

# STRATEGY & PLANNING

Info-Tech Advisor Premium - Strategize



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Strategy & Planning notes define the critical decisions and actions surrounding successful adoption of a specific technology, tool, or process.

## Craft a Green IT Action Plan

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Learn to build a Green IT Action Plan by setting realistic goals and choosing projects that IT can perform autonomously. The resulting environmental benefits and cost savings help prove that more extensive projects are both feasible and necessary. Use this knowledge to promote cross-enterprise collaboration on leading green initiatives.

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## Executive Summary

Many IT departments want to undertake Green IT initiatives, but don't know where to start. Use this research note to begin by understanding Green IT as an umbrella term, with many initiatives falling underneath. Next, learn the difference between victory projects, which IT can complete autonomously, and leadership projects, which require business collaboration but often result in greater cost savings and environmental benefit.

Then, craft and execute a Green IT Action Plan by learning to:

- » Set the IT department's goals, timelines, and major projects, taking organizational realities into account.
- » Baseline energy and consumables use for the IT assets affected by projects.
- » Execute and measure the results of initial projects which can demonstrate success and quantifiable impact to the business.
- » Market IT efforts to the senior management, and build business cases for leadership projects that require unified management, cross-department buy-in, and aligned monetary incentives.

The environmental benefits and cost savings that result from initial projects will help prove that more extensive projects are both feasible and necessary.



## Strategy Point

Many IT organizations have expressed a desire to green their operations. The Info-Tech note, "[North America Underperforms in Green IT Attitudes & Actions](#)," demonstrates that while more than 50% of IT departments are strongly concerned about climate change, far fewer have taken on major initiatives in this area. IT is faced with myriad options to go green, and in many cases, no way to lobby for changes required outside its own responsibilities. Moreover, a lack of measurement in energy and consumables use prevents IT from quantifying cost savings and environmental benefits associated with Green IT initiatives. In fact, the term "Green IT" can be confusing in itself.

Understand that Green IT is an umbrella term, and the initiatives falling underneath it reduce environmental impact while typically generating cost savings or efficiency improvements. In fact, many past initiatives have had green benefits but were not framed as such. It's probable that the IT department has already taken on green initiatives. The classic example is virtualization, which decreases hardware costs and increases processor utilization. Burgeoning power and cooling requirements in the data center have shifted discussions about virtualization to include green benefits (greatly reduced energy and cooling consumption and a smaller environmental footprint). For today's IT departments tasked with improving environmental performance, these benefits are a powerful selling point, in addition to cost or efficiency improvements.

The feasibility of such initiatives varies from company to company, because business requirements and corporate sustainability goals will affect what projects are possible. However, for a progressive line of projects to be successful, IT needs to have a plan in place with goals, projects for consideration, and a way to measure and market results.

This note discusses how to build and execute such a plan. Learn to build a Green IT Action Plan by setting realistic goals and choosing initial projects that IT can perform autonomously. Measure the results of these projects, and use quantifiable reductions in environmental impact and cost savings to prove to the business management that more extensive projects are feasible and necessary. Finally, understand the importance of cross-department collaboration in more extensive projects – and keep in mind that major green initiatives can be marketed to the company's current and future customers.



## Key Considerations

Not all green IT initiatives are created alike. While IT can undertake some types of initiatives on its own, many projects require collaboration with other parts of the business. Because of this, Info-Tech separates projects with environmental benefits into two separate arenas:

- » **Victory projects.** These are implemented with little assistance from outside the IT function, and may not require approval beyond senior IT management. The business will likely notice little difference in daily operations. Victory projects typically have smaller up-front investments and tangible, understandable results. IT can quantify cost or energy savings and reduced environmental impact, and promote these benefits to the business. When marketed correctly, victory projects can win the business over on green initiatives led by IT. See Figure 2 for examples of tangible victory projects.
- » **Leadership projects.** These usually require collaboration with departments outside IT. Cooperation is most often needed with facilities or real estate departments in addition to business units. While offering substantial cost savings and environmental benefits, leadership projects can bring the company to a frontrunner position in terms of environmental efforts. The business can leverage this in external marketing to end customers, who increasingly care about their business partners' ecological practices. However, changes in management and operations may be required in multiple departments. Additionally, many leadership projects involve user behavior changes, with the potential of short-term stress and pushback from business end users. Capital investments may be substantial, thus pushing out payback periods.

See Figure 1 to compare the characteristics of victory and leadership projects. Figure 2 gives examples of both types of projects.



## Figure 1. Green IT Victory & Leadership Projects

Source: Info-Tech Research Group

Victory Projects	Leadership Projects
» Planned & implemented by IT	» Requires collaboration between IT, facilities, & business departments
» Requires fewer end-user changes	» Some end-user changes may be needed
» Minimal impact on the business	» May cause business growing pains
» Capital investment is relatively small	» Capital investment may be significant
» ROI is reliable	» ROI may be longer
» <b>Can be internally marketed to win the business over on environmental &amp; cost savings initiatives</b>	» <b>May be externally marketed by the business as environmental leadership</b>



## Figure 2. Examples of Victory & Leadership Projects

Source: Info-Tech Research Group

Victory Projects	Leadership Projects
<ul style="list-style-type: none"> <li>» Basic data center optimizations (temperature, layout, HVAC repair, etc.)</li> <li>» Equipment recycling</li> <li>» Green procurement policy for IT</li> <li>» Basic PC power conservation education</li> <li>» IT equipment metering</li> <li>» CRT monitor replacement</li> <li>» Utility rebates</li> </ul>	<ul style="list-style-type: none"> <li>» Virtualization &amp; server consolidation</li> <li>» Data center redesign/rebuild</li> <li>» Comprehensive telecommuting policy &amp; enabling technologies</li> <li>» Advanced company-wide PC power management &amp; scheduling</li> <li>» Full print output rationalization</li> <li>» Lean application development</li> <li>» Network-enabled facilities power management</li> <li>» Alternative energy sources</li> </ul>

Understand that the divide between victory and leadership projects is defined by incentives and disincentives. A combination of monetary and altruistic incentives usually drives IT to complete victory projects, with minimal assistance from outside IT. However, because leadership projects often require cooperation across the business, a complex realm of incentives – and disincentives – present themselves. Faced with resource or time constraints, other revenue-producing departments will be reluctant to help IT with initiatives which produce no additional monetary value. For many, this outweighs altruism. Bridging this incentive gap between victory and leadership projects will be discussed more in a later section.



## Recommendations

The Green IT Action Plan follows a specific path. See Figure 3, and learn how to craft and execute a plan that can eventually lead the organization to leadership projects with cooperation across the business.

**Figure 3. Green IT Action Plan**

Source: Info-Tech Research Group





1. **Set green IT goals.** In this step, define IT's reasons for pursuing green initiatives, and the specific victory and leadership projects that IT can undertake, and in what time frame. The goals – or mission statement – should explain why IT wants to undertake green initiatives, and what balance of cost savings, efficiency improvements, and environmental impact is acceptable. Temper the work in this step by organizational realities. Victory projects should be realistic and achievable in a shorter time frame (say, six to nine months), and the first leadership projects should be “stretch” targets that the business may agree to, rather than unattainable ideas. When setting green IT goals for both victory and leadership projects, consider:
  - » **Business requirements.** The action plan cannot interfere with IT's mission to fulfill business requirements. For example, it may be unrealistic to virtualize some parts of a data center with servers requiring near-100% uptime, or to purchase thin clients for everyone when some user groups frequently perform graphics-intensive design work. For this reason, virtualization would fall into the leadership category and IT needs to work with certain user groups to ensure virtualized servers will still meet business needs.
  - » **Organizational will.** How progressive is the business? Even if IT has staff members who wish to undertake victory projects that pair environmental responsibility and efficiency, leadership projects may be met with skepticism from the business. Victory projects help convince business stakeholders of cost and environmental success, but baby-step leadership projects may be necessary when cross-business collaboration is initiated.
  - » **Concentration of resources.** Focus victory and leadership project goals on where inefficiency is greatest. For example, if the business has 2000 workstations but only twenty-five servers, end-user power management projects probably offer more potential for cost savings and environmental benefits. In addition, think about the *intensity* of resource use. For example, a single mid-range server that consumes 700 watts is as much as ten to fifteen workstations (and throws off a similarly large heat signature).

Keep in mind that the right selection of goals will vary significantly based on the organization. If conservative businesses don't accept innovative moves such as network-based facilities power management, then projects should be more restrained. For example, virtualization could be as far as the organization could go at the present time. However, do not get discouraged if the business is less than receptive – even basic victory projects, such as changing data center temperature set-points or enabling basic PC power management features, will decrease expenses and move the company to a greener state. If and when the business warms up to Green IT, have these quick victories taken care of and be ready to tackle larger, cross-enterprise leadership initiatives.
2. **Take baseline measurements.** Quantifiable cost and environmental measures for victory projects are essential in proving the case for more innovative projects to the business.



Used correctly, this data promotes understanding of true benefits and drives buy-in from senior stakeholders.

Collect and record baseline measurements for the target asset of each project, with costs quantified if possible. For example, if IT has targeted print management as a victory or leadership project, metrics for proving the results might include cost of print output per month (sheets printed in color and monochrome) and toner or ink. This provides a baseline for both cost and environmental impact (since basic data on trees needed to produce various types of paper is widely available, IT can baseline “tree use”). For most green initiatives, it is relatively easy to come up with baseline measurements before projects begin. Start with the question, “What energy or consumables does this asset use?” See Figure 4 for example projects and their measurements.

**Figure 4. Example Projects & Corresponding Measurements**

Source: Info-Tech Research Group

Example Project	Possible Data Points	Possible Data Collection Methods	Possible Metrics
PC Power Management	<ul style="list-style-type: none"> <li>» Watt-hours per workstation</li> <li>» Hours of PC usage</li> </ul>	<ul style="list-style-type: none"> <li>» Low-cost, plug-in electrical meter</li> <li>» User logging</li> </ul>	<ul style="list-style-type: none"> <li>» Electricity cost</li> <li>» CO2 emitted</li> <li>» “Cars Off Road”</li> </ul>
Server Virtualization	<ul style="list-style-type: none"> <li>» Watt-hours consumed by servers &amp; infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>» Software meters</li> <li>» Physical meters</li> <li>» Formula to calculate percent of utility bill</li> </ul>	<ul style="list-style-type: none"> <li>» Electricity cost</li> <li>» Equipment cost</li> <li>» CO2 emitted</li> <li>» PUE/DCiE*</li> </ul>
Comprehensive Videoconferencing	<ul style="list-style-type: none"> <li>» Hours of equipment usage</li> <li>» Travel costs</li> </ul>	<ul style="list-style-type: none"> <li>» User logging</li> <li>» Conference bridge billings</li> </ul>	<ul style="list-style-type: none"> <li>» Travel cost</li> <li>» Business trips</li> <li>» CO2 emitted</li> </ul>

\* For more information on PUE/DCiE, refer to the Info-Tech Advisor research note, [“If You Measure It, They Will Green: Data Center Energy Efficiency Metrics.”](#)



For certain initiatives, understand that installation of meters or consumption monitoring devices is required for baselining and to measure future improvements. For example, many data centers don't have hard or soft metering for energy consumption, on either the infrastructure or server side. This is a cost IT may need to consider as part of the internal business case for victory projects.

3. **Implement victory projects and measure success.** Execute victory projects as laid out by the goals of the action plan, in a time frame that accommodates IT's mission to meet business goals. Understand that after execution, evidence of results may not be immediate. Undertake ongoing measurement of the initiative. For example, in a PC power management initiative, activity logs should be reviewed on a monthly basis to record data on the time that computers are "on." This measurement is important, because it provides the quantitative proof of results. This evidence is critical in convincing senior stakeholders to participate in future leadership projects.
4. **Communicate success to create victories.** Once results have been compiled over an adequate period of time, market IT's success to the rest of the business. Communicate cost savings and reduced environmental impact resulting from IT's actions. Ensure that both savings and environmental impact are quantified (dollars saved, kilowatt-hours saved, amount of CO2 emissions prevented). Tell these success stories to both end users and senior management. Educate all stakeholders on both the altruistic and economic impact of green IT initiatives. They will be more likely to ally themselves with IT down the road.
5. **Build commitment.** Once senior management learns about the value of IT's past initiatives, they will be more likely to support wider-ranging initiatives. However, business cases are an excellent vehicle to formally build commitment throughout senior management. Initiatives requiring cross-department collaboration are unlikely to succeed without a unifying senior sponsor – and this person will want to see the proof in the pudding. In the business case, include:
  - » A brief summary of past successes, with full quantification of benefits (dollars saved and cars off the road, for example).
  - » A description of the new initiative, in non-technical language.
  - » A cost summary for the project, including time for implementation.
  - » A projection of cost savings, avoidance, or revenue, and the reduction in environmental impacts. For leadership projects, the payback may be farther out, so ensure this is accounted for. Ensure that increasing energy costs are also included, if necessary.
  - » A statement of risks, and what IT will do to mitigate them. Highlight the need for full executive sponsorship, cross-department cooperation, and aligned monetary incentives.



- » The external marketing benefits of green IT leadership projects. Focus here on the fact that IT can produce meaningful, quantifiable results and that current and potential clients are increasingly concerned with the environmental profile of their business partners.

For more information on building the business case, refer to the ITA Premium tool, “[Cost/Benefit Analysis Tool](#),” and the Info-Tech Advisor research note, “[How to Build a Business Case](#).” For more information on getting business units on board, refer to the ITA Premium research note, “[Use Chargebacks and SLAs to Wean Business Units Off the Box](#).” This particular note offers best practices for working with the business in virtualization and utility infrastructure. Another Info-Tech Advisor research note, “[Mitigate Miscommunication with an Internal SLA](#),” addresses the use of service level agreements (SLAs) for making commitments to the potentially skeptical business units.

6. **Attain buy-in and unify management.** In presenting the business case to senior management, stress that individual department management must be unified in leadership project efforts. For example, the installation of network-controlled environmental management systems will fail if facilities or real estate won’t cooperate or offer up a share of the cost. At the same time, ensure such departments share in successes. Monetary incentives help here; if departments share in the potential cost savings, or are simply compensated for their time and effort, they will be more likely to buy in.

Do not underestimate the importance of unified management. It may only require the CEO or COO to sit down at a table with the CIO and the VP of Real Estate once to open lines of communication to start collaboration. In fact, some managers simply don’t see cost savings and environmental benefits of particular initiatives until they are highlighted by a champion, whether that is the CFO, CIO, or some other stakeholder. When benefits are clear, they are more open to participation. However, leadership projects are more likely to fail without adequate education and unification in this step.

## Bottom Line

Learn to build a Green IT Action Plan by first setting realistic goals and choosing projects that IT can perform autonomously. The resulting environmental benefits and cost savings help prove that more extensive projects are both feasible and necessary. Use this knowledge to promote cross-enterprise collaboration on leading green initiatives.



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