Death By Design

This program includes close captions and subtitles and has an interactive transcript when viewed as part of the Global Environmental Justice documentaries collection on Docuseek2.

Man in Street # 1
(1:00:00:18)
Sue I just wanted to ask you how many electronic devices do you have like phones, computers?
(01:00:05:21)
Ms Kattis Oh my God. Definitely, more than ten.

(01:00:09:13)
Lawrence iPad, phone, Play station and I have a little tablet.

(01:00:14:01)
Girl in SLO I'm pretty close with my phone. It doesn't really like leave my hand [CHUCKLES] very much.
(01:00:18:07)
J.C. Vasquez My iPhone is the most critical device I have.

(01:00:21:17)
Sue Do you love that phone a lot?

(01:00:23:01)
Lauren Garcia I'm pretty attached to it, yes (LAUGHS). I'd be lost without it probably

(01:00:32:01)

Titles: Ambrica Productions and Impact Partners present /
a film by Sue Williams

(01:00:40:19)
Sue - I'm also attached to my phone, my computer, my tablet. And it amazes me how, in just 20 years, they've completely changed the way I live and communicate.

Our devices are sleek and elegant.

(01:01:04:04)
Sue - We store our lives in a beautiful cloud.

(01:01:09:03)
Director of Photography – Sam Shinn

(01:01:12:11)

Composer – Paul Brill

(01:01:16:21)
Sue I started making this film to explore the impact of our digital revolution. And very soon, secrets the industry tried to hide for years began to spill out.

(01:01:33:05)
Editor – Adam Zucker

(01:01:36:23)
Producer – Hilary Klotz Steinman

(01:01:40:08)
Sue - How our electronics are made – and unmade – is dirty and complex.

VIDEO subtitles:
SACOM workers: We've been poisoned
Chinese Police: We're telling you to stop

(01:01:48:09)
Sue - It's a global story of damaged lives, environmental destruction, and devices that are designed to die.

(01:02:00:18)
Executive Producers – Diana Barrett
Dan Cogan
Julie Goldman
Judith Vecchione
Victoria Wang

(01:02:13:10)
Main Title - DEATH BY DESIGN

(01:02:18:00)
Written, Produced & Directed by Sue Williams

(01:02:31:12)
Ma Jun In China massive industrialization has put a huge pressure on our ecosystem and on the environment. When it comes to IT industry many people think it's aah, it's green or naturally it's green. Or some people think, even think it's virtual. But in our investigation we've found it's not like that.

(01:02:47:17)
TEXT: Ma Jun, Institute of Public + Environmental Affairs

Ma Jun walking around by river

(01:02:56:16)
TEXT **WUHAN, CHINA**

(01:03:03:13)
TEXT ***In 2011 Ma Jun investigated an electronics factory that was discharging copper, cyanide and solvents into a lake near the Yangtze River.***

(01:03:11:23)
Ma Jun This pollution is having all kinds of different consequences but I think hat the top impact, the biggest impact is on this public health. We have nearly 300 million rural residents who don't have access to sufficient safe drinking water.

(01:03:32:08)
Text ***More than 60% of China's groundwater is considered unfit for human contact.***

Man rowing on filthy river

(01:03:43:03)
Rower: Some people reported all this, but the authorities didn't believe it because they didn't see it. Now when you see it, you believe it.

(01:03:54:02)
Rower: Factories like these should be shut down. This is really killing people. It's hurting people, right? They're hurting our generation, and they'll hurt the next one, too.

(01:04:11:03)
Ma Jun I keep thinking about the moment that when I face all this environmental and social damage on that river, you know, which carries all this waste to the lake beside the Yangtze River.

Old ladies on their knees pleading for help.

Ma Jun And these old ladies suddenly kneeled down on their knees in front of me.

(01:04:32:02)
Sub-Title of Old Ladies -- We beg you, help us ordinary people!

(01:04:37:17)
Ma Jun I don't have a, a, any sort of government administrative power, I don't have much financial resources to deal with this, but I told myself at that moment in front of those ladies, I told myself that at least I need to bring the message out. I need to make sure that all the users of these gadgets, they need to be informed about this.

Big shots of Silicon Valley, CA. Ted driving -
8/23/16 11:53 AM -- Death By Design – Picture Lock

TEXT – SILICON VALLEY, CALIFORNIA

(01:05:18:06)
Ted Smith — You can see the farmland here. This is what this valley used to look like, aaa just full of, this was the richest agricultural valley in the country. You can see why people once they saw this, wanted to live here. I moved to this are in 1969, to go to law school, because I wanted to help people who didn't have the means to represent themselves. It was a time when most people had not heard of the semi-conductor industry.

Lower Third Ted Smith - founder, Silicon Valley Toxics Coalition

(01:05:59:12)
Ted Smith — But within a few years people started seeing the birth of what has become the global electronics industry. Top names were companies, Hewlett-Packard, Apple, Intel, Advanced Micro Devices, the virtually the who's who of the electronics industry. And of course the granddaddy of them all was IBM.

Lower Third Art Rodriguez

(01:06:29:15)
Art Rodriguez — When I got hired at IBM that was great. That was the company to work for at the time. I could go any place. "Where do you work?" "IBM." [SCOFFS] I don't need an ID. You just write a check. It was that easy. IBM had that much clout.

Lower Third Mike Gray

(01:06:45:13)
Mike Grey — I was the first microprocessor buyer for IBM. In the early Eighties, the idea of a personal computer which- was an oxymoron, right. I mean "personal computer?" What would you use it for anyway, but it got legs. When we started the PC business, the first year they shipped 50,000 units. And so we went from 1,000 a week to 40,000 a week. And at that point the PC was launched.

(01:07:34:07)

Ted Smith — From almost the very beginning, you heard electronics and semiconductor production was a clean industry. Cause they said it was as clean as a hospital but what they weren't telling people was that it was really a chemical handling industry and that the magic of making these micro-circuits relied on the use of hundreds, if not thousands, of very toxic chemicals.

Graphic Animation 1 (list of chemicals): Asbestos, Barium, Benzene, Chromium, hexavalent, copper chloride, copper cyanide, dichloroethylene, 1,2 -, ethylene oxide,

Ted Smith — And that's why they have clean rooms, that's why they have bunny suits to try to protect the chips. It was never designed to protect the workers it was always designed to protect the product itself.

(01:08:08:07)

Art Rodriguez — Oh my God. There was a lot of different chemicals. I built the disk drives. We'd have to strip 'em out and then we'd literally have to dip 'em in, in sulfuric acid, and with a sponge you just (circling motion) with sulfuric ac.. . I didn't know what it was. I just knew was that it stunk really bad and you couldn't get it on your skin 'cause it would burn you like nobody's business.

Graphic, Chemical List2: Hexane N, Hydrogen Chloride, Indium Tin Oxide, Iron Oxide, Lead Oxide, Mercury, Methane, Methyl Chloride, Nickel, Nitrobenzene

(01:08:32:21)

Ted Smith — What, what happened was people started getting sick with very strange kinds of illnesses, things that didn't seem to make a lot of sense and didn't seem to hang together. But increasingly as this happened more and more, there was a small group of people that began to think that maybe this was related to the chemical exposure on the job.

EXT. Yvette's house.

(01:08:51:14)
TEXT – SAN JOSE, CALIFORNIA

Mark and Yvette's playroom

(01:08:52:18)
Yvette Flores Wanna' put music on?

(01:08:53:08)
Mark Yeah.

(01:08:54:07)
Yvette Flores Alright, go on, turn on the music for mom. Put some good music on today. (Burning down the House song playing) Right there. Alright, you gonna sing?

(01:09:09:19)
Mark Yeah

(01:09:10:23)
Yvette OK, go!

Photo young Yvette
Lower third - Yvette Flores

(01:09:15:12)
Yvette Flores In 1975, I was eighteen years old and I started working in the electronics field. I went to Spectra-Physics and they just hired me just like that. I was making the end of the laser and I would have to mix up this chemical and I used to call it green gunk [chuckles] and get the consistency and then put it into a spray gun. And I would have to heat that up after I glued it on together. That was just all day, that I did that.

Lower Third - Amanda Hawes – Lawyer

(01:09:50:10)

Mandy Yvette didn't know the material she was using turns out to be probably in the vicinity of 50% lead oxide. She didn't know she was exposed to lead. They didn't tell her that.

(01:10:02:02)
Yvette I got pregnant with Mark in 1979 and that was full term, nine months and we were just really happy about it.

Yvette and Mark throwing a ball back and forth

Yvette He doesn't even know to cross the street and not know a car is coming to stop. Going to rest room, you know, I have to go with him in there. So I have to assist him with everything.

Yvette and Mark sit at a table:

SOT Yvette *Who's number one?*

(01:10:25:03)
SOT *Mark Mark is.*

(01:10:28:08)
Yvette If I knew what I know now I would've ran out of Spectra-Physics at the time. It was unnecessary. It just, it, it breaks my heart that I could've avoided this.

SOT as Mark jumps up: (Yvette) There you go!

(01:10:44:09)
Mandy We are filing a lawsuit against her employer. And it's a lawsuit for her son, who was born with s-severe developmental disabilities. And it's a suit for concealment of systemic chemical poisoning in the case of Yvette and for the direct injuries to Mark.

(01:11:01:13)
Yvette Mark's condition isn't like a cold—take antibiotics and you're gonna be fine in five days. This is life long. Your love… just overrides all that and you do what you gotta do. To this day I still do that—I'm sorry, I'm getting a little emotional.

Yvette and Mark lie on the grass on their backs counting.
SOT Mark and Yvette: One, two, three, keep going.
Mark Two
Yvette No, four…

(01:11:31:07)

Mandy — We've known about the bad effects of lead, including reproductive effects since the era of the Romans. There was an OSHA standard in place requiring hazard communication and medical removal. They didn't do any of those things. Do I think this was preventable? Oh yeah, I do.

(01:11:48:08)

TEXT *Amanda Hawes was part of the legal team that filed a lawsuit in the 1990s on behalf of IBM workers with health problems*.

(01:11:58:04)

Amanda Hawes — I discovered IBM had a Corporate Mortality File, which they kept for 30 years. And it kept track of the causes of death of their employees.

Graphics of IBM Mortality File

(01:12:08:02)

Richard Clapp — The most dramatic findings were about cancer. For the company as a whole this was 33,000 deaths that were in this Corporate Mortality File, so it included people who had worked all over the US.

Lower Third Richard Clapp – Epidemiologist

Richard Clapp — But then when you look at specific plants like the IBM plant in San Jose, there were some extraordinary excess causes of death. One was brain cancer. Another was non-Hodgkin's lymphoma. Another was melanoma of the skin. And in the women breast cancer was three and fourfold higher than expected. That was the heart in this San Jose lawsuit.

(01:12:44:20)

Newscaster 7 In the Santa Clara Courtroom today, the first trial out of more than 200 similar lawsuits filed against IBM. Former IBM workers Jim Moore and Alida Hernandez say they developed cancer from exposure to toxic chemicals at IBM's San Jose facility in the late 70's to early 90's.

Archival from time of trial

(01:13:02:18)

Richard Clapp IBM literally tried to prevent the results of the mortality analysis from ever seeing the light of day. In fact, they went to the judge and said, " This can't be used in this case. Alida Ha-Hernandez is not dead. She's gonna be in the courtroom." And not only was it not relevant the judge said it, it might prejudice the jury if they saw what these excess causes of death were. And so he denied use of it in court.

(01:13:32:16)

Linda Greer Many of the brands will respond to questions by saying, "No one has ever proved to me that a single person has died from exposure to these chemicals either within, inside our factories or outside of their factories. End of discussion. "But that's not the way that we approach environmental or occupational health in the world.

Lower Third - Linda Greer – Environmental toxicologist, Natural Resources Defense Council

Linda Greer We are not flying blind here at all, especially on the chemicals at issue here in the electronics industry. Actually on most of the common chemicals used in all industrial manufacturing, we've been at this work for 40 years.

Graphics - Newspaper headlines: IBM wins. People continue

(01:14:12:22)

Mandy If you look at the publicity generated by IBM, you'd think we lost everything and that simply is not correct. After the trial IBM matters were resolved for hundreds of people whose claims did not go to trial.

(01:14:28:21)

Sue Question: What can you tell us about the settlement?

(01:14:32:04)

Mandy Hawes I'm not gonna be able to talk about any of the resolutions of the cases and I won't.

(01:14:41:20)

Question You can't give any details at all? Was not being able to talk about it part of the resolution of the case?

(01:14:51:12)

Mandy Hawes All I can say is that the matters were resolved. That's what I'm allowed to say.

(01:14:57:11)

TEXT ***IBM did not respond to our request for an interview.***

Ted standing in shopping mall parking lot. Ted driving walking to car and pointing to the area

(01:15:06:22)

Ted Smith It is kind of ironic to have the, the Lucky supermarket on such an unlucky site. This whole area was a contaminated site. It still is. And there were many companies in here that all of whom created this toxic nightmare. It was an arrogance, a hubris to the leadership of this industry that was basically saying to the people of this Valley, "You should be lucky that we're here." And it really enraged me.

Ted Smith Here in Silicon Valley chip companies and the other electronics production companies used hundreds, if not thousands of toxic chemicals. And most of the chemicals, once they are used in making the components, needed to be disposed of as waste. The companies ended up storing them in underground storage tanks all over the valley.

3rd list of chemicals/animation ends on TCE:
Sulfuric Acid, Toluene, Tin, Toluene-2, 4- Diisocyanate, Trichloroethane, 1,1,1-; Trichloroethane, 1,1,2-; Trichloroethylene

(01:16:16:19)

Ted Smith But what they, the brilliant people who were designing these systems, didn't quite think through all the way was that the solvents were really good at dissolving things and so when you put them into a tank, eventually, they are going to eat their way through the tank.

(01:16:38:20)

Anne Blake Solvents that the electronics industry used in production in Silicon Valley in the 70s and 80s are now in, in the groundwater.

Animation Chemicals linked to illness – Benzene = Leukemia; Trichloroethylene = Lymphoma; Cadmium = Lung Cancer

Anne Blake And if you think about putting a drop of ink in the bathtub, that spreads really quickly and it's really hard to get that drop of ink back. That's what we are dealing with except we are dealing with multiples, gallons of this stuff that is in the ground water.

Ted at parking lot, former Fairchild Semiconductor site. Headlines and photos of child birth defects caused by exposure to industrial chemicals.

(01:17:01:16)

Ted In late 1981 there were over 100 families in one little neighborhood who had serious problems. And the State Health Department discovered that the families that were drinking the most heavily contaminated water had significantly higher rates of miscarriages and birth defects than did people in other neighborhoods.

Lower Third - Anne Blake - Environmental + Public Health Consultant

(01:17:24:20)

Anne Blake The chemical industry will often say- if I had a dime for every time I heard this – that even water can kill you, the most non-toxic thing. Of course it can but only if you stick your face down in the bathtub or fall into a, you know, fall into a large body of water. So that is the traditional approach to toxicology, is the more stuff you are exposed to the more harm it causes you. But what we are seeing in, particularly around cancer and around hormone disrupting chemicals, is that its when you are exposed to it, the time of exposure, so if you're in third trimester and you get even a part per billion or part per trillion exposure, it can actually cause significant damage.

Ted and others with protest signs….

(01:18:06:20)

Ted We formed the Silicon Valley Toxics Coalition. And we did a summer organizing project getting people to sign petitions asking the EPA to step in with their authority under their Superfund program.

SOT people chanting "No CFCs, no CFCs"

(01:18:21:01)

TEXT ***The federal Superfund program requires companies to clean up sites they have contaminated.***

(01:18:28:17)

Ted Then I went to a meeting in Washington and presented these thousands of petitions saying, "We need EPA to come in, it's time for EPA to exercise your authority." And to everybody's great surprise they agreed to do that. So Hewlett-Packard became a Superfund site. Intel became a Superfund site. National Semiconductor. Advanced Micro Devices, IBM. You name it they were there and they are all Superfund sites.

(01:18:58:17)

TEXT ***Santa Clara county, the heart of Silicon Valley, has 23 Superfund sites, more than any other county in the United States.***

Ted Smith The cost of the clean up for IBM as well as all the other companies has been tremendous. It is enormously slow and tedious process.

Ted outside Google

Ted If you look over here also, this is a major residential neighborhood just directly across the street from this industrial site. Most of the people living here today are unaware of this huge toxic plume. And those same chemicals that are still right under where we are standing are now beginning to seep back up out of the groundwater, through the soil, and are actually coming into the offices of these software engineers at Google.

Aerials over Google headquarters and Silicon Valley.

Ted Smith And this is the one that EPA said might take 300 years to clean up. This is so complicated, the devastation is so enormous that we're really talking centuries of clean up, not just years or decades.

Animation, graphics No 3: - <u>Map - Silicon Valley to Shenzhen, China. The industry goes global</u>

(01:20:15:00)

Ted Smith Every time we've been able to identify a problem, companies have made the argument that we've had problems in the past but we've learned from those and now everything's fine. The problem is that it just keeps reoccurring. When companies started moving away from Silicon Valley to China, I think they've been only too happy to have the government off their back.

(01:20:49:09)

Linda Greer The Chinese government made an offer to multinational corporations that they couldn't refuse.

(01:20:56:06)

Mike Gray You need land, and you need money, and you need government approval, and you need lots of people to put it all together. Well, they have all of that in China.

Mike Gray It went insane in the 90s. I look back now and just kind of shake my head and say, "How did that happen?"-

IPOD commercial

(01:21:21:02)

TEXT ***In 2001 a struggling tech company launched the first of a series of wildly popular personal devices.***

Graphics/Animation/ No 4: Chart - *IPOD SALES Skyrocket 10 million 20 million 40 million 50 million, 100 million.*

Press Conference - 2007 - Steve Jobs announcing iPhone. "We are calling it iPhone. Today Apple is going to reinvent the phone."

(01:21:58:22)

Mike Gray If you look at the launch of the Apple 5, they were making 10,000,000 in one week. So, I mean hey… you know, how do you wrap your head around these numbers.

(01:22:12:00)

TEXT ***The major brands rely on supply chains, vast networks of factories that make and assemble their products.***

Lower Third – Scott Nova, Worker Rights Consortium

(01:22:19:10)

Scott Nova One of the primary purposes of outsourcing is to enable companies like Apple to make, what are essentially, unreasonable demands on manufacturers that they wouldn't and couldn't make if they actually had to employ the workers directly. Apple doesn't have to worry about what it means to workers when they insist on a tripling of the pace of iPhone production.

Lower Third - Li Qiang, China Labor Watch

(01:22:47:00)

Li Qiang Workers in the electronics industry are mostly from the countryside. Most only have a middle school or high school education. / The reason you work in these factories is because you are poor. / You have to work overtime, you work your heart out so you can save a little otherwise you can't even survive.

(01:23:05:20)

TEXT: ***Workers' pay is so low that labor makes up barely 1% of an iPhone's cost***.

Undercover footage

(01:23:21:12)

Text ***Despite the risks, a few workers shot and shared videos with us.***

(01:23:28:00)

Wang Xueding The factory makes plastic products for Apple, like chargers and ear buds.

Wang Xueding There is also HTC / HP printers and products like that. The factory sets daily production quotas and standards.
They are very high.

(01:23:52:10)

Zhong Xiaolin — There is a lot of pressure./ If a tiny mistake goes down the line, our boss really swears at us. / Once I told the supervisor I didn't want to work overtime. He said there weren't enough people on the assembly line. / He wouldn't let me leave.
I had to stay. / It's really too long, you get really tired.

(01:24:22:10)

Li Qiang — The assembly line goes long and fast./ Every worker has their own detailed step in the process./ If you slow down even a tiny bit / you'll impact the entire line.
You can't just walk away.

(01:24:44:02)

Wang Xueding — May had 31 days and I worked 30, only one day off. I was working a night shift, it was around 4 a.m., and I was tired. A mechanical arm swung out / and hit me in the back. I went to the hospital and then I called our boss. I asked if I could report this as a work-related injury because I couldn't go back to work. But he said, 'No, you can't do it now.'

EXT Foxconn – use shots of regimentation, workers lined up

(02:25:25:08)

TEXT ***Foxconn is Apple's main manufacturing supplier. It is the largest private employer in China, with over 1 million workers.***

(01:25:59:12)

Li Qiang — Foxconn has had to adopt a very strict management system.
It's the invisible stuff that hurts the workers physically and mentally.
You feel very lonely inside because the factory is huge and you feel very isolated.

(02:26:00:00)

Larry — When you worked at Foxconn, were you and your co-workers happy?

(01:26:06:14)

Tian — Yu Well, you worked every day and, after you finished, you were very tired. (laughing) 12 hours a day, you get very tired.

(02:26:18:09)
Larry Any breaks?

(01:26:20:09)
Tian Yu Almost no breaks.

(01:26:22:08)
Larry How many days a week?

(01:26:24:09)
Tian Yu 7 days.

(01:26:43:25)
TEXT ***In recent years, the pressure has been so great***
26 workers have jumped off the roof.
18 have died.

SUBTITLE: Security Camera, Foxconn, May 11, 2010

(01:26:58:19)
TEXT Tian Yu was 17 when she jumped.

(01:27:15:18)
Father When I first saw her she was still in a coma. / Every afternoon I could only go in for 20 minutes because she was in intensive care.

(01:27:37:08)
Larry When you dealt with the factory, what did they say?

(01:27:43:14)
Father We had an appointment and they said that out of humanitarian consideration they would help us get treatment. / They would give us a little humanitarian compensation.
There's no way to describe it.
It breaks your heart.
Let's forget about it, no need to talk about it.
It's not good to talk about it.

(01:28:14:07)
Larry Looking back, what do you think of Foxconn?

(01:28:21:22)
Tianyu I never think about it.

(01:28:26:04)
Larry Any idea about your future?

(01:28:29:11)
Tianyu Ah, not at all.

(01:28:37:22)
TEXT *To discourage Tian Yu and her family from talking to the media, local Communist Party officials monitor them to this day.*

Workers streaming into Foxconn, Chengdu plant

TEXT In 2011, the year after Tian Yu jumped, Foxconn workers were scrambling to meet quotas for Apple's new iPad.

Chinese Newscaster Subtitles:
Tonight a production workshop at Foxconn Chengdu exploded.
The latest news reports that two are dead and 16 injured.
Newscaster SOT: Three workers died and 15 others were injured after an explosion at a Foxconn factory in Chengdu, southwest China on Friday evening.
Chinese Newscaster Subs: The incident erupted on the factory's third floor, in the workshop where the iPad's aluminum backing was polished.
Newscaster SOT: The accident occurred at around seven PM in a polishing workshop. It appears to have been triggered by an explosion of combustible dust in a duct.

(01:29:53:20)
Garrett Brown No one should be surprised that aluminum dust, if it's in a high enough concentration and there is an ignition source it will produce explosion and fire. This is a hazard which is extremely well known.

Lower Third: Garrett Brown - Occupational health + safety expert

Garret Brown So the fact that Apple suppliers, aaa, had an explosion in Chengdu in that plant, means that they had very poor housekeeping, very poor production processes. That's terrible.

Shots Pegatron Explosion

Garrett Brown What's completely unacceptable is that five months later in an another plant but within the Apple supply chain they had another explosion and fire. It's outrageously inexcusable that they had a second one five months later.

(01:20:43:23)

TEXT *Apple issued an official response: they were working "to understand the cause of this accident."*

(01:30:47:19)

Garrett Brown They've set up these supply chains exactly the way they want them. They monitor these supply chains with exacting scrutiny so they know exactly what's going into their products at every point along the way.

(01:31:04:17)

Mike Gray I find it really hard to believe for any of those companies to say they don't know where some of their stuff comes from. I find it really hard to believe, right, because… they do. Now, they may not want to admit it publically, fine. You don't have to but, but they should know where it comes from. Any good supply chain practitioner knows that.

(01:31:31:04)

TEXT *Apple and Foxconn refused our requests for an interview.*
MAN ON THE STREET

(01:31:38:18)

Sue: How often do you upgrade your phone?

(01:31:40:19)

Michael: Every couple of years.

(01:31:42:07)

Sue: Do you upgrade often?

(01:31:43:20)

Markus: Uuuh, when I have the money to, yeah.

(01:31:46:05)
Chad: Probably every year.

(01:31:49:00)
Girl with Ponytail Chinese: *About every 6 months.*

(02:31:53:08)
Man in Beijing: Good ones last 2-3 years. The not so good ones only last a few months.

(02:31:58:12)
Sue: So you upgrade pretty, pretty often, or…?

(01:32:00:16)
Malaika: Oh, yes, you have to. Yeah, you have to.

Kyle walking around Maker Faire, looking at what's on display.

(01:32:04:01)
TEXT - New York City, Maker Faire

(01:32:16:16)
Kyle SOT: Well we have a table at all iFixit of the guns. It will show how to disassemble the whole thing.

Lower Third: Kyle Wiens – Co-founder, iFixit

(01:32:25:10)
Kyle So I have an iPhone 5 here and I'm gonna show you a little about what's inside, what makes it tick and some of the design choices that Apple made putting it together. So the first thing Apple has on the bottom is two proprietary, pentalobe screws. This is a security screw that Apple designed to keep people out of the phone. Once you get the phone open, we can start to see the guts. This isn't really a phone, it's pretty much a full blown computer. To make your phone last for eight hours you need a really big battery. …. Batteries in phones last about 400 charges. Every cellphone I've ever had you just pop the back off, you could pull the battery out, swap a new battery in and every year or two years you have to replace the battery. Apple has decided with the iPod and, now, the iPhone that they don't like

that model. So what they are doing is building the batteries into the phone and using proprietary screws on there and in attempt to limit the lifespan of the phone to about 18 months, which is around the time when they have a new phone and they want you to buy a new one anyway.

Kyle and Luke into iFixit

(01:33:28:02)
TEXT SAN LUIS OBISPO, CALIFORNIA

(01:33:38:20)
LUKE iFixit is a company that wants to see everything get fixed, so we show people how to fix things and provide the parts, tools, and guides to enable them to do so.

Lower Third – Luke Soules – Co-founder, iFixit

Luke Helping everyone fix everything. That's the challenge. It's a big challenge 'cause there's millions of devices out there.

(01:33:56:17)
KYLE I'd say Luke and I are reluctant capitalists. We get excited selling screwdrivers even though that seems like a boring product because we're selling people a capability where they're able to do something that they wouldn't have otherwise.
KYLE We wanna make it simple and easy for people to repair their own stuff. The amount of raw materials that go into the products that we use are staggering. It's over 500 pounds of raw material that go into making an eight-ounce cell phone.

Luke looking at circuit board by big cardboard box.

(01:34:24:03)
Luke So, here's an example of a circuit board in this e-waste bin. This is out of an Apple laptop from a few years ago …. Even if you make this circuit board in the most proper environmentally friendly way, it's still going to use a ton of water, a ton of m-, probably literally a ton of water, lots and lots of materials.

In MacBook Air teardown – (Kyle – Brand new MacBook Air and nothing new)

(01:34:45:20)
SOT Kyle *We got the new MacBook. What do we know so far?*
Ifixit employee Cost is a bump and a flash speed bump.

(01:34:53:01)
Kyle *Brand new Macbook, nothing is different*

(02:34:57:11)
Kyle The electronics industry is closed in the ways that traditional American manufacturers aren't. They're selling you a thing and they're saying, "Well, you have it but you don't really own it." There is no way we are gonna ever sell you the screwdriver to be able to get into the phone. // Ford would never sell you a car and say, "We're not gonna make tires available to, to keep your car running after 30,000 miles." You have an entire ecosystem, an entire industry that's built on secrecy and we're one organization that's trying to pry open the hood a little bit, show people what's inside.

(01:35:30:02)
LUKE We've kind of been conditioned by manufacturers and brands to leave yourself on the outside. "Don't worry about the details. We make this product. We give it to you and you just use this product. And when it stops working you go buy a new one."

(01:35:47:13)
KYLE They are pushing us into a model where products are completely disposable. Globally we manufacture 1.6 billion cellphones in 2014 and it just keeps going up and up and you have to ask at some point like, "What is too many phones?"

(02:36:05:13)
Luke When we originally started iFixit, it was just a way to provide people with some solution to fix broken devices. And over time we've realized both the manufacturing and the environmental problems are a huge concern.

(01:36:24:17)
TEXT SHENZHEN, CHINA
EXT. Evening. Luke arriving at hotel in taxi in Shenzhen, meets Alex.

(01:36:28:19)

Luke Over the last few years, I've been to China on a pretty regular basis, a lot of that related to our tool manufacturing.

INT. Hotel room. Luke showing Alex the flashlight with circuit board he needs to get made.

(01:36:38:14)

LUKE We're looking at getting some circuit boards manufactured.
This is the big rechargeable battery and then this is the main circuit board in here. So considering it's just a flashlight, you can see it's a surprisingly, uh, complex circuit board. I've got this basic schematic of the circuit board Once, we decide, we'll leave them with the full information, will be the idea.

Lower Third - Alex Li, Luke's local translator

Driving shots on the way to factory. INT. First chip-making factory

Luke Finding a supplier that is environmentally friendly, has good quality and has reasonable pricing, all three of those at once, is probably going to be a challenge…
Visiting factories we've found it's surprisingly effective to show up on short notice. In general any factory that's not willing to let you see the factory is an immediate red flag and at least for us, someone that we don't want to do business with.

Luke looking at machines

(01:38:03:08)

Luke This is the big line in the factory, so this is where they are etching, bringing in all these nasty acids and other chemicals in. You've got a little bit of acid leak here, you can see congealed acid on the outside of the machine.

Luke looking at huge vats of chemicals.

Luke I walked over where there were some storage tanks and it was basically acid all over the floor and the moment I looked they told me, "Get back away from here." This isn't giving me a good feeling.

Luke and Alex back in hotel room

Luke As far as making sure things are done correctly, environmentally, doesn't seem like a priority for them. And then about the Maozhou River, he said the fact that it was so dirty was the price you had to pay for the last thirty years of development.

(01:38:58:05)
Alex Yes.

(01:39:01:11)
Luke Yeah, don't wanna' buy from them.

(01:39:07:21)
TEXT The circuit board factory Luke visited is one of dozens that line the banks of the Maozhou River.

One worker wanted to talk, but only if his face was hidden.

Bank of Maozhou River - Mr Feng walking to Maozhou River, looking at river…

(01:39:21:00)
Mr. Feng I work in a water treatment center. When the environmental bureau comes, the boss puts tap water into the waste pipe. So it's tap water is that's collected for testing. A lot of factories do this.

(01:39:38:03)
Larry So, tap water is put into the bottle?

(01:39:41:16)
Mr. Feng Right, that's how it's done. About 40% to 50% of the factories do this now.
I know. I worked in the industrial park up there / and another industrial park by the river over there. The wastewater all goes into the river. If the boss is caught, he'll get a fine. But if it's treatment workers, we will get a sentence of 3-5 years. This can get pretty scary and I am scared. I want to make this clear because talking about this is really dangerous.

Luke and Alex in Taxi on their way to another factory.

(01:40:25:01)

Alex Do you feel Shenzhen changed a bit?

(01:40:27:09)
Luke Shenzhen is constantly changing (chuckles).

(01:40:32:16)
Alex A lot of industrial parks here and there.

(01:40:37:05)
Luke Spent a lot of time traveling, getting around Shenzhen.

TITLE Luke's Fourth Factory Tour

Luke So we shall see what they have to offer us…. This is definitely the most professional of the factories visited. The fact that we are being taken through this water treatment facility is a really promising sign.

Big vats of water filtration system, then outside at fountain with gold fish.

Luke You start out with incredibly yucky water and it goes through a progressive series of filters and other processes and eventually you end up with, hopefully, acceptably clean water. // The coolest thing, when the water is coming through the treatment facility, some of the water comes out and dumps into this fountain and they have fish in here and the factory owner said, "Well, they know the water treatment is working as long as the fish are still alive." A little unfortunate for the fish cause if something breaks maybe the fish die.

Luke outside talking to camera.

(01:41:51:00)
Luke So, the factory general manager specifically said to me that lots of the Chinese customers they have don't like the fact that they've spent all the money to do the water treatment cause it adds to the cost of the boards.

Luke (But) it's clear to me this would definitely be the factory to buy from of the one's we've visited.

Luke in taxi with Alex

Luke You see here, with all these factories just the impact of all our manufacturing and buying. Like when we were looking at the river yesterday, all the stuff we are going and buying at the store is messing up water in rivers over here in Shenzhen. But in America, we never see that river; we think we've fixed all of our environmental problems with water

quality and such cause we don't see it. So it's kind of out of sight out of mind.

INT. Auditorium – Skoll Award Ceremony. Applause.

(01:42:51:10)

Presenter This is the 2015 Skoll Awards for Social Entrepreneurship. From the Institute of Public and Environmental Affairs, Ma Jun.

(01:43:16:15)

Ma Jun Ladies and gentlemen, I'm truly honored and humbled to be the first Chinese citizen to receive the Skoll award.

Ma Jun I set up this Institute of Public and Environmental Affairs or IPE and our first project is to build a national water pollution database. All these records comes from the government sources. The public can access the information by click on the locations on the map because people want to know who should be held responsible for such a bad water pollution situation. And so far we got some more than 110,000 records of violation in our database.

(01:44:15:14)

Ma Jun Environmental litigation is still quite difficult in China. As a result the cost of violation is very low. It's actually lower than the cost of compliance. So all the factories in China, many of them would rather pay fines year after year without really addressing the problems.

Graphic animation: Word cloud of 29 company names and tag lines of brands.

Ma Jun In April 2010 we filed letters to 29 IT brands to check with them whether those polluting factories, whether they are their suppliers. All of them actually responded except one. That is Apple. Apple just give us one statement, that is, "We have a long-term policy not to disclose our supply chain." That's it.

(01:45:15:10)

SOT Steve Jobs *And we call it the iPad*

(01:45:19:22)

Ma Jun I was quite shocked. I can't accept that because, you know, I think that you could have your own culture, you can make your own policy but when your operation is having an impact on the health of other people you can't say that, "I've made a policy not to talk."

Lower Third - Linda Greer – Environmental toxicologist, Natural Resources Defense Council – 3 lines

(01:45:48:15)

Linda Greer Ma Jun contacted me and we began to work together to apply additional pressure to a company with headquarters here in the United States. Ma Jun singled out a number of facilities that he believed were in Apple's supply chain that had a very heavy environmental impact in their locality. And when he leveled those charges, Apple was shocked and sort of in denial that this type of problem to this extent could really exist in their supply chain.

(01:46:24:21)

Ma Jun I think it's important to understand that this is not just about Apple. This is about the IT industry.

(01:46:34:06)

Linda Greer They all share printed circuit board manufacturers. They all share chip manufacturers. You know, despite their audit protocols, there's a lot more talk than walk on environmental impacts in the supply chain. You say to yourself, "How could they not know about any of these problems?" But, you know, it's all what you ask and it's all what you look for. So if you're there and you have a checklist of what you need and you need it now and that checklist does not include what's going on at the end of the pipe in your wastewater treatment plant, it's actually conceivable that you know exactly where it's being made, you just don't know exactly how it's being made and what the impact is. That's what's going on not just with Apple but with all of these companies. 40 years of operating the Environmental Protection Agency in this country, these are American-based companies. Hard to believe.

(01:47:36:20)

Ma Jun The battle is far from being over. This industry is still, you know, consuming too much resources. We still have this industry which is discharging… so much waste, not just normal waste, hazardous waste. Just one supplier it generate more than 100,000 tons of hazard waste in one year. How could we dispose them, you know, in a safe way? So how much a time bomb this industry is gonna create?

Graphic world map from China to Endicott, New York.

(01:48:46:15)

Toni Sherling 106 lung cancer. 108 Hodgkin's lymphoma. 110, non-Hodgkin's lymphoma, twice. 112 the son had testicular cancer, the father had stomach cancer. 113 prostate cancer.

(01:49:21:17)

TEXT ***In Endicott, New York, thousands of gallons of cancer-causing solvents leaked from the IBM plant.***

More than a generation later, they are still traveling through the soil and up into people's homes.

Lower Third – Larry Sherling – Endicott homeowner

(01:49:41:08)

Larry I found out that IBM was responsible for spilling a lot of chemicals. And they said, "Sorry! We'll be glad to put in, what do they call it? A mitigation system. The way they do is they seal the floor and then they put this system in the formal basement. The idea is they are sucking the ground vapors and we can only go on what they tell us.

Lower Third – Toni Sherling

(01:50:10:02)

Toni Sherling They tell us these vapors go up through that pipe and then come out and immediately dissipate and I said, "You know, c'mon. You can best believe I'm not gonna put my garden underneath it because it's gotta go somewhere."

(01:50:34:18)

TEXT Larry's first battle with non-Hodgkins lymphoma came in 1993.

TEXT ***The cancer came back in 2002.***

TEXT ***In 2011, the Sherling's son, Cory, became ill.***

(01:50:54:11)

Toni Sherling Our son, Cory, presented the same way his father did. No low-grade fever, no, you know, night sweats, weight loss, just pain. He had pain in his stomach. He started with his first chemo treatment and they said:

if there is such a thing as good cancer, this is it. This, we can fix this." And that poor kid went through two or three rounds of chemo, they did a PET scan and it grew back to what it was and this repeated six times till they admitted it was chemo resistant and he went from 185 pounds, we were with him the day before he died he was 70 pounds. I mean I know our son is not the only one and there is no big hullabaloo that's ever gonna bring him back but how many have to go before we start realizing that- you know money is very insignificant when it comes to the bottom line in life, really.

The Sherlings at the table and Toni's diagram of sick neighbors, reprise opening shots of Endicott streets…

Toni Sherling I brought this diagram to one of the first town hall meetings. I'm a nurse and I was concerned because I believe there is a total of 16 houses and there were 12 cases of cancer in them.

(01:52:33:19)

Larry Sherling I'm sure there's other cancer cases. These are the ones that we knew the people personally.

(01:52:43:22)

Toni You know, IBM can do all they want but I don't think anything they're doing could ever change the impact of what has happened in our lives.

(01:52:57:14)

TEXT ***In 2015, after a decade of lawsuits, Endicott were advised to accept a $14 million settlement with IBM. Payments would average less than $20,000 per plaintiff.***

Visual transition Into Dublin shots

(01:53:10:07)

TEXT DUBLIN, IRELAND

Paul on motorcycle; opens his shop

(01:53:20:07)

Paul Maher In electronics, at this moment and time, I believe that we are in the dinosaur age. We are using too many resources, too many raw materials and the life of computers, typically 3 to 4 years.

(01:53:33:10)

TEXT ***In Europe, a handful of entrepreneurs are re-imagining the way our devices are made.***

(01:53:40:04)

Paul Maher We're a small company in Ireland andour mission is to produce a fair trade computer. In the early days, I'd repair just component levels on the computers, on the motherboards. From that, I noticed that there was a huge amount of waste in the computer industry. So, we started designing and building updateable, upgradeable, reusable computers.

Lower Third Paul Maher – Co-founder, iameco

Paul Maher This is my father's environmental drill, no electricity. You just drill (laugh).

Paul Maher How could you build a computer without plastic, how could you build a computer without lead, mercury, PVCs, brominated flame-retardants and all the other heavy metals? That was our goal.
The material we use is wood, so it's technology of 100 years ago but it's perfectly good. Our computers will last seven to ten years because home users, non-technical people, can repair and replace. I'm now replacing the memory. You can extend the life of it by upgradability.

Paul This year coming is a, is a very big year for us. In March we'll be in CeBIT in Germany. It's probably the second largest fair in the world, electronic fair and we, we will show our computers there.

Lower Third Anne Galligan – Co-founder, iameco

(01:55:27:25)

Anne in meeting The problem is the laptop, which is just at prototype stage. I'm trying to get a manufacturer that will produce it at a reasonable price.

(01:55:38:19)

Paul Maher The volume is minimum 5,000-plus. That's the only way, you know. Once you're beyond 5,000 you now have a factory.

(01:55:47:00)

Anne Yeah

Paul in meeting with Anne and accountant

Anne I think it's great we'll be at the CEBIT, especially with the delegates that are going to be there. It's a great opportunity for them to see the product.

Anne I think it's all about the message. We're doing all the right things. We're the only people doing it. We're leading by example. We're a small little company, showing these things can be done.

(01:56:23:13)

TEXT Hanover, Germany

EXT. Convention center, crowds, Paul into building

(01:56:26:17)

Paul Maher Today is our major launch in Europe. We have lots of invites sent out to people.

(01:56:35:19)

Sue You nervous?

(01:56:36:22)

Paul Maher Yes [CHUCKLES]. Always. We have a lot riding on this so it's quite important that the launch is good and we can meet people afterwards and explain what we are doing.

(01:56:51:21)

SOT Paul *What we've brought for you… see. And we also brought the laptop which you didn't see.*

(01:57:04:21)

SOT Consumer *Let's see. It's a nice case.*

(01:57:09:18)

Anne Galligan We were awarded the world's first European Ecolabel for integrated desktop computers. It was the world's first to ever achieve — this award. At that time, I thought, wow, the — the gates will open, the orders will flood in. But that was not the case. Maybe a little bit of naiveté on — on my part. It's hard out there, the government agencies and people like that there is no room for environmental. They are totally just bottom line.

(01:57:39:18)

SOT Paul *So we have a crowd. We have a crowd there and standing in, so.*

Paul Maher talking to visitors at his stand:

Paul Have you an interest in environmental? A laptop made from industrial waste? It's made from pallets.

Paul We're getting is lots and lots of students and younger people and they all had a huge interest. Most of the people who've come to us are stating it, "Why can we not repair them? Why can not-, why can we not replace a battery? Why can we not replace a hard drive? Why does it only last for three years?" I'm looking at it now it's one little step at a time. What we do need to do is work harder, build more computers and get people to join us.

Man in street Stand-ups

(01:58:36:18)

Sue What do you do with your old electronic devices that you don't use anymore? Like when you get a new iPhone.

(01:56:42:21)

Alfonso Sjogreen At the moment it's lying somewhere in a closet.

(01:56:46:09)

Woman 1 I believe it's in a drawer in my desk at home.

(01:58:50:16)

Young Woman (Chinese) Throw it away! If it's not broken, I'll just keep it.

(01:58:55:06)

Man I'm hoping that someone's out there recycling 'em, or, or they're being fixed and reused.

(01:59:00:14)

Woman 2 Part of the reason why I still kept my old phone was uh- I really didn't know what to do with it and I had no idea what happens if I get rid of it.

EXT – New York City Recycling Event

(01:59:20:13)

Ted Smith For the first 20 years that I was involved in electronics the focus was on production. But as the industry grew and expanded, I realized along with a number of other people that it was not only the production related hazards

that were a problem, it was what happened to these products as they became obsolete. This industry has grown so rapidly that it's becoming much more of a resource, a suck. It is just taking up so many resources. We have to find ways of reusing our devices.

(02:00:00:22)
Darrin Americans toss out a lot of gadgets every day. If we look at the 3 million or so tons of electronic waste that gets generated in the United States every year, probably 15% of that gets recycled. And some percent of that gets recycled in a responsible fashion.

Lower Third: ***Darrin Magee, Environmental geographer, Hobart + William Smith Colleges***

Darrin Magee walking into 2TRG Recycling

Darrin Holy cow.

(02:00:34:15)
Don Cass Yeah, now this is the way it all comes in.

Darrin and Don walking down the disassembly line

Don Cass What you'll see now is this line is doing desktop computers. Lisa's working on one right now where she'll take, she'll take the whole desktop computer, take it down to the parts.

Lower Third: Don Cass, 2TRG Recycling

Don Cass So you see the parts are in the boxes [Darin: Right]. We've got wire [OVERLAP], plastics…

Don Cass The value, you can see, is going up 'cause [Darin: Right] now these are the boards.

(02:01:02:21)
Darrin Okay. So this is where the potential for a little bit of money is right there.

(02:01:07:14)
Don Cass Right in here is where the money is.

(02:01:09:02)
Darrin Okay. Is that gold?

(02:01:10:15)
Don Cass That's gold, yes.

(02:01:13:04)
TEXT Up to 90% of global electronic waste is illegally traded or dumped each year.

(02:01:32:19)
Darrin We have very little relationship to our garbage here. We throw it away, and my point as an environmental geographer, is to say: Where is "away"? "Away" is here for someone.

Seagulls fly. Clouds/smog - transition to China, People taking apart devices, smelting, children…

(02:01:57:17)
TEXT: GUIYU, CHINA

People taking apart devices, smelting, children…

(02:02:11:18)
TEXT Millions of our devices end up back in China, not far from where they were first made.

Lower Third: Dr. Xia Huo, Pediatrician

(02:02:17:22)
Xia Huo I saw a program on Chinese television about Guiyu's e-waste dismantling. /I couldn't believe people could be handling it like that and causing such serious pollution.
So I decided to go to Guiyu to take a look. It's only about 40 min away by car. I saw e-waste all over Guiyu. I was really shocked.

(02:03:13:08)
TEXT After her visit, Dr. Huo began to monitor the health of Guiyu's children.

(02:03:19:12)
Xia Huo The children we test in Guiyu have higher levels of lead and cadmium than our control group.
There really is no safe level for lead because any amount is harmful to the body.

(02:03:55:25)
Man at Trash There is a lot of pollution all over Guiyu. The farmers complained that the rice they grow is polluted. Rice!
So now the higher ups want to send the waste underground. That way there isn't so much smoke, not so bad.

(02:04:21:21)
Michael But if you send it underground?

(02:04:23:20)
Man at Trash There is the sewer that takes it underground.

(02:04:27:11)
Michael Wouldn't that pollute too?

(02:04:49:21)
TEXT ***Scientists estimate that 20% of China's arable land is contaminated with toxic heavy metals.***

(02:05:01:05)
Xiao Huo Actually, everything is connected. The air, the sea, they don't have national boundaries – they flow freely, right? And fish swim everywhere. So when you pollute the sea, you pollute the air and that will be blown to other countries. So honestly, everyone will be affected.

Sky, clouds, ocean and CA aerials moment.

(02:05:36:23)
Kimberley Prather We think, "Okay, we'll send our e-waste to China. Let them burn it. Let them have the pollution." But we have to remember that air pollution travels around the globe.

TEXT San Diego, California

Kimberly Prather That pollution's getting lofted into the atmosphere and coming right back to us.

Lower Third – Kimberley Prather –Atmospheric Chemistry, UC San Diego

Kimberly Prather A metal is a metal is a metal, you know, and it's- there's no other form for it to convert to. You can covert it from being in the soil to being in the water to being in the air but you still have a metal.

Kimberley Prather in airplane with instruments

Kimberley Prather In our work, we fly through clouds and we sample the cloud droplets and we measure the chemistry of each one very fast as you're flying through a cloud. And they're flashing as fast as you can imagine on a screen and we collect that information. And what we get is a chemical fingerprint. In California with the getting rid of lead in gasoline, we've reduced the amount of lead we have. And so when lead shows up that is one of the tracers that we say, "Hm. This could be from elsewhere." And we can trace it back in time and say, you know, "Four days ago this air was over Asia."

Kimberley walks into her lab with two assistants.

(02:06:59:18)

SOT Kimberley *Soo let's look at this. This is amazing. How long has she been doing this? The hit rate is really high.*

(02:07:06:19)

Kimberley We look at what are called aerosol particles, little microscopic bits of dust and soot that float around in our atmosphere. And then we've been using them to understanding how they affect our climate or how they affect the clouds and the weather. When you have more pollution and you have more aerosols, those go into the cloud. And you have so many that they can't get big enough to fall and lead to rain.

Flooding and stormy ocean shots

Kimberley And that's giving you these extremes of either not enough water in some places and way too much water in other places. What happens if we push it too far? We'll start to see more of these extreme events, things like flooding and hurricanes. These are what people often refer to as tipping points. And that's, that's what we're very concerned about happening.

Beauty shots of Lake Tahoe

(02:06:20:17)

Kimberly Prather I think people take for granted that the world will always be here for us. It was somehow… it's ours so we can just use it up. I'd like to leave something for my kids and their kids to be able to enjoy and I just see it slipping away. We're responsible for taking care of this planet and we need to realize that each individual is responsible in every choice we make every day.

(02:08:51:12)

Sue's voice My attachment to my devices is more complicated now. It's hard to get excited about the next new model or upgrade knowing what they really cost to make.

Shot of globe/ MAP of where the brands manufacture – China, Korea, Thailand, Cambodia, Vietnam, Mexico etc.

Sue's voice The industry, in its constant search for cheaper workers and land, is moving on to new countries with few government safeguards or inspections.

Then to beauty shots and moving upwards. Swipes from beauty shots on phone.

Sue's voice We all have a share in this problem. But we can use our voices and our buying power to demand real labor safety and greater environmental protections.

The digital revolution has improved our lives in so many ways.

We need to make sure it doesn't rob us of our health … and our planet.

THE END

(02:09:56:17)

First six credits.

(02:10:12:19)

TEXT: With Amanda's help, Yvette reached a settlement with her former employer. They cannot discuss the detail.

(02:10:21:12)
Ma Jun Video Using Ma Jun's database, Apple has forces some of its suppliers in China to clean up their operations.

(02:10:26:01)
SUE: Do you feel like you as a consumer have anything you can do about this?
(02:10:29:22)
EIRINI: I think consuming not too often helps.

(02:10:36:06)
ANTONIO: I would upgrade less often. I would absolutely do that.

(02:10:39:16)
LAWRENCE: I could put together a petition to these companies and ask them to be more responsible in their work practices.

(02:10:48:06)
SUE: Would you be interested in buying a green phone?

(02:10:50:25)
ELIZABETH: A green device would be great.

(02:10:52:12)
KEVIN: I would pay actually more for a green device.

(02:10:59:05)
GIRL: Get rid of the iPad, I'll pay for a green phone.

(02:11:01:19)
EIRINI: I would pay more for it. We already pay more for stuff that we consider organic or ethical. We already do.

Start Production credit roll
Co-executive Producers….
Chinese workers Video
The labor cost of an iPhone remains about 1% of the final retail price.

TEXT Revenues for the consumer electronics industry are at an all-time high.

TEXT To learn what you can do, visit www.deathbydesignfilm.com