

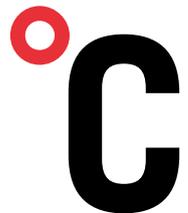
RE **100**



GOING BEYOND

A guide to integrating
renewable electricity into
your supply chain

November 2017





CONTENTS

Introduction	2
Why supply chains?	4
Seizing the opportunity	5
Case study companies	7
Internal organization and target setting	6
Top ten tips	9
Successfully engaging suppliers in renewable electricity sourcing	11
- Internal organization and target setting	11
- Engaging suppliers	14
- Problem solving with suppliers	18
Next steps	20
Appendix: summary of featured company programs	21
Authors and contributors	23



INTRODUCTION

To realize the ambition of the Paris Agreement will require nothing short of an energy revolution, and corporates are in a powerful position to lead the way.

Bold targets like 100% renewable energy are fast becoming the norm for many companies, with RE100 members at the leading edge through ambitious commitments to 100% renewable power. To date, companies have mostly focused on addressing the direct impact of their own operations. However, RE100 members are starting to look beyond this, to encourage the uptake of renewable electricity within Tier 1 of their supply chains.

Electricity is just one of the many energy-related impact areas to be addressed within the supply chain, alongside energy productivity, thermal energy sources, and embodied energy. However, implementing a comprehensive supply chain renewable electricity program is an effective and relatively quick way to substantially reduce your company's carbon footprint. Simultaneously, it has the added benefit of helping global renewable electricity markets grow at a faster pace – transforming more than just your company or sector.

Treating electricity as a strategic asset – and helping your suppliers to do the same – can provide security against cost fluctuations and greater control over energy supply, while enabling you to be one step ahead of regulatory changes and compliance requirements in the geographies you and your suppliers operate in. By working with suppliers to do this, strong partnerships can be created with an emphasis on long-term value creation.

That's not to mention the need to be at the leading edge of corporate responsibility to enhance brand reputation with customers, partners and employees; driving sales and improving workforce retention in a world where people increasingly expect a positive social and environmental contribution from the companies that provide our products and services, and where companies who are doing so are seeing a significant financial benefit.¹

It is no wonder that interest in this practice from organizations across the globe is gaining rapid momentum.

**“WE HAVE TO BE
THE RIPPLE ON
THE POND... WE
CAN'T JUST BE
100% RENEWABLE
ENERGY – WE HAVE
TO BRING OTHERS
WITH US.”**

**LISA JACKSON – VICE
PRESIDENT FOR
ENVIRONMENT, POLICY AND
SOCIAL INITIATIVES, APPLE,
SPEAKING AT CLIMATE
WEEK NYC 2016**



THIS DOCUMENT

The purpose of this document is to provide insights for leading corporations who are starting the process of implementing a renewable electricity program throughout their supply chain and looking for guidance and inspiration.

While the opportunity is huge, this is a new discipline and the 'rulebook' is yet to be written. Supply chains are often complex and difficult to navigate – and the bigger the company, the more this tends to be the case.

RE100 is a global collaborative initiative led by The Climate Group in partnership with CDP, at the time of writing bringing together 113 influential and multinational businesses that are committed to sourcing 100% renewable electricity. Collectively, the companies involved represent demand for over 150 (TWh) of renewable electricity annually – more than enough to power Poland. We work to enable our network to experiment with new ways of working and collaborating to find effective solutions to the problems that crop up again and again.

We have gathered the experiences and guidance of three leaders in our network – Apple, BT and IKEA Range & Supply – to show you the challenges that each face and how they are tackling them. These companies are engaging their supply chains in renewables because they know that it makes long-term business sense. The technology is ready, unsubsidized costs are competitive in many parts of the world, and they are ready to invest at scale.

If all of the companies in our network take a similarly strong approach, and influence others to do the same, we can create massive change closer to the speed commensurate with the challenge we face to deliver on the Paris Agreement.

This RE100 report focuses on renewable electricity, in line with RE100's mission. It should be noted that while we have focused solely on the aspects relating to renewable electricity, the programs described by our case study companies stretch beyond electricity, to cover broader energy savings and CO2 reductions.

We hope that this document, alongside our supportive program of activity available to RE100 members, will encourage and enable many more companies to explore the energy that powers their own supply chains – for the benefit of all.

The original research data for this report was compiled under Chatham House Rules to enable more open sharing. As a result some quotes have not been directly attributed to a specific company or person in this public report.



WHY SUPPLY CHAINS?

Indirect emissions from supply chains are typically four times greater than an organization's direct operational emissions², and leading companies recognize that it is their responsibility to minimize the impacts of the goods produced to support their businesses.

While only a small number of innovators have supply chain renewable energy initiatives in place, the CO₂ reduction potential is clear. For example, at the time of writing, 14 Apple suppliers had committed to power all Apple manufacturing with 100% renewable energy in the next one or two years.³ These commitments are expected to contribute 2.8 gigawatts (GW) of renewable energy towards Apple manufacturing and reduce emissions by 4.4 million metric tons.

Focusing on supply chains will assist RE100 members in achieving their 100% goals, as well as helping to deliver on broader zero carbon strategies, Science Based Targets and other similar initiatives through:

- Growing corporate demand for renewable electricity in new geographies, sending a strong signal to markets and policymakers;
- Opening up opportunities for collaboration, aggregation of demand, increased purchasing power and knowledge sharing between different companies, sectors and parts of the supply chain;
- Leveraging influence that may not be possible within their own electricity procurement; for example, by demonstrating renewable electricity demand in markets where the company's own operations are small, but those of their supply chain are significant and politically noteworthy.
- Consider having a 'climate positive' impact by influencing at a whole-factory level (ie impacting beyond production of the company's own goods) – where possible.

“BY RAISING AWARENESS OF THE POSITIVE ASPECTS OF SUPPLY CHAIN ACTION, IT IS POSSIBLE TO DELIVER TANGIBLE, MEANINGFUL RESULTS FOR THE BOTTOM LINE AND THE PLANET.”

- Patricia Espinosa, Executive Secretary, United Nations Framework Convention on Climate Change (UNFCCC)



SEIZING THE OPPORTUNITY

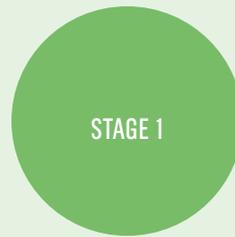
A survey of RE100 members by Vrije Universiteit Amsterdam, commissioned by The Climate Group in spring 2017, revealed a growing interest in engaging with supply chains. A small number are already exploring this – for example, through using the combined purchasing power (and roof-space) of several suppliers to optimize the economics of on-site renewable generation.

However, there is a need to develop capacity within companies to turn ambition into reality and rapidly create change at scale. This will require many to leave the comfort zone of their own operations and engage with their supply chains in a way which might at first feel new and, at times, challenging.

FOCUS AREAS FOR RE100

RE100 plans to collaborate with our members, our CDP supply chain program, our We Mean Business partners in the Renewable Energy Buyers Association (REBA) and World Business Council for Sustainable Development (WBCSD), the International Renewable Energy Agency (IRENA) and with the wider renewable electricity and supply chain advisory community, to increase supplier engagement as quickly as possible.

Areas of focus for our work with members are outlined on the opposite page.



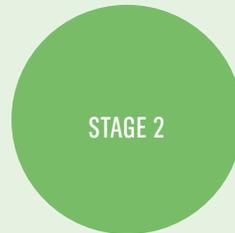
BUILDING INTERNAL CAPACITY

PURPOSE

Helping companies incentivize procurement staff by making the benefits of a more sustainable supply chain clear; providing a roadmap to make it happen

ACTIVITY

Establish a Peer Learning Group
Support corporates and their suppliers with guidance such as this report



BUILDING SUPPLY CHAIN CAPACITY

PURPOSE

Better enable companies to work with staff within supplier companies to purchase renewable electricity

ACTIVITY

Develop opportunities to scale-up capacity-building activities of REBA, GECCO (China), IRENA, RE100 Technical Advisory Group and others to meet increased demand for knowledge
Investigate opportunities to aggregate training across multiple suppliers



INNOVATING AND UNDERTAKING PRACTICAL PROJECTS

PURPOSE

Find new solutions to common challenges, scale-up demand for renewable electricity and leverage financial and political impact

ACTIVITY

Bring together leading renewable electricity buyers, commitment platforms and technical experts to collaborate, share best practice and guide development of practical projects
Bring progressive suppliers together with beginner suppliers to share their experiences and show business case
Help companies and their suppliers to aggregate demand, and look for financial benefit through working collectively



CASE STUDY COMPANIES

The three RE100 members interviewed for this study from April to June are among the companies already leading the way. Each company acknowledges the huge opportunities on offer, but also recognizes that the scale of the challenges involved can only be solved with sustained collective effort.

All three see themselves as being at the very early stages of working with suppliers on a renewable electricity program, and recognize the need to rapidly develop and share pioneering practice to shift this agenda.

IKEA Range & Supply was a first mover with its Suppliers Go Renewable (SGR) Project in 2014-15.⁴ The program had some success on energy efficiency projects but was perhaps a little ahead of its time, and failed to achieve significant renewable energy uptake by suppliers. The experience highlighted some important lessons which we will outline later in this report. IKEA Range & Supply will reaffirm its commitment to ensuring its Tier 1 suppliers and raw material suppliers are climate positive and committed to renewable energy (including electricity) with its updated sustainability strategy.

Apple launched its Supplier Clean Energy Program in October 2015⁵ and has successfully helped to bring about commitments from 14 suppliers to achieve 100% renewable power for their Apple production by 2018/2019, with a number of other partial commitments.

BT has had an established supplier sustainability program since 2012⁶, and this year has increased the focus on renewable electricity sourcing. It has used renewable electricity to power its UK operations since 2012 and aims to achieve 100% renewable electricity worldwide by 2020. To date, BT has invested £440 million in UK wind farms and has 8 megawatts (MW) of on-site solar.⁷



IKEA RANGE & SUPPLY

STAGE OF SUPPLIER-PROGRAM	Started in 2014, relaunching in 2017-18
TARGETS	In process of setting Science-Based Targets for supply chain
PROGRESS	Now identifying renewable energy potential of major suppliers
KEY SUCCESS DRIVERS	New focus on ensuring internal alignment and priority areas and goals for action in supply chain
DEPLOYMENT TOOLS	Energy audits and developing suitable supplier incentives
MAJOR BARRIERS	For first round of supplier programme, lack of viable business case with reasonable return of investment at that time. Lack of available sourcing of renewable energy and technology for on-site generation
QUOTE	“We are going all-in to have a positive impact on people and the planet. By taking action and encouraging others to do so, we can create a better everyday life for the many” - Lena Pripp-Kovac, Sustainability Manager, IKEA Range & Supply

BT

STAGE OF SUPPLIER-PROGRAM	Started in 2012, extended in 2017
TARGETS	87% emissions reduction across operations by 2030 and 29% emissions reductions in the supply chain by 2030 – both from a 2016/17 baseline
PROGRESS	Have launched new campaign with energy supplier Npower to encourage suppliers to buy renewable energy
KEY SUCCESS DRIVERS	Sharing high-quality expertise and experience with suppliers, encouraging them to share successes
DEPLOYMENT TOOLS	BT Better Future Supplier Forum training, support and assessment of suppliers. New campaign with npower
MAJOR BARRIERS	Building renewable energy sourcing expertise for non-UK suppliers
QUOTE	“We are well on our way to hitting 100% renewable worldwide. Going at this alone is not an option - The extensive knowledge and experience we’ve acquired is being used to help our partners and suppliers on their own carbon reduction journeys.” - Robert Williams, Head of energy supply, BT

APPLE

STAGE OF SUPPLIER-PROGRAM	Started in 2015
TARGETS	4GW renewable energy by 2020, representing 30% of manufacturing emissions throughout supply chain
PROGRESS	14 suppliers committed to 100% renewable power for Apple production by 2018-19. Over 100 suppliers registered on clean energy web portal and working on renewable solutions
KEY SUCCESS DRIVERS	Internal prioritization and resourcing, partnering with suppliers on specific challenges that arise
DEPLOYMENT TOOLS	In-house expertise provided to suppliers, additional resources and supplier portal
MAJOR BARRIERS	Geographic regions in which limited commercially viable renewable energy options exist
QUOTE	“We believe passionately in leaving the world better than we found it and hope that many other suppliers, partners and other companies join us in this important effort.” - Tim Cook, CEO, Apple

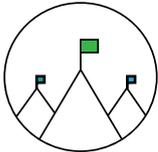
TOP TEN TIPS

Incorporating the insights offered by Apple, BT and IKEA Range & Supply, the following 'Top Tips' provide our summary of the key stages to a successful renewable electricity strategy for your supply chain.



1. BUILD A COMPREHENSIVE ANALYSIS OF YOUR SUPPLY CHAIN ELECTRICITY CONSUMPTION AND THE RENEWABLE ELECTRICITY POTENTIAL FOR THE MAJOR SUPPLIERS WITHIN IT

Prioritizing key suppliers in strategically important geographies requires a solid understanding of your supply chain's emissions, its willingness to adopt leading targets and the local renewable electricity markets.



2. SET AMBITIOUS AND FACT-BASED PUBLIC TARGETS FOR YOUR SUPPLY CHAIN

Ambitious targets should be suited to your company type and culture to help ensure internal alignment on achieving targets. For example, science-based targets provide a credible baseline, while extending existing 100% renewable electricity commitments to suppliers for more ambitious stretch targets sends a clear leadership message. For example, Apple extended its 100% renewable electricity commitment to its supply chain, while IKEA Group and IKEA Range & Supply are in the process of setting science-based targets, including the IKEA supply chain.



3. ENSURE YOUR ORGANIZATION IS FULLY ALIGNED BEHIND AMBITIOUS TARGETS, WITH SUPPORT FROM KEY PROCUREMENT DECISION MAKERS

Implementing a renewable electricity program with suppliers requires a high level of collaboration and prioritization across multiple departments. The active involvement of staff and departments that have the most influence with suppliers is critical to success.



4. BE PREPARED TO INVEST SUFFICIENT RESOURCES IN SUPPORTING SUPPLIERS TO MOVE TO RENEWABLES

Implementing a major shift towards renewable electricity with suppliers can require a high level of resourcing, both in terms of finance to overcome potential upfront costs (although these are increasingly saved or neutralized later down the line), and human resources – to overcome the complexity of implementing projects with suppliers who have different levels of knowledge and experience.



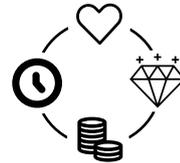
5. LOOK FOR LEADERS IN YOUR SUPPLY CHAIN TO DEMONSTRATE WHAT IS POSSIBLE

Apple successfully identified the suppliers who shared its own ambitions on sustainability to be the first movers in its program and inspire others to join. Work with leaders in your supply chain first to establish early success and help build internal support for the program.

While not all companies have the extensive renewable electricity experience or resources of our case study companies, the common success factors highlighted here should provide insights that can be applied in a wide range of situations. We look forward to building on this initial body of knowledge as companies continue to innovate and work with us.

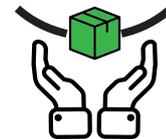
6. PICK THE RIGHT INCENTIVES FOR SUPPLIERS

Plan carefully for how to motivate suppliers to join your program. Additional financial support and resources can be important for building a credible business case, but public recognition, preferred supplier status and gaining competitive advantage have been shown to be important factors in encouraging suppliers.



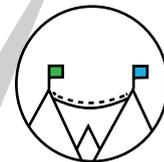
7. BUILD IN THE RIGHT KINDS OF SUPPORT FOR YOUR SUPPLIERS TO BE SUCCESSFUL

Help your supplier feel like they are not alone. Having the right targets, strong relationships, support and strategic partnerships are important considerations for success, alongside finance and other incentives, and can often be the critical winning factor.



8. BE PREPARED TO INNOVATE, AND COLLABORATE WITH OTHER COMPANIES WITH AMBITIOUS SUPPLY CHAIN TARGETS TO OVERCOME SHARED BARRIERS

This is a new, evolving discipline. Look for opportunities to work with organizations that share your suppliers, and agree on how you will use your collective power to influence them, guide them and reward them. Two budgets are better than one.



9. LEARN FROM PIONEERING COMPANIES AND LOOK FOR COLLABORATION OPPORTUNITIES

Knowledge sharing between companies and collaboration with suppliers to overcome shared challenges will accelerate the pace of change and reduce duplication of effort. RE100 and our partners in REBA will be actively assisting this process over the coming months.



10. REPORT ON PROGRESS AND ON CHALLENGES RELATED TO SUPPLY CHAIN TARGETS

Sharing successes and challenges with your industry and taking advantage of thought leadership opportunities can help to confirm the business case to the rest of the sector, motivate others to take action, identify future partnerships and demonstrate progress.





SUCCESSFULLY ENGAGING SUPPLIERS WITH RENEWABLE ELECTRICITY SOURCING

In this section, we'll go into more detail and look at the results of the in-depth company interviews and research undertaken between April-June 2017.

The survey of RE100 members undertaken in spring 2017 showed that companies wanted to understand more about:

- Internal organization and target setting for suppliers
- The winning strategies and tactics for engaging with suppliers
- Problem-solving with suppliers, and national electricity market and policy challenges

1. INTERNAL ORGANIZATION AND TARGET SETTING FOR SUPPLIERS

A common theme across the information given by Apple, BT and IKEA Range & Supply was the importance of having an effective strategy and roadmap for achieving ambitious renewable electricity targets with suppliers. The most important areas within any strategy include:

- Complete data-driven understanding of supply chain energy use
- Ensuring key internal departments and leaders are fully aligned and engaged, and see this activity as part of their everyday roles – in particular, members of the procurement teams need to take ownership of their new roles working with suppliers to transition to renewable electricity
- Investment of the right level of internal resource to support suppliers developing renewable electricity plans

Understanding your supply chain electricity consumption

Modern supply chains are complex, global networks involving hundreds or even thousands of companies.

Each company that we spoke with considered it essential that they understood their supply chain properly before agreeing on a strategy. This included comprehensive data on greenhouse gas (GHG) emissions from suppliers, that can be segmented by supplier spend, to identify which ones would be most valuable to work with. For example, IKEA Range & Supply and Apple undertook extensive energy audits at more than 100 suppliers to identify opportunities for energy efficiency savings and renewable energy potential.

Just as important was a clear geographic overview of suppliers, combined with analysis of the most relevant energy markets and policies, in order to identify countries with the best potential for renewable energy investment and procurement.



IKEA Range & Supply highlighted that its first renewable energy project with suppliers in 2014-15 did not have a fully comprehensive analysis of the potential to transition to renewable energy. Supply chain targets were not grounded in a comprehensive analysis of what would be required to achieve them, and targets were only for direct suppliers (Tier 1) and did not include Tier 2 and 3 of the supply chain.

IKEA Range & Supply is now in the process of setting science-based targets, as a business that will require significant renewable energy uptake by its suppliers and will address the large percentage of emissions from its raw materials. Top-down modelling of what will be required to significantly reduce the carbon footprint of the IKEA supply chain is being combined with bottom-up data analysis of potential savings at each type of major supplier. This will result in detailed projections of what is required for each major purchasing category to meet specific supply chain goals and allow internal teams to track progress. This is considered critical to increasing future internal buy-in and accountability across the organization, and ensures they can meet their science-based targets.

Apple has undertaken comprehensive carbon footprinting for each product and for the company's overall operations. This has been used to identify and prioritize the most energy-intensive commodities and the largest volume manufacturers for improvement. For example, production of aluminum components is the second highest contributor in Apple's manufacturing footprint. A focus on hydroelectricity for smelting and increased use of scrap aluminum has resulted in GHG reductions. Every gram of aluminum in iPhone 8 generates 11% fewer carbon emissions than in iPhone 7, and 83% less than iPhone 6.

Achieving internal alignment

A key success factor for all three companies was ensuring that all relevant executives, departments and staff were engaged in the program and held accountable for delivering on the goals.

Most important is ensuring that procurement staff holding direct relationships with individual suppliers are **active in driving awareness that increasing renewable electricity use is a key priority, and driving this transition through their business relationships with supplier companies.**

As with any new program, this is an **ongoing process to identify key internal allies** and build support. Procurement staff have traditionally been focused on price, quality, quantity, and delivery, with the role expanding recently – and rapidly – to include a growing number of sustainability considerations. Adding renewable electricity sourcing as a priority requires effective **internal upskilling and promotion** to secure buy-in from busy teams.

“CLIMATE CHANGE IS ONE OF THE GREAT CHALLENGES OF OUR TIME, AND THE TIME FOR ACTION IS NOW. WE BELIEVE PASSIONATELY IN LEAVING THE WORLD BETTER THAN WE FOUND IT AND HOPE THAT MANY OTHER SUPPLIERS, PARTNERS AND OTHER COMPANIES JOIN US IN THIS IMPORTANT EFFORT.”

- Tim Cook, CEO, Apple



Apple has strategically placed significant responsibility for supplier clean energy within operations and procurement, both in functions and physical location. This is an important factor in ensuring that the supply managers – those that manage the direct business relationships with suppliers – take ownership of the renewable energy initiatives.

Consistent top-level leadership and focus on environmental goals is a key factor for success. Apple's clean energy goals are fully incorporated into its business strategy, with progress reports included in the quarterly review process. The program benefits from full CEO and executive leadership team support and prioritization, including the extensive involvement of CEO Tim Cook and Vice President of Environment, Policy and Social Initiatives Lisa Jackson. In a letter to all Apple staff in June 2017, Cook highlighted the importance of clean energy for suppliers: **“We’re going to keep working with our suppliers to help them do more to power their businesses with clean energy. And we will keep challenging ourselves to do even more.”**

Jackson also presented the Clean Energy Program (CEP) at the annual global procurement staff meeting, ensuring it was clear that everyone at Apple is expected to contribute to delivering its environmental goals, no matter what their overall role.

The tactical support of operations executives and senior global procurement managers is also vital, leveraging business relationships to ensure suppliers see the importance of these initiatives to Apple. The CEP program meets regularly with responsible key Vice Presidents from Operations, ensuring two-way accountability.

Supplier sustainability and risk management functions are part of the role of the procurement team at BT. The company's purposeful business strategy is governed by a Board Committee for Sustainable and Responsible Business. Board members include the Group Chairman and the CEO.

It is critical to clearly show how improving the sustainability performance of suppliers reduces risks and costs, while increasing efficiencies. Early sustainability success with suppliers helped BT to make the business case for continued investment in its Better Future Supplier Forum (BFSF) program. BT has now built on this program and launched a campaign with energy provider npower to provide a tailored renewable electricity offer to its suppliers.

For IKEA Range & Supply, implementing a Science Based Targets program with suppliers will require changes to the way procurement is managed and how climate is integrated in supplier development. The company is currently considering incentives to reward suppliers who are reducing their GHG emissions.



The implementation of IKEA Suppliers Go Renewable (SGR) program was not always prioritized as needed by procurement managers who hold business relationships with suppliers. While ambitious targets were set on leadership level, one of the biggest challenges was ensuring that sustainability ambitions and goals were translated into tangible actions and knowledge across the entire organization. This is one of the key focus areas with the implementation of the new climate targets.

Internal resourcing requirements

Be prepared to commit **significant internal resources** to a renewable electricity program with suppliers and build their capability. The three featured companies benefit from extensive experience in renewable electricity investment for their own operations but most suppliers have little or no energy expertise or renewable electricity experience.

“With some suppliers, we’ve had to start with just the basics of carbon accounting; others want detailed advice on how to secure cost-competitive renewable energy deals.” BT General Procurement Manager

Companies need to plan for **electricity markets and policy expertise in their major suppliers’ key countries**. For example, Apple provides suppliers with introductions to skilled renewable energy developers and electricity providers, technical guidance documents, scenario planning tools and policy updates. In some cases, Apple even goes as far as working directly with suppliers to partner on environmental, social, and technical due diligence, and in the case of China, has worked alongside its suppliers to secure local government approval for securing renewable electricity under innovative new procurement models.

2. ENGAGING SUPPLIERS

There is no ‘one size fits all’ approach to successfully engaging suppliers – even within one company’s supply chain – as they vary in size, type, location and environmental performance. However, our interviewees highlighted five key success factors in helping suppliers to understand the value of renewable electricity sourcing:

- Build long-term strategic relationships
- Understand the motivations of suppliers and support early movers
- Incentivize participating suppliers
- Leverage your leadership, brand and expertise to broker deals with suppliers, renewable electricity providers and local authorities
- Build specific, shareable business case examples to bring additional suppliers on-board



Building long-term, strategic relationships

Strong relationships with suppliers is a key success factor. Renewable electricity investments are long-term considerations and the usual 1-3 year contracts may not provide adequate confidence for suppliers to invest to meet a client requirement. Consider longer term contracts – or develop partnership/Master Agreements with suppliers which provide reassurance of longer term engagement, while retaining the flexibility of shorter(1-3 year) contracts for specific product types, price and quantity.

All three companies interviewed invest in improving supplier environmental capacity and performance in the long-term. The long-term partnership approach helps build a good understanding of different suppliers, and provides confidence to both the company and supplier to make longer term investments in an improvement program.

“We have a global commitment to be a low-carbon business, using our size and scale to help the companies that supply us to commit to do the same.”

- Gabrielle Ginér, Head of Sustainable Business Policy at BT

Understanding supplier motivations and supporting early movers

To drive significant change within supply chains requires a deep understanding of key supplier motivations. Large investments in renewable electricity sourcing are often seen as a high-risk option for suppliers who may lack energy expertise and experience, or access to investment capital.

Firstly, **ensure the importance of renewable electricity is emphasized** in all business relationships with suppliers.

To increase the initial uptake of renewable electricity options by suppliers it is important to **identify potential early adopters**. These may have existing sustainability programs or experience with renewable electricity investments. These types of suppliers make up a significant portion of the early adopters in Apple’s program.

BT uses its Better Future Supplier Forum (BFSF) to understand suppliers’ motivations and supports early movers through this initiative. In the forum, BT shares best practice on environmental issues, performance and improvement. Once a supplier is on board, BT analyzes its strengths and weaknesses, identifying opportunities to make a difference. With BT’s support, suppliers learn how to capture the savings and quantify the benefits of improvements.

Timing is an important factor in encouraging suppliers to take up renewable electricity. If a supplier is planning a major new investment or to upgrade existing facilities, it may be an opportune moment to push for the inclusion of renewable electricity capacity.

“JABIL HAS FOR SEVERAL YEARS BEEN DRIVING A SUSTAINABILITY STRATEGY OF CONSISTENT REDUCTION OF CARBON EMISSIONS AND ENERGY CONSUMPTION, AS WELL AS THE POSITIVE STEWARDSHIP OF WATER RESOURCES AND RECYCLING. THIS PARTNERSHIP WITH APPLE IS ONE WAY WE ARE LEVERAGING OUR OWN COMMITMENT.”

- Eric Austermann, Vice President of Social and Environmental Responsibility, Jabil



Leverage your leadership, brand and expertise to get renewable electricity deals agreed

Committing to significant renewable electricity sourcing is a big decision for any company. Convincing often risk-averse suppliers to make a bold decision, and the need to get involved in problem-solving with suppliers should not be underestimated.

Well planned and focused interventions by company executives with supplier CEOs are effective in helping to bring suppliers on board. This is especially relevant in hierarchical business cultures. For example, Apple uses interventions from top company executives to help secure renewable electricity commitments from suppliers. Short phone calls to a supplier CEO from Apple Operations Executives at the start of their relationship were cited as fundamental to achieving quick success. Simultaneously, Apple's team works with the implementation-level staff to develop clean energy strategies that can be rolled out once executive buy-in has been achieved.

Leveraging the power of major companies' brand and credit rating helps start conversations with renewable electricity project developers, and enables policy-level discussions to resolve technology or regulatory hurdles.

Sharing experience and 'getting involved' with suppliers to solve shared problems is vital. Renewable electricity sourcing at a global scale is complex, with a bewildering array of regulatory and market environments. For example, in China, local and provincial regulations covering renewable projects for non-energy companies can be complex or ambiguous.

Apple has invested significant resources to partner with Chinese suppliers to enable them to commit to the program. Apple's technical energy experts are on hand to support them to ensure the highest standard of technical and social due diligence for their renewable energy projects. This significantly reduces any risks that may discourage them from moving ahead. Apple also provides energy policy and regulation support, facilitating deals between suppliers, renewable energy project developers and/or utility providers. There is a recurring need to help suppliers resolve regulatory ambiguity on local or provincial approval for renewable energy projects in China.

“APPLE AND JABIL MET JOINTLY WITH THE CHENGDU AND WUXI GOVERNMENTS TO SHAPE POLICY CHANGES THAT MADE IT POSSIBLE FOR JABIL TO SOURCE CLEAN POWER DIRECTLY THROUGH POWER PURCHASE AGREEMENTS WITH LOCAL PROJECTS, PRIMARILY THOSE INVOLVING WIND FARMS, WITHIN THE PROVINCES WHERE IT OPERATES FACILITIES.” - GreenBiz



COLLABORATING TO INCREASE LEVERAGE

How much leverage a company can exert over a specific supplier can also vary widely depending on their position in the supply chain, their degree of competition and the percentage of a supplier's business a company represents.

Often, even large corporations may represent less than 5-10% of a supplier's total business. To increase leverage with those suppliers will require collaboration with other like-minded customer companies. Such collaborations should form a key part of future work.

Replicable business cases for renewable electricity investment

Many companies have implemented successful energy efficiency programs in their supply chains. Most energy efficiency improvements are low risk and have a return on investment (ROI) period of 1-3 years within the duration of average supplier contracts. Convincing suppliers to make significant renewable electricity investments with a long ROI period (8-10 years) is a significant barrier to overcome. **A company's own experience can help build a credible business case.**

Apple used its own experience of direct solar and wind investments in China to help build a credible business case for renewable energy investments, and overcome initial resistance from risk-averse suppliers. To spread this knowledge and expertise in an efficient way, Apple built **a clean energy portal to distribute tailored case studies and relevant technical and policy information**, highlighting stories of how competitors have successfully implemented renewable energy projects. Apple's initial successes in engaging suppliers with renewable energy has had a snowball effect in building confidence and interest; content is provided in relevant local languages (Mandarin, Japanese, and Korean), and Apple staff cite the portal as a very important tool for supplier engagement. Currently over 100 suppliers are registered on Apple's clean energy program web portal and working on renewable solutions.

In a replicable example of **leveraging corporate influence**, IKEA Range & Supply has an active alternative fuels program to reduce transport emissions. In Scandinavia, smaller logistics partners lacked the influence to convince large truck manufacturers to provide modified trucks to use hydrogenated vegetable oil as a renewable alternative fuel. By aggregating the demand of a group of logistic partners, IKEA Range & Supply was able to convince a major truck manufacturer to take on the risk of testing modified truck motors. Aggregating demand like this can be highly impactful.

Incentivize supplier participation

In the early stages of a voluntary renewable electricity program with suppliers, additional incentives can help to overcome initial resistance to participation. This can be in the form of financial incentives, additional resourcing and expertise on energy or public recognition of suppliers' commitments.

If participating suppliers are offered the right combination of incentives this can compensate for the long ROI for renewable electricity investments.

For example, most Apple suppliers are not allowed to disclose that they supply to



Apple. However, Apple publicly acknowledges 100% renewable energy-committed suppliers on its website and in the media. This has proved very motivating for Apple suppliers to gain a competitive advantage over non-committed suppliers. On the other hand, IKEA Range & Supply is investigating how it can best provide incentives to suppliers by giving extra credit to those focusing on renewable energy in the procurement process and penalizing those that are not making a significant effort – while every BT contract has at least 5% of its supplier rating based on sustainability.

“WE ARE IN THE HELPING MODE RIGHT NOW. BUT WE PUT A REAL VALUE ON SUPPLIERS WHO ARE MAKING THIS TRANSITION. WE CAN BE LIKE THEIR OWN SPECIALTY CONSULTANT.”

- Lisa Jackson, Vice President of Environment, Policy and Social Initiatives, Apple

3. PROBLEM-SOLVING WITH SUPPLIERS

Our research revealed several common barriers to the uptake of renewable electricity by suppliers – many of which are shared by other RE100 companies. These included:

- Lack of access to renewable electricity in specific countries
- Financial barriers
- Lack of supplier expertise and experience
- Renewable electricity policy uncertainty

By working together with their suppliers, companies can begin to address these.

Lack of access to renewable electricity in specific countries

Sourcing of renewable electricity supply can be challenging in many important supplier hubs, such as Korea and China (which were specifically discussed in our case studies), Indonesia, Vietnam, and Japan. Often a high degree of innovation and experimentation is required in partnership with suppliers in these regions to chart the right path towards forging precedent-setting agreements on renewable electricity sourcing.

This challenge is of course not unique to suppliers, and RE100 members will be experiencing similar challenges securing renewable electricity in these regions. Indeed, one of the primary reasons for building demand in these regions via the supply chain is to create a compelling case for policymakers to improve access to renewable electricity. Nevertheless, this presents something of a chicken and egg situation for pioneering companies.

- Be aware that initial reluctance or a negative response from suppliers that sourcing renewable electricity is not possible for them could be a result of a lack of energy expertise and renewable electricity experience. In such cases seeking independent expertise in relevant electricity markets and regulation can be very useful. Seeking out examples of other suppliers or companies who have employed innovative approaches can help convince suppliers and regulators to view renewable electricity investment as feasible.
- Be prepared to innovate: several of Apple’s Chinese suppliers have had to create the first ever corporate deals for renewable electricity investment in specific Chinese provinces.



RE100 members should not underestimate their ability to positively influence renewable electricity market and policy landscapes. We have already demonstrated our influence in this regard – with Chinese policymakers specifically citing the positive influence of Apple in stimulating the creation of China’s renewable electricity certificate scheme, and Facebook successfully persuading some US utilities to provide access to renewable electricity, being two of many examples.

Transferable examples of policy change can also be a useful guide to what is possible. For example, IKEA Range & Supply’s use of hydrogenated vegetable oil as a renewable alternative fuel is limited to regions like Scandinavia where tax exemptions make it cost competitive with diesel. By working with other regions to encourage adoption of similar policies, IKEA Range & Supply has been able to expand the use of these fuels through more of their logistics supply chain.

Financial barriers

Despite the falling cost of renewable electricity technology in most countries, investment or procurement can still have a price premium and a much longer ROI than the average contract length with suppliers. Solutions to overcome financial barriers include:

- **Longer contract periods** to provide security for suppliers making longer-term investments
- **Electricity load aggregation.** When a company aggregates the load of multiple suppliers to support a renewable electricity project (normally as a PPA), it gains a higher threshold, increased purchasing power, and greater economies of scale. While aggregation of demand across multiple stakeholders is still relatively new, in the future major companies could collaborate where they share suppliers to create increased demand and reduce the level of risk for suppliers’ renewable electricity investments. The innovative collaboration between Royal Philips, Google, AkzoNobel and Royal DSM to collectively sign combined PPAs from community-owned wind farm projects in the Netherlands shows how major companies could collaborate in the future to advance renewable electricity uptake in shared supply chains.

“OUR (WIND) POWER PURCHASE AGREEMENT IS THE FIRST OF ITS KIND IN SOUTHERN CHINA AND WE HOPE IT WILL SERVE AS AN EXAMPLE FOR OTHER COMPANIES LOOKING TO TRANSITION TO CLEANER, MORE ECONOMICAL SOURCES OF POWER”

- Zhou Qunfei, CEO, Lens (Apple supplier)

- **Provision of financing assistance** to enable committed suppliers to make up front investments, or preferential treatment/incentives in the procurement process. Individual incentives and arrangements for specific suppliers are confidential and were not shared by case study companies. It should be noted that the case study companies seek commercially viable and cost competitive approaches – incentives should not be considered as compensation, and greening the supply chain should be considered a shared responsibility.



Lack of renewable electricity expertise and experience within supplier companies

Most suppliers have little or no energy experience beyond energy saving projects. This can be overcome by investing in building renewable electricity expertise with suppliers and providing significant resources to support first movers. In the medium-term, as uptake grows, seize opportunities to cascade knowledge, or aggregate training across multiple suppliers – reducing demand on your in-house experts.

Evolving renewable electricity policy

Electricity markets around the world vary considerably in their approach to renewable electricity sourcing. Rapidly evolving policy responses to new renewable opportunities, while welcomed, add complexity.

To implement a successful renewable program with suppliers requires companies to invest in energy policy expertise for relevant countries. If regulatory reform in favor of renewable electricity is a priority, companies should consider building an effective advocacy strategy together with local suppliers.

NEXT STEPS

“I want to see more openness from other companies about how they have achieved change in supply chains. More surprises please!”

- Project Leader, IKEA Range & Supply Sustainability

The guidance provided in this document is intended to help companies make their first steps in engaging their supply chains with renewable electricity.

By sharing examples and providing opportunities to learn from pioneers and collectively overcome major challenges, RE100 aims to build momentum towards a rapid acceleration of global investment in renewable electricity. But as the Project Leader, IKEA Range & Supply Sustainability quoted above points out, collaboration is key if we are going to create real change at speed.

WE ARE SEEKING THE INPUT OF RE100 MEMBERS ON THE SUPPLY CHAIN PEER LEARNING GROUP WHICH WE ARE CURRENTLY FORMING. WE PLAN ON USING THIS TO SHARE BEST PRACTICE AND ADDRESS PRACTICAL CHALLENGES – AS WELL AS LINKING UP ORGANIZATIONS THAT WE FEEL WOULD BENEFIT FROM WORKING TOGETHER.

There will also be a series of webinars and ongoing communications to help support you in your journey.

If you are interested in getting more involved, or if you have questions or useful feedback on this document, please contact Sam Kimmins, Head of RE100, The Climate Group – at SKimmins@TheClimateGroup.org.



APPENDIX: SUMMARY OF FEATURED COMPANY PROGRAMS

The guidance in this document has been developed through extensive interviews with three companies with different program designs and at different stages of program implementation.

IKEA Range & Supply buys products from over 1,000 home furnishing suppliers in over 50 countries. BT spent around £14.1 billion in 2016 with more than 18,000 suppliers across 150 countries.⁸ Apple discloses over 200 of its major suppliers that have thousands of other suppliers further down the supply chain.⁹ These facts illustrate the size and complexity of major companies supply chains and the scale of the challenge to drive significant renewable energy adoption across complex global supply chains.

BT

BT has used renewable electricity for its UK operations since 2012 and aims to be 100% renewable worldwide by 2020. To date, the company has invested £440 million in UK wind farms and has 8MW of on-site solar.

BT's carbon strategy includes not only its own operations, but also the carbon associated with customers using its products and services, as well as the carbon from its supply chain. BT has a target to reduce its carbon emissions intensity by 87% in tonnes of CO₂e per unit of gross value added by 2030 from a 2016/2017 base-year. This is in line with current international policy and climate science, being BT's share of the global emissions reductions needed to limit global warming to 1.5°C. BT also has a target to reduce supply chain carbon emissions by 29% over the same time-period.¹⁰ BT's biggest carbon impact is in its supply chain, and suppliers buying renewable electricity is one of the key ways that BT aims to reduce its supply chain carbon footprint.

IKEA is one brand and many companies. Around the globe, a large number of companies operate under the IKEA trademarks.

IKEA Group (INGKA Holding B.V. and its controlled entities) is one of 11 different groups of companies that own and operate IKEA sales channels under franchise agreements with Inter IKEA Systems B.V. IKEA Group is the world's largest home furnishing retailer and operates 360 stores in 29 countries. Our vision is to create a better everyday life for the many people. IKEA Group offers well-designed, functional and sustainable home furnishing products at prices so low that many people are able to afford a beautiful and functional home. IKEA Group stores had 817 million visits during FY17 and 2.1 billion visits.

IKEA Range & Supply, which is a part of Inter IKEA Group and consisting of IKEA of Sweden and IKEA Supply, has the responsibility to develop, design, produce and supply IKEA stores around the world with home furnishing solutions available to the many people. Each year IKEA Range & Supply introduces 2,000 new products in the IKEA stores. The total range is almost 10,000 products.

IKEA RANGE & SUPPLY

IKEA Group is a founding member of the RE100 campaign and has a commitment to produce more renewable energy than it uses in its own operations by 2020 as part of its People and Planet Positive strategy.

IKEA Range & Supply launched its Suppliers Go Renewable (SGR) Project in 2014-15, and will be relaunching its supplier programme in 2017-18. IKEA Group and IKEA Range & Supply are in the process of setting science-based targets, which will require significant renewable energy uptake by suppliers and will address the large percentage of emissions from raw materials.

In FY 2016 IKEA's carbon footprint was 39,992,548 tonnes of CO₂. Over 97% is supply chain emissions.¹³ In the same year, IKEA Group produced renewable energy equivalent to 71% of the energy used in its own operations.

In September 2016, the composition of IKEA Group changed when IKEA range, supply and production activities were transferred from the IKEA Group to the Inter IKEA Group.



APPLE

Apple has been committed to 100% renewable electricity for its own operations since May 2012¹¹ and a member of RE100 since September 2016. At the end of the 2016 financial year Apple used 96% renewable electricity, and the company is now at 100% renewable electricity in 25 countries worldwide. Apple's comprehensive 2016 carbon footprint was 29,500,000 metric tons of GHG emissions, with a 10% absolute reduction since 2015.¹²

77% of Apple's total emissions come from manufacturing in its supply chain, with at least two thirds of this coming from electricity consumption. Since the launch of its supplier clean energy program, Apple has committed to working alongside its manufacturers to bring online at least 4 GW of new clean energy worldwide by 2020 in support of the manufacturing of Apple products. Currently, Apple has reached over 2.8 GW of commitments (and nearly 1.5GW of clean electricity already grid connected) towards that goal through Apple's own investments into clean electricity and commitments from manufacturing partners. These commitments represent 4.4 million metric tons of CO2 avoided.

Apple's Supplier Clean Energy Program (CEP), launched in October 2015, aims to reduce its manufacturing carbon footprint by helping suppliers become more energy efficient and by transitioning the entire supply chain to 100% clean energy. As of September 2017, 14 suppliers operating in 10 countries had committed to sourcing 100% renewable electricity for Apple production by 2018-2019.

Further Reading

Apple supplier update Sept 2017

BT BFSF webpage and supplier case studies

CDP 2017 Supply Chain Report



AUTHORS AND CONTRIBUTORS

ABOUT THE AUTHOR

[Tom Dowdall](#) is a consultant specializing in corporate climate action and conducted this research project as part of a Masters Degree thesis in collaboration with RE100. Previously he was responsible for Greenpeace's successful campaigns to transform the electronics and IT sectors and pushing major companies to effectively advocate for climate solutions.

ACKNOWLEDGEMENTS

Sam Kimmins, Head of RE100 at The Climate Group, commissioned and oversaw the research and writing of this report. He will continue to lead RE100's work on renewable electricity in supply chains.

IKEA Range & Supply, BT and Apple have generously provided time, information and feedback to make this report possible. Special thanks to Andrew Peterman at Apple, Andreas Ahrens at IKEA Range & Supply and Gabrielle Ginér and Robert Williams at BT for contributing and coordinating input from their teams.

Iconography adapted from artwork developed for the Noun Project by:

Samson Tennela, Thijs Rentier, Becris, Eucalyp, Delta, shashank singh, Maxim Kulikov, BomSymbols, Rockicon, Setyo Ari Wibowo, il Capitano, Callum Taylor.

Editor: William Brittlebank

ENDNOTES

1. Vikas Vij, 'Green product sales up average 91% for GE, Dow, others Greenbiz, July 2015
2. 'Big buyers harness the power of purchasing to deliver emissions reductions in supply chain', The Carbon Trust, January 2017
3. Anya Khamayzer, 'Apple eyes 'lifting' voice of companies committed to clean energy', GreenBiz, September 2017
4. Ikea supplier portal
5. 'Apple launches new clean energy programs in China to promote low-carbon manufacturing and green growth', Apple, October 2015
6. BT Better Future Supplier Forum
7. BT powers on towards global green energy target, BT
8. Delivering our purpose report, BT
9. Apple progress report
10. Gabrielle Giner, 'CDP data powers BT's new supply chain target,' CDP
11. Apple facilities report
12. Apple Environment Responsibility Report
13. IKEA Group Sustainability Report FY16



ABOUT RE100

RE100 is a collaborative initiative uniting the world's most influential businesses committed to 100% renewable power. Renewables are a smart business decision, providing greater control over electricity costs and driving innovation, while helping companies to deliver on emission reduction goals. RE100 members, including Global Fortune 500 companies, have a total revenue of more than US\$2.5 trillion and operate in a diverse range of sectors – from Information Technology to automobile manufacturing. They send a powerful signal to policymakers and investors to accelerate the transition to a low carbon economy. RE100 is brought to you by The Climate Group in partnership with CDP, as part of the We Mean Business coalition.

RE100.org | @theRE100 | #RE100



ABOUT THE CLIMATE GROUP

The Climate Group works internationally with leading businesses, states and regions to deliver a world of net zero greenhouse gas emissions and greater prosperity for all. We are at the forefront of ambitious climate action. Our focus is on collaborative programs with corporate and government partners that deliver impact on a global scale. The Climate Group stimulates action by businesses, states and regions, bringing them together to develop and implement the policies that make change happen. We also communicate their achievements to secure global public acceptance of, and even greater ambition for, a prosperous, net-zero future for all. The Climate Group is an international non-profit with offices in Beijing, London, New Delhi and New York.

TheClimateGroup.org | @climategroup



ABOUT CDP

CDP is an international non-profit that drives companies and governments to reduce their greenhouse gas emissions, safeguard water resources and protect forests. Voted number one climate research provider by investors and working with institutional investors with assets of US\$100 trillion, we leverage investor and buyer power to motivate companies to disclose and manage their environmental impacts. Over 6,300 companies with some 55% of global market capitalization disclosed environmental data through CDP in 2017. This is in addition to the over 500 cities and 100 states and regions who disclosed, making CDP's platform one of the richest sources of information globally on how companies and governments are driving environmental change. CDP, formerly Carbon Disclosure Project, is a founding member of the We Mean Business Coalition.

cdp.net | @CDP

