero centigrade, and so far the company's product has been tested only in the laboratory; but Melo said that the Amyris molecule easily passed that test and has essentially the same energy content as the gas that planes use today.

"What amazes me the most about all this," Branson had told me, "is how promising the research is and how little money has been invested to help it along. If biofuels are made right, they should help create another green revolution." It would be hard to dispute the promise of biofuels—particularly as a replacement for burning oil and coal. Yet almost any project that is derived from collecting trees, crops, or fibre will require an enormous manipulation of nature (as would, surely, most plans to scrub billions of tons of carbon from the atmosphere). The world's forests are already in peril; harvesting trees to make cellulosic ethanol can only make them disappear faster. Few achievements of modern science have been more bitterly disputed than altering the genetic composition of crops for food; to do it for fuel will be no less controversial. The price of corn, sugar, and soybeans is certain to

rise if they become powerful sources of energy. Worse yet, each of those crops demands a constant infusion of freshwater—which may be the scarcest commodity of all. Branson is right: if these issues are addressed properly, there could be a new green revolution. But magic bullets are hard to find.

I asked Branson whether he might be viewing the world through an unusually optimistic lens. “I don’t know any other way to look at it,” he replied. “We know when there is a world war humans are magnificent at changing their behavior. Before Pearl Harbor, six thousand warplanes were made in the United States. Then America went to war, and within three years the number grew to more than a quarter of a million.” Branson became more animated as he went on. “In a crisis situation, humans are brilliant. They know how to react. Our problem is that we have not gotten governments into that crisis mode. But if necessary we will do it without them.”

There is no gathering of technology geeks more exclusive than TED (Technology, Entertainment, Design), which is held each spring in Monterey. It is an invitation-only event—four thousand people each pay six thousand dollars, and many others are turned away. If you can countenance the summer-camp ethos—attendees refer to each other as TEDsters and TEDizens—the group does manage to herd together many of the most interesting people in the world. It is one of the few places on earth where you can see Bill Clinton, E. O. Wilson, or Philippe Starck chatting amiably with Kareem Abdul-Jabbar, Cameron Diaz, or Paul Simon. This year’s theme was “Icons, Geniuses and Mavericks,” and on the final day of the conference its organizer, Chris Anderson, interviewed Richard Branson before a rapt, capacity crowd.

It was early on a Saturday morning, and Branson looked a little ragged. He had been out the night before with several people from Google, including one of the founders, Sergey Brin. When there didn’t seem to be enough room in the car, Branson jumped into the trunk and curled up there. As Anderson ran through Branson’s résumé, a slide show flashed behind them: Branson launching a Virgin Megastore in Los Angeles, then

dressed in a tulle-and-lace wedding gown to publicize the opening of a Virgin Brides store. There were shots of helicopters lowering him into Times Square and of Branson hoisting Pamela Anderson over his shoulder to help launch Virgin Cola. (“We launched a cola bottle called the Pammy, because it is shaped a bit like Pamela Anderson,” Branson explained.)

A list of Virgin companies flashed onto the screen. Chris Anderson asked Branson how involved he is in the mechanics of the business—after all, there are so many. Branson laughed. “Well, I don’t understand these things completely,” he said. “For instance, I have been running the largest group of private companies in Europe, but I had never been able to know the difference between net and gross. So the board meetings have been fascinating. Because I will have to say, ‘Is that good news or bad news?’

“When I turned fifty,” he went on, “somebody took me outside the boardroom and said, ‘Look, Richard. Let’s draw you a diagram. Here is a net and here is the sea. The fish that you’ve pulled

from the sea go into the net and they are your profit. You get to keep it, so they call it the net.’ Finally, I had worked it all out.”

There are times when it is hard to know whether Branson is as humble as he seems or if he is putting us on. Is he just a lucky gambler? And will the planet be as lucky?

“I don’t think I am different really from any entrepreneur,” he told me later that day. “You have to stick your neck out on occasion. You have to make bold moves, and sometimes you come close to betting everything. In my speeches, I will always say you have to protect the downside. But there have been occasions when I have asked my wife to sign a bit of paper. And she would say, ‘What’s that, dear?’ And I would always say, ‘Don’t worry,’ when it was actually the third mortgage on the house.

“But I really do believe that if something is important enough you should go and bet the damn house,” he said. “Fortunately, we have no mortgages on our property now. So that is past. But there are bigger things we need to gamble on. Much bigger things.” ♦



“This would be a great place to put a huge city.”