



An Outlook: Green IT in Singapore

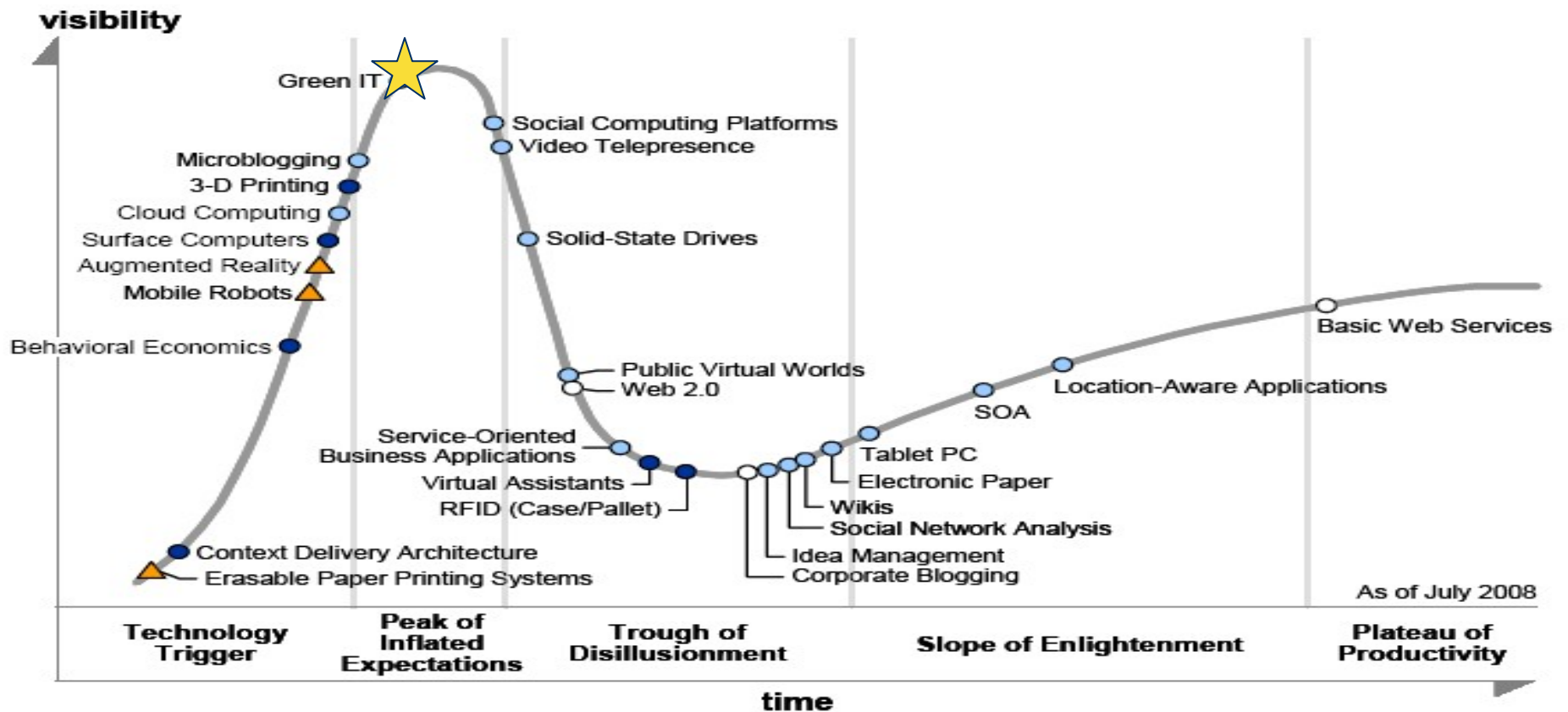
*Institute of Systems Science
National University of Singapore*





Gartner Hype Chart

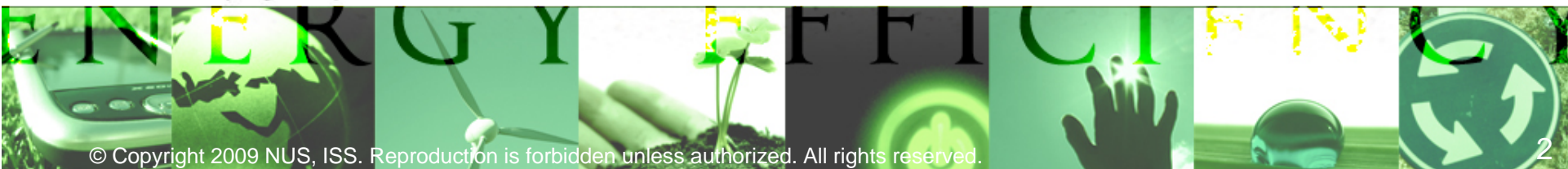
Figure 1. Hype Cycle for Emerging Technologies, 2008



Years to mainstream adoption:

- less than 2 years
- 2 to 5 years
- 5 to 10 years
- ▲ more than 10 years
- ⊗ obsolete before plateau

Source: Gartner (July 2008)





Inaugural Green IT Survey

- Developed by Institute of Systems Science, NUS
- Collaborative effort by business, industry; government agency & partners
- Targeted at senior management; CIO; CFO; IT Director; IT Managers
- Sent to more than 15,000 companies from SBF and its affiliates member databases
- Research period: Aug 08 to Oct 08
- Total respondents: 327
- Confidence Level: 95%
- Margin of Error: 5.4%





Definition of GREEN IT

The study and the implementation of sustainable practices of utilizing computing resources in an efficient and environmentally friendly manner



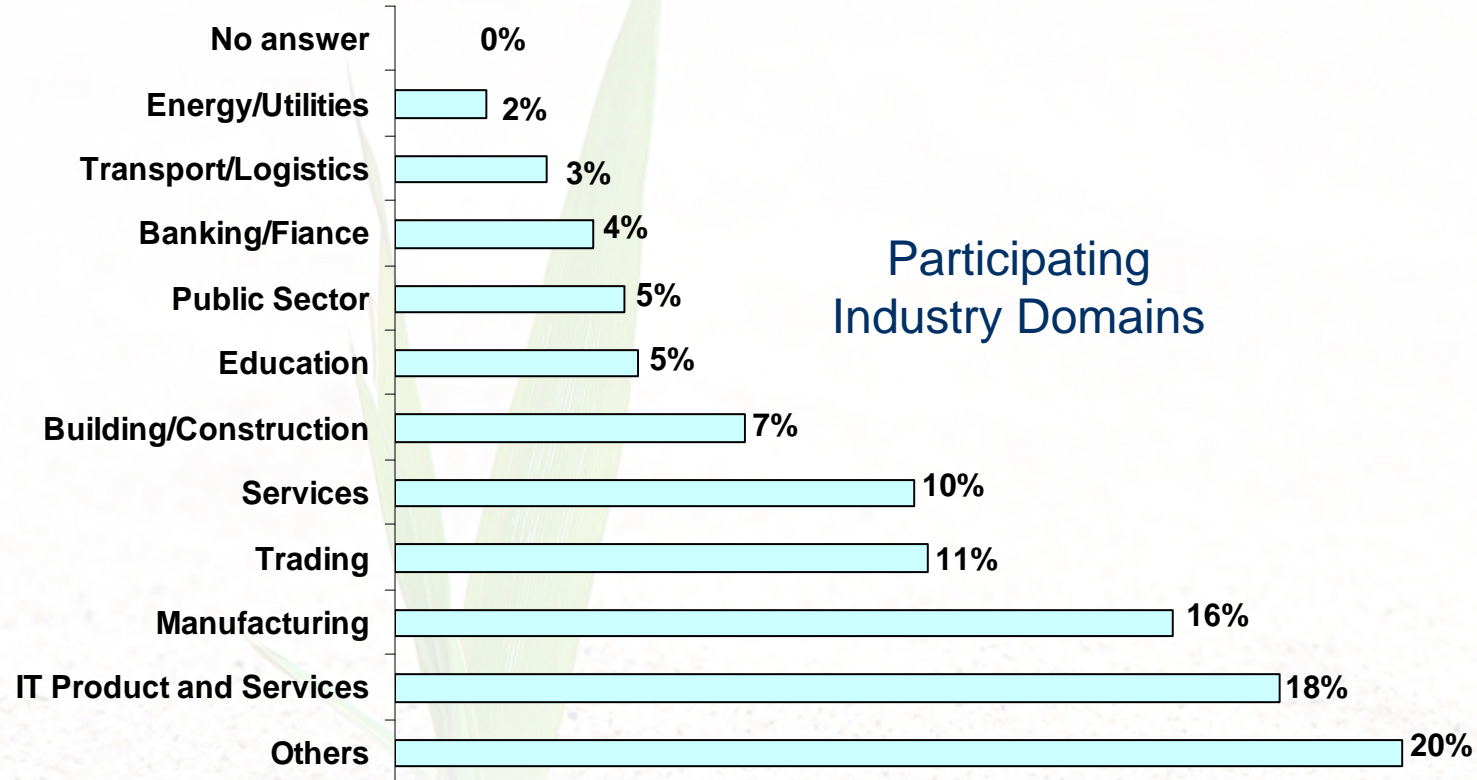


Objectives of Survey

- 1. Determine Singapore's current interests, adoption and implementation plans in Green IT**
- 2. Determine the potential market value to businesses and industries**
- 3. Derive critical information required to roll-out an effective implementation plan for National Green IT training, adoption & implementation**

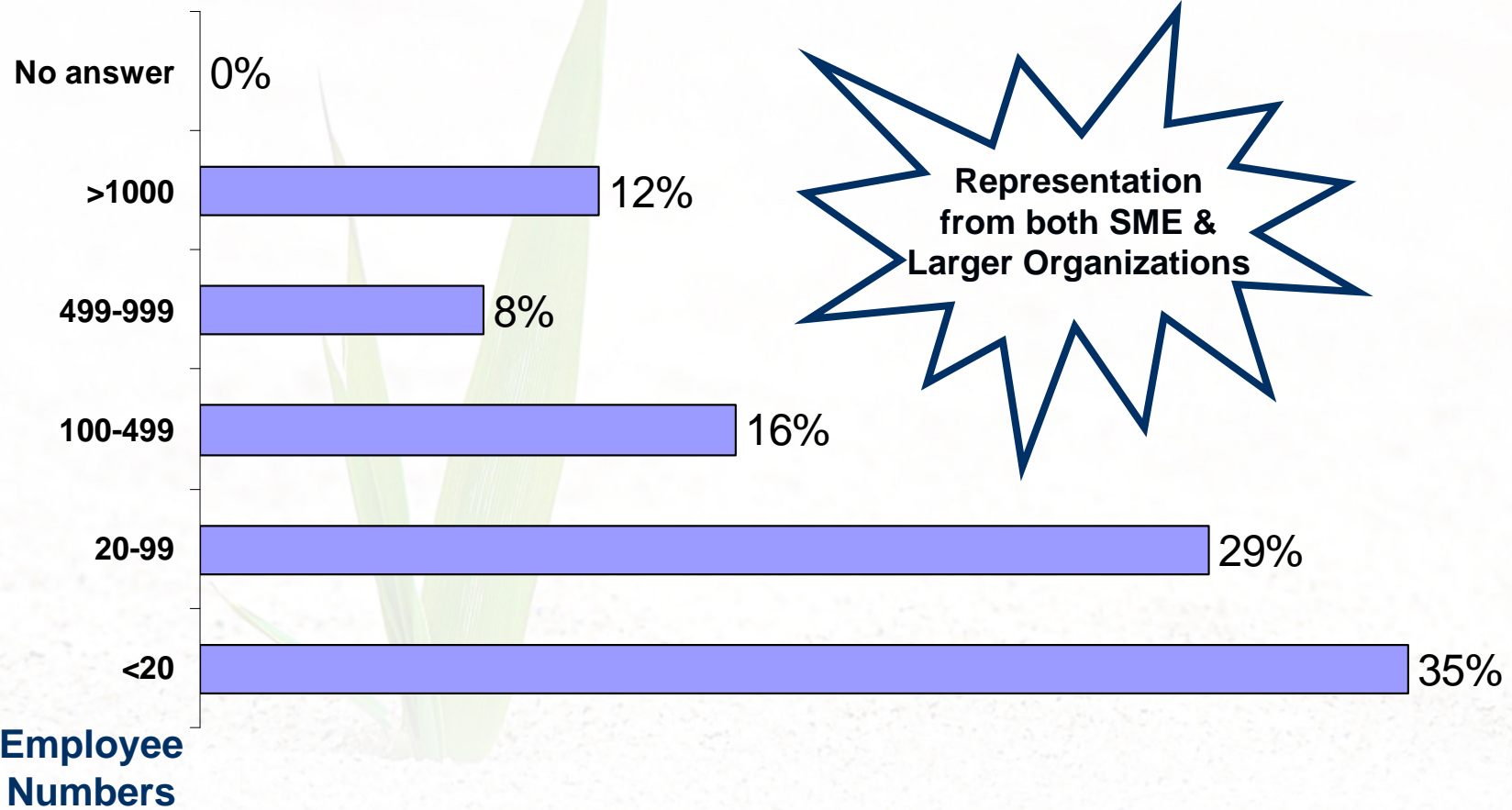


Industry Domains

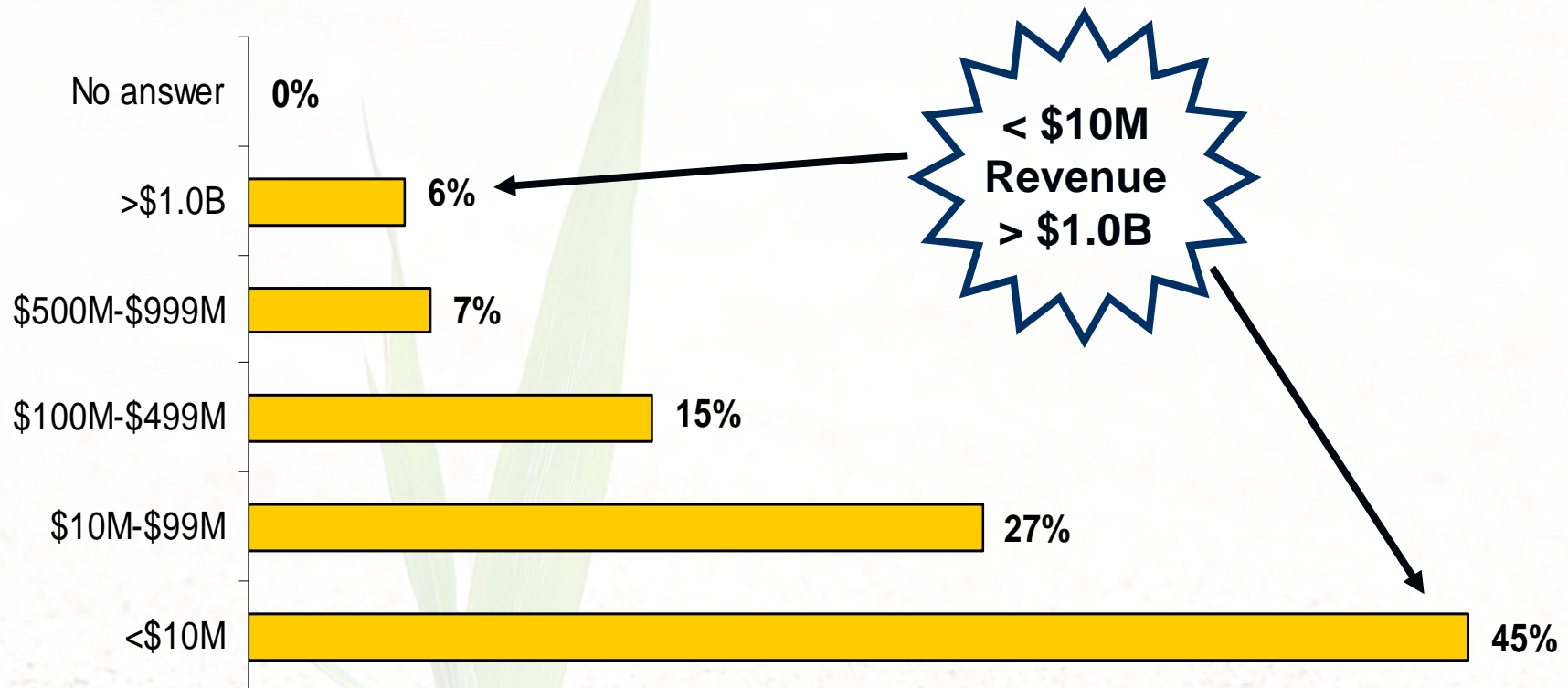




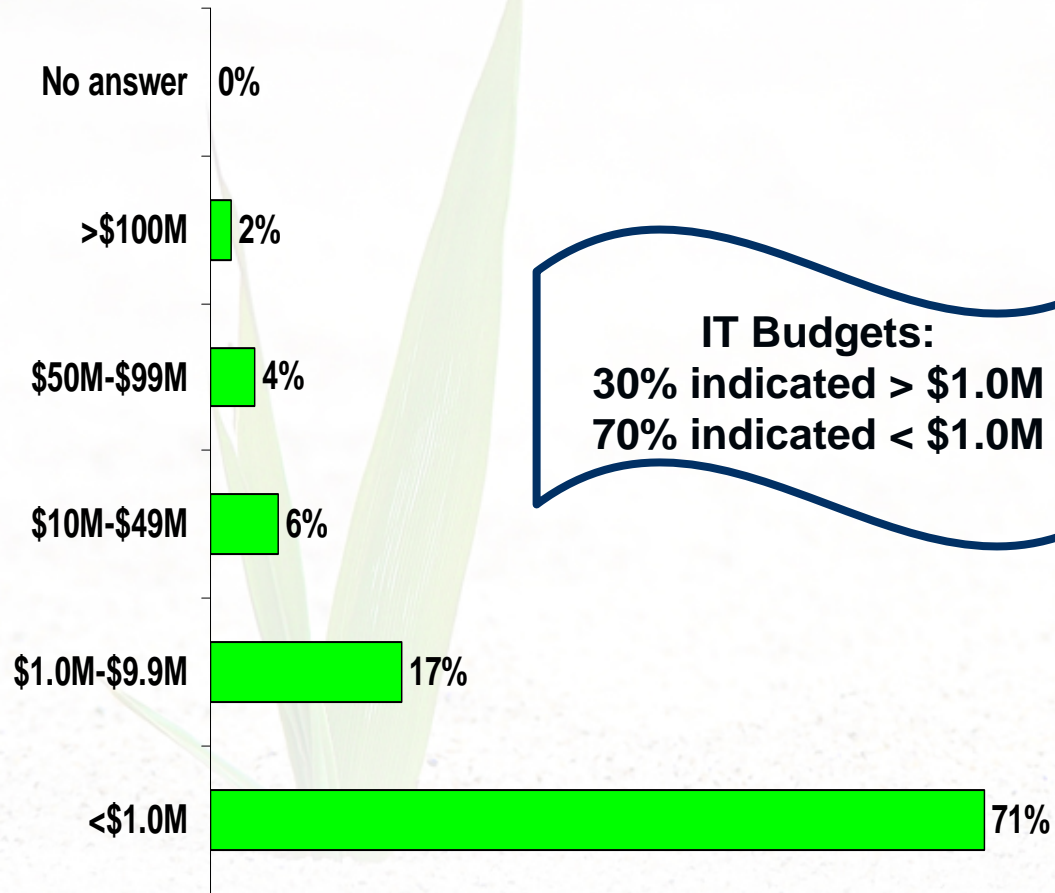
Employee Strength



Revenue of Organization



IT Budget in Singapore





Green Awareness...

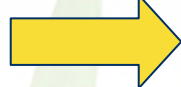




Sample Segmentation

Category 1:
42 respondents

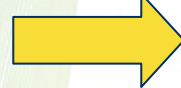
13%



IT Vendors + aware of Green IT & its benefits

Category 2:
108 respondents

33%



Non-IT Vendors + are aware of Green IT & its benefits

Category 3:
177 respondents

54%



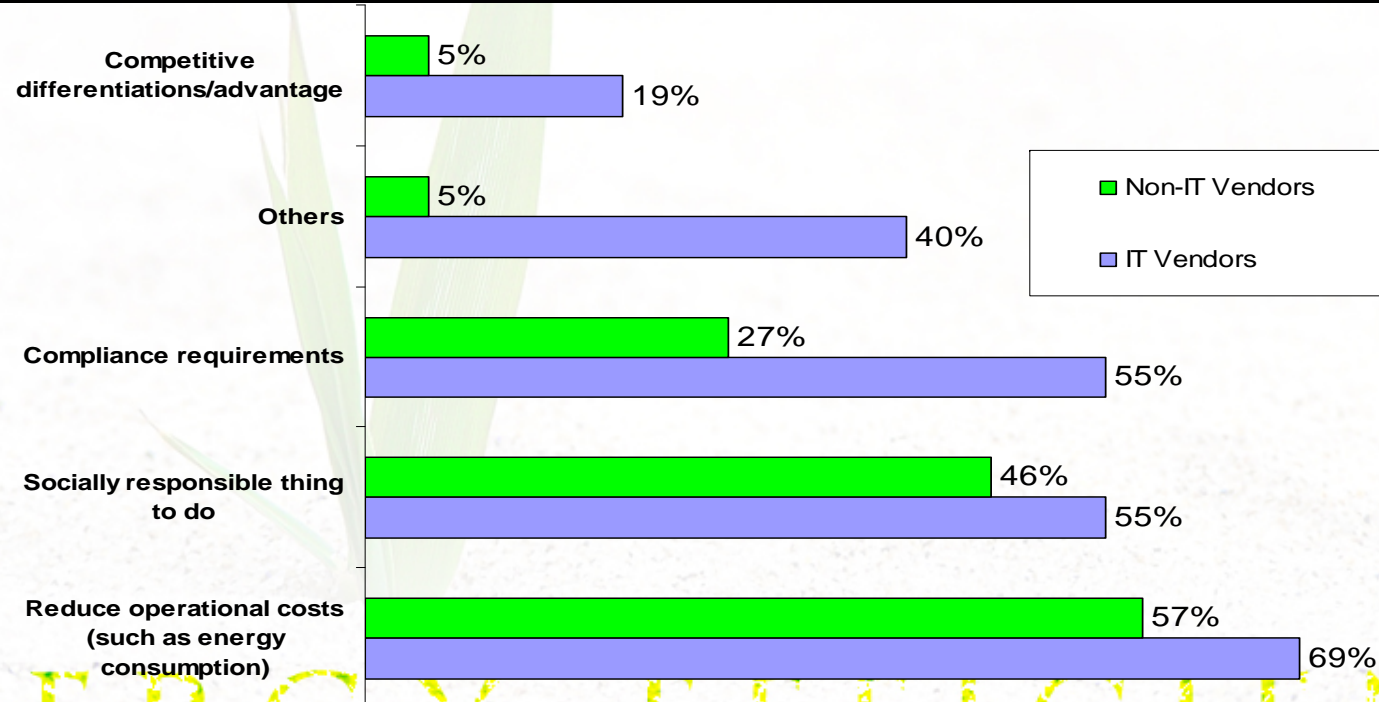
Indicated that they are unaware of Green IT & its benefits





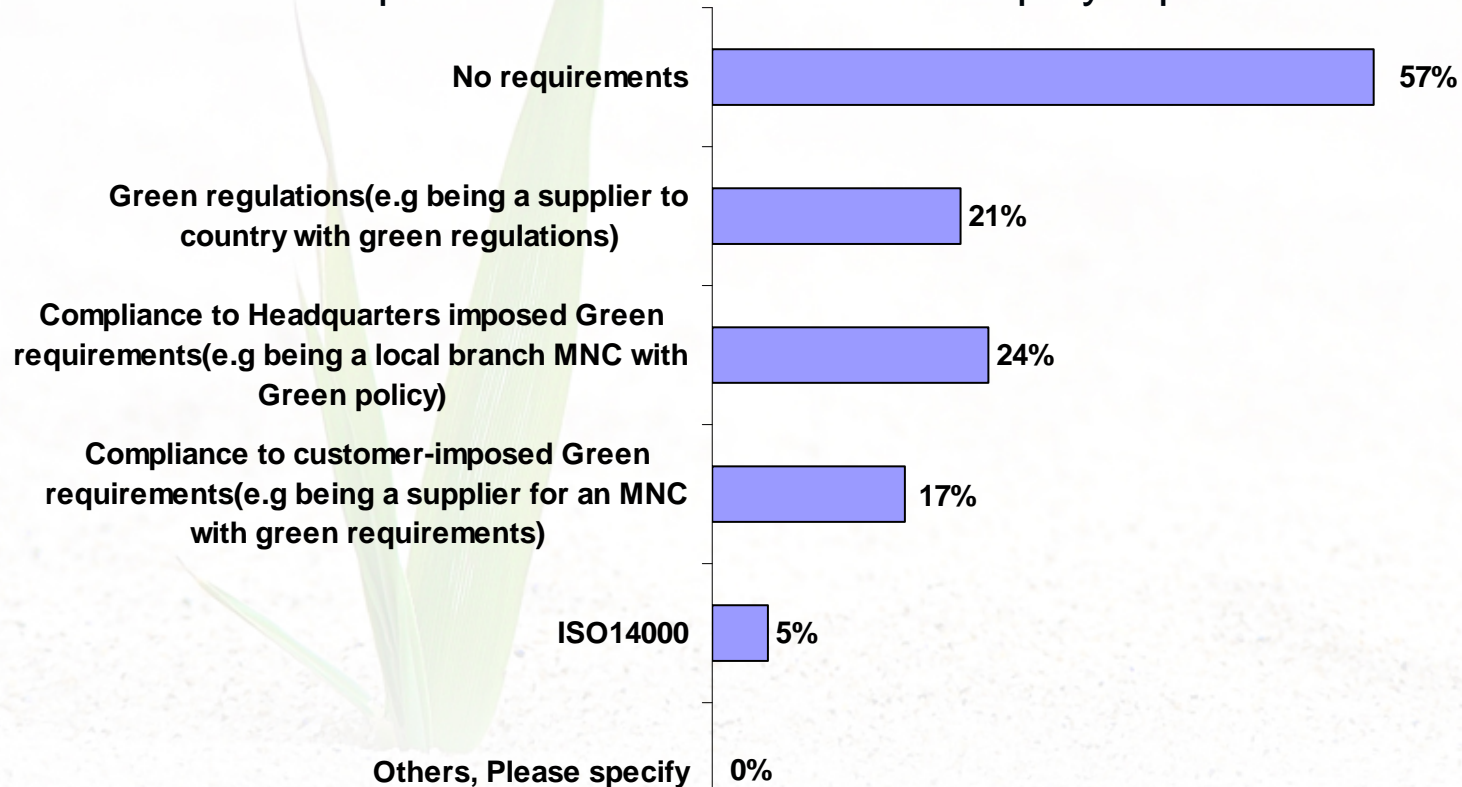
Rank Primary Business Drivers to embark on Green IT Initiatives...

Primary Business Drivers	CAT 1 - IT Vendors		CAT 2 - Non-IT Vendors	
Reduce operational costs (such as energy consumption)	69%	#1	57%	#1
Socially responsible thing to do	55%	#2	46%	#2
Compliance requirements	55%	#2	27%	#3
Others	40%	#3	5%	#4
Competitive differentiations/advantage	19%	#4	5%	#4



Green Compliance?

Is your organization required to comply with Green requirements for which IT has to play a part?





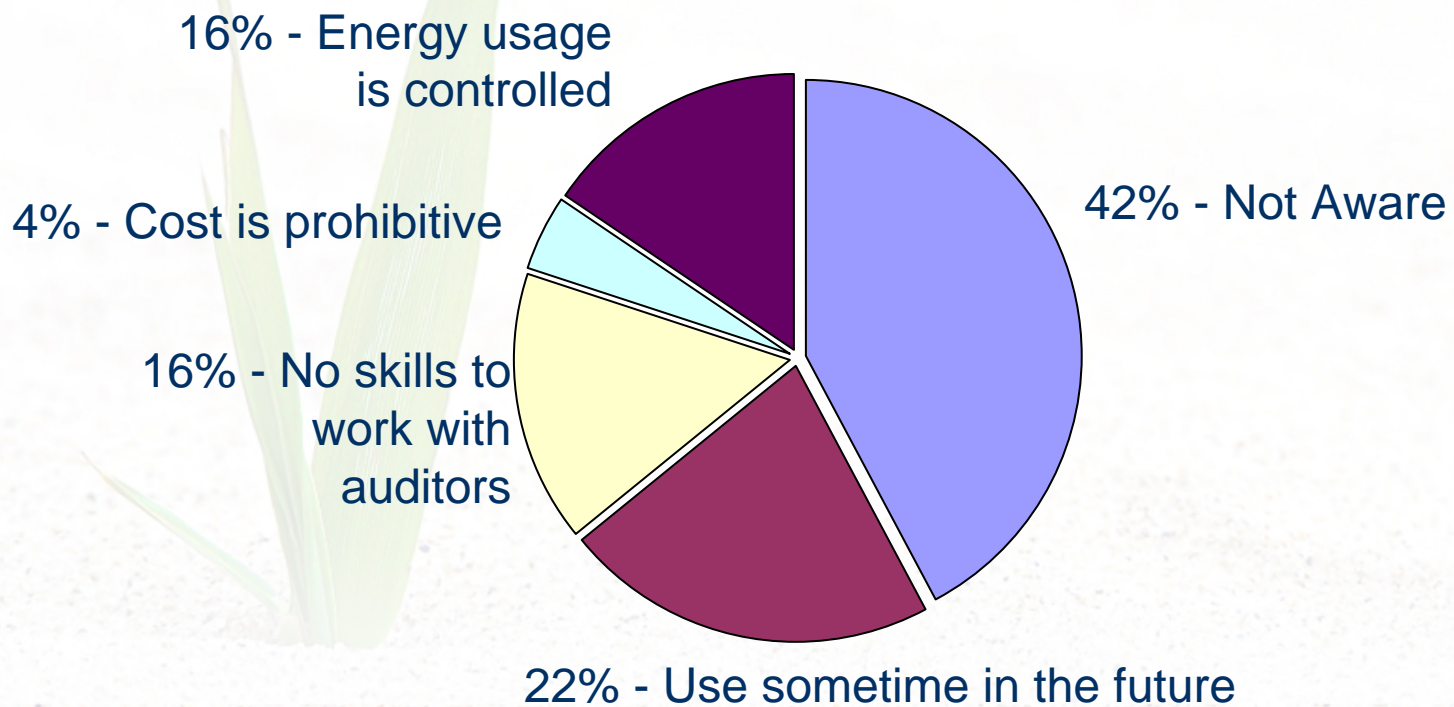
Green Incentives...





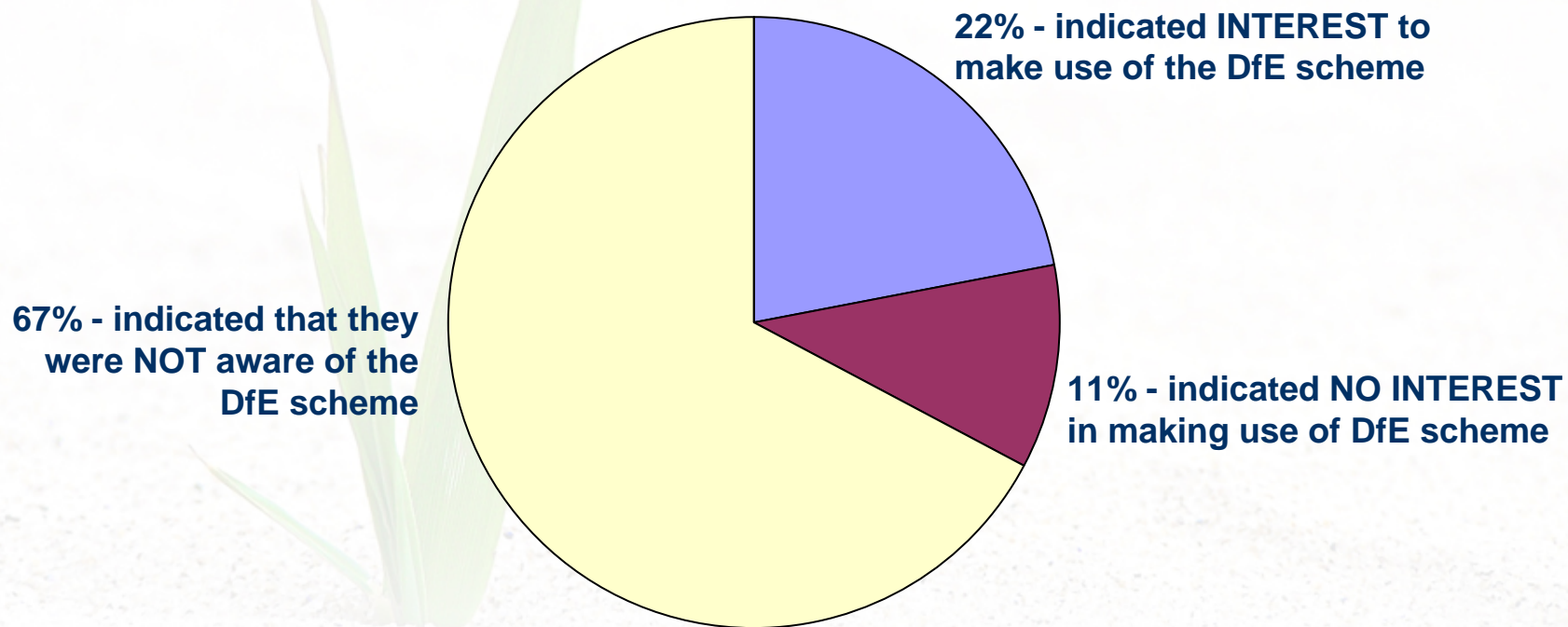
Monetary Assistance + Energy Audit

Singapore Government offers monetary assistance to support Energy Audit through NEA's Energy Efficiency Improvement Assistance (EASe) scheme. Please indicate your interest in taking advantage of this scheme.



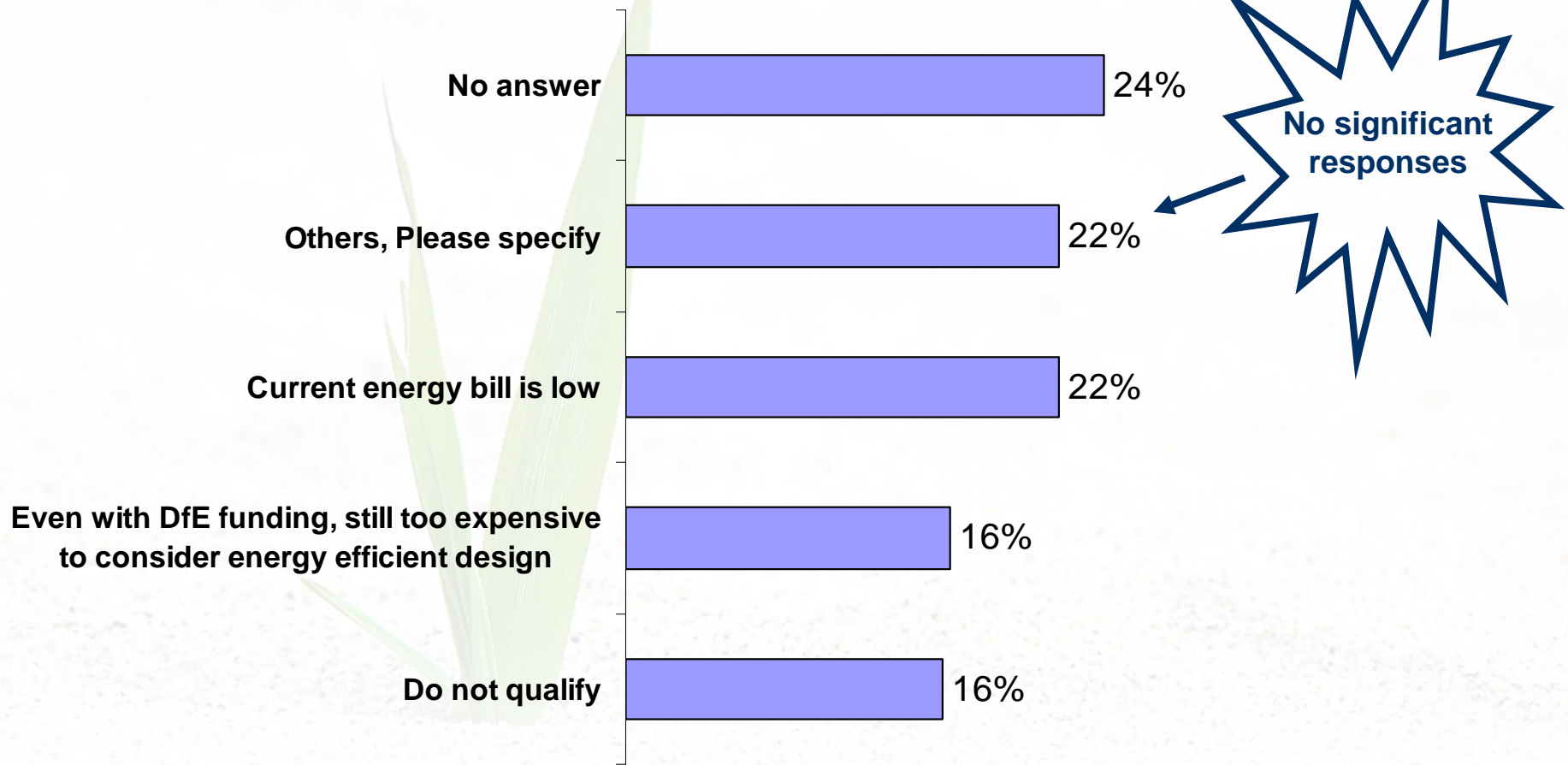


Are you aware that government funding is available to new facilities to integrate energy efficiency considerations into the development plans early in the design stage through NEA's Design for Efficiency Scheme?





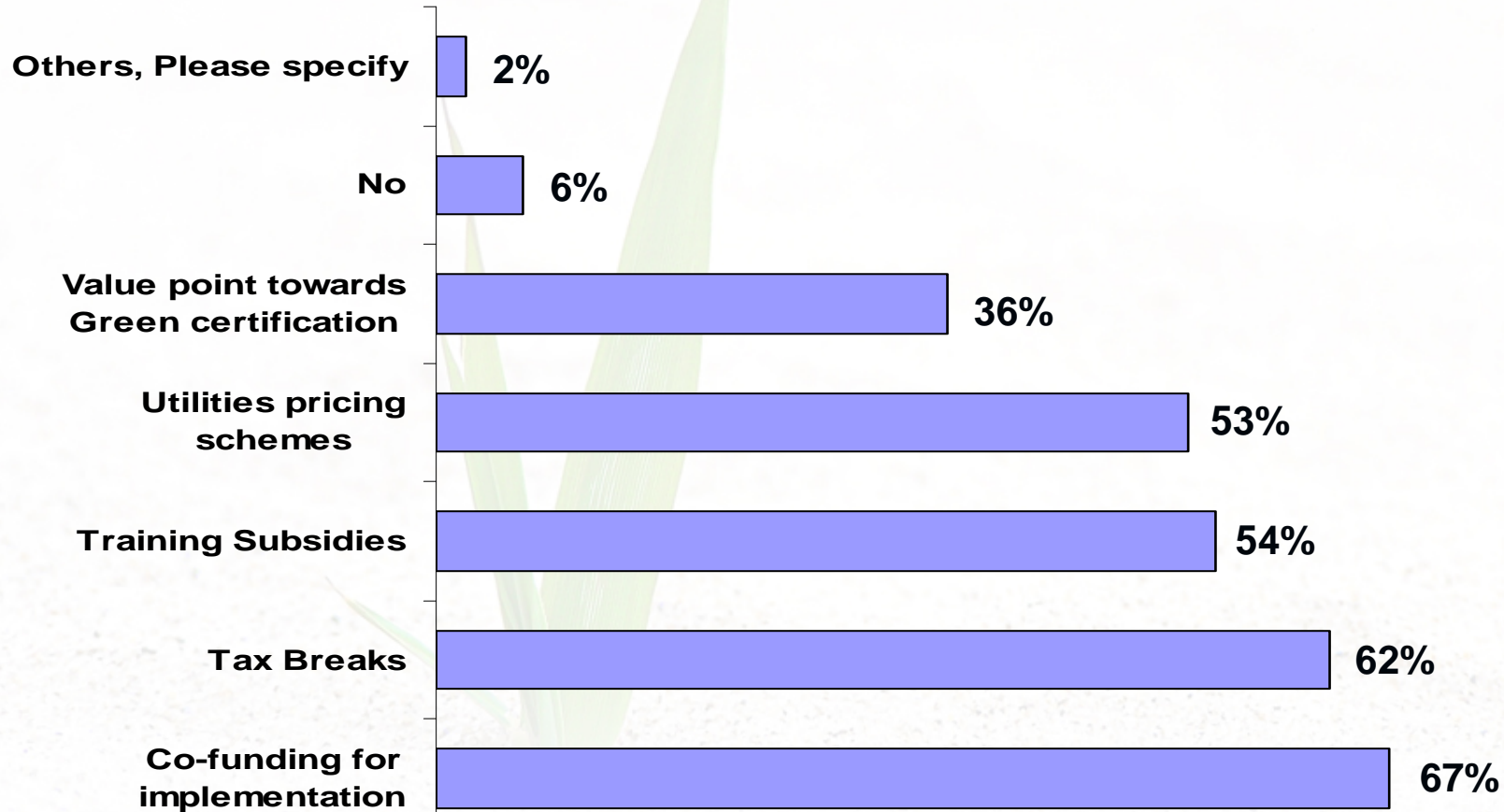
Unaware of Design for Efficiency?





Incentives to Influence Implementation...

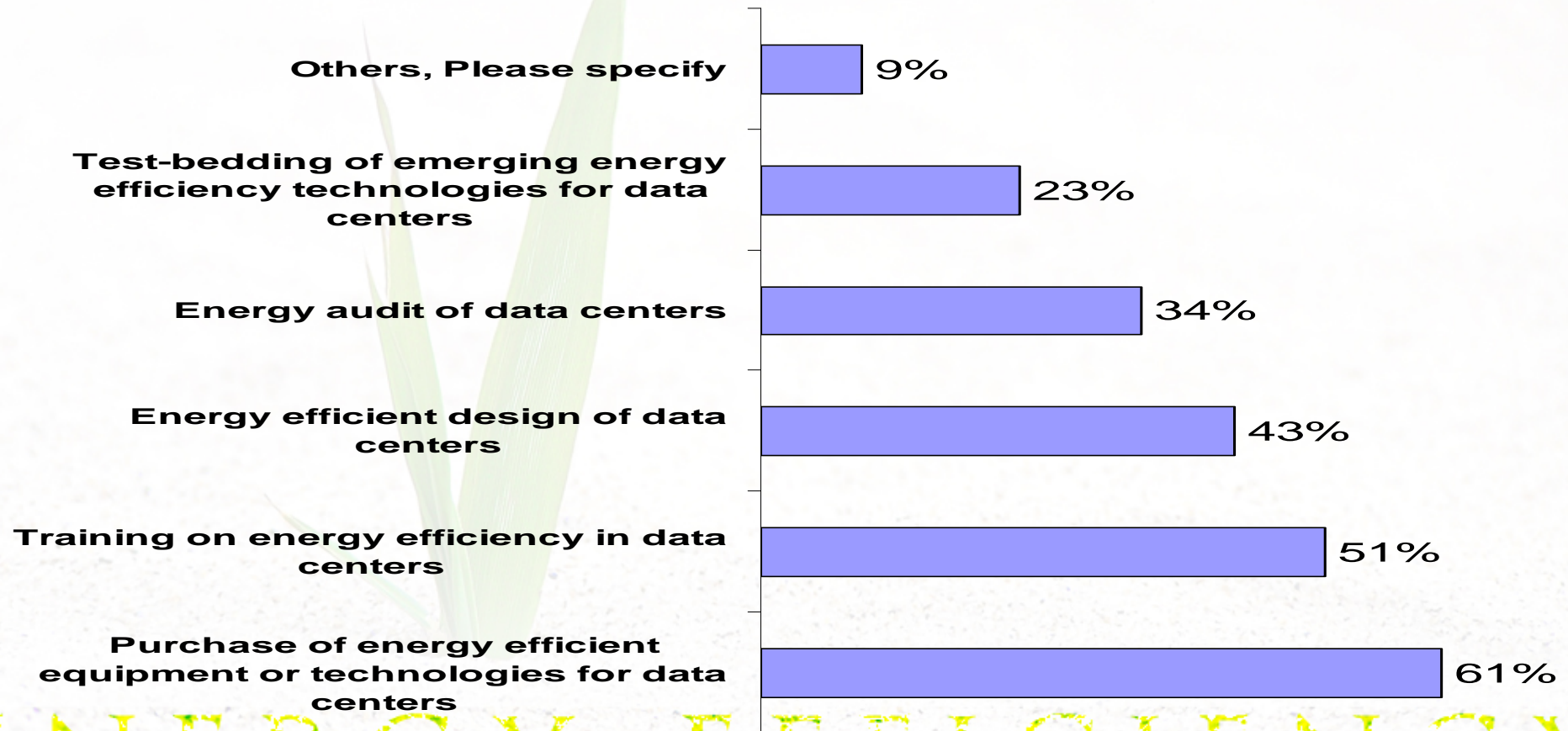
What kind of government incentives will influence your organization's decision to implement Green IT practices, systems and solutions?





Incentives + Green Initiatives

If government incentives are provided, will your organization be interested to implement any or all of the following?



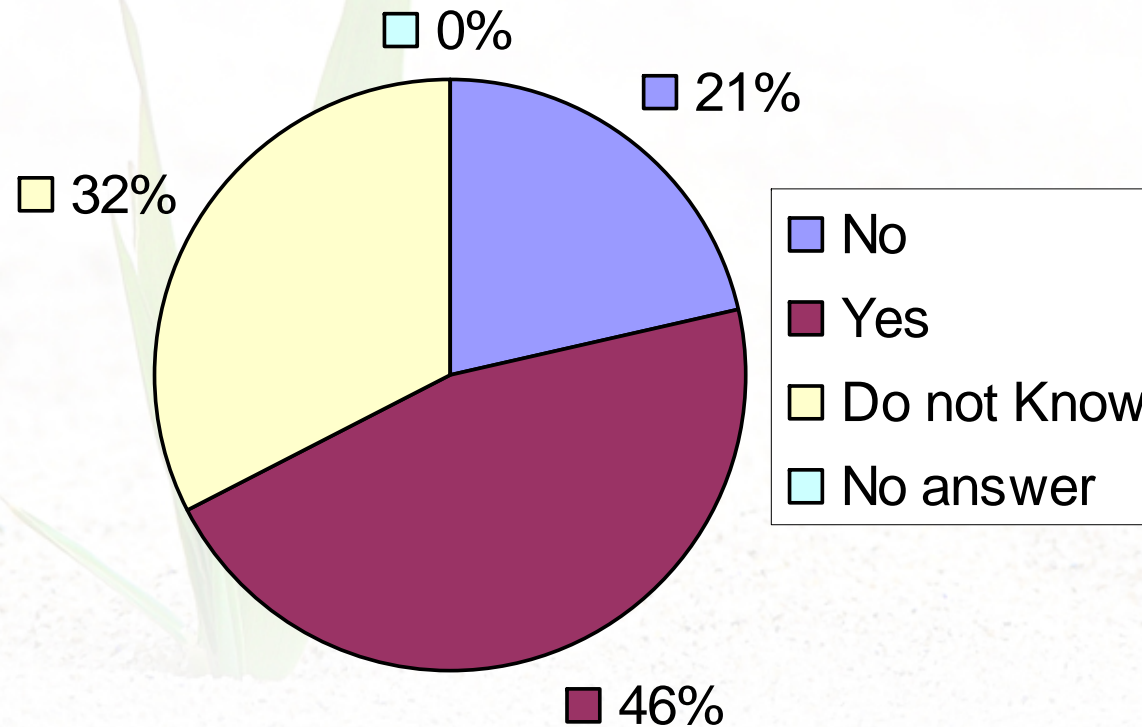


Potential Green Market Opportunities...



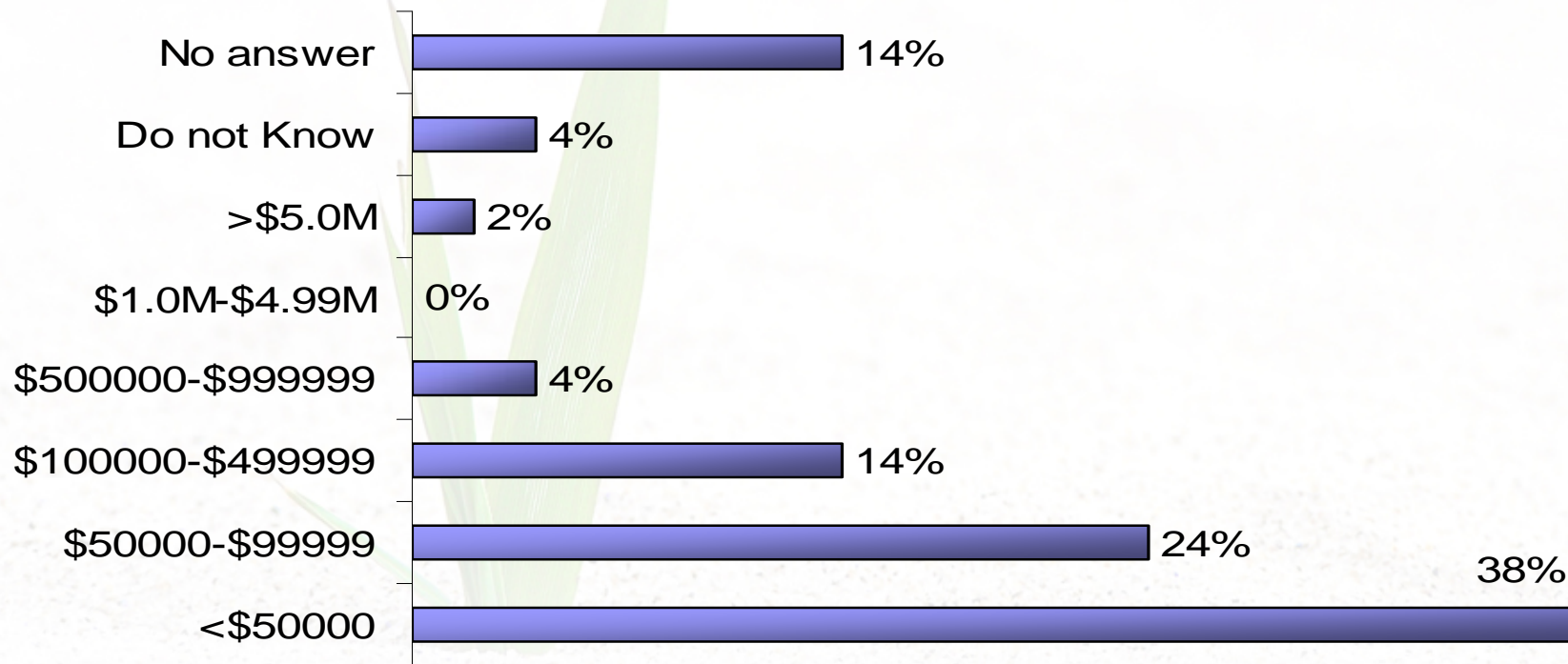
Spend Money to Save Money?

Besides budget for the usual IT equipment replacement, would your organization be willing to incur additional up-front budget for projects that achieve future savings through investing Green IT technology or Green IT best practices?





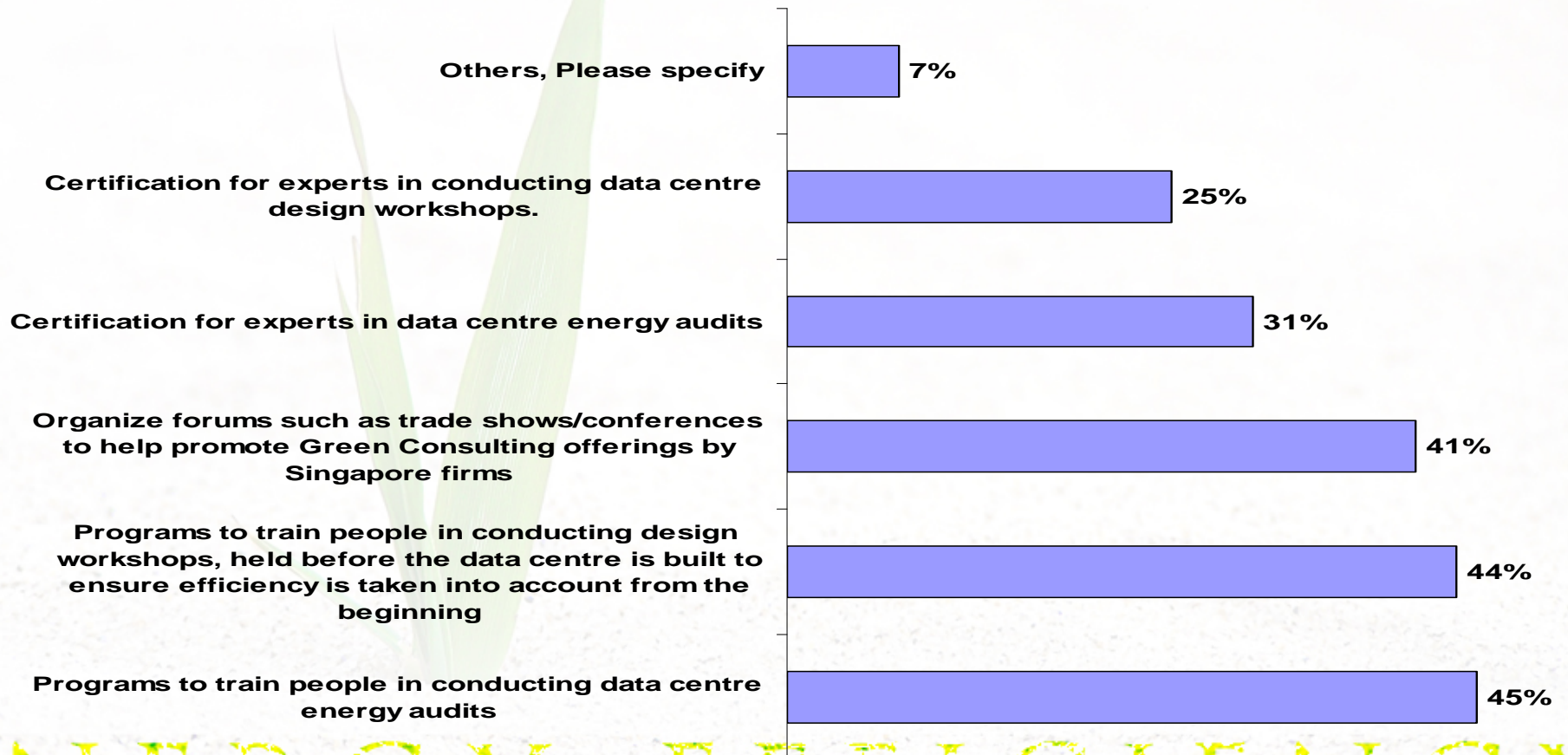
How much of such non-equipment replacement annual budget your organization would be willing to spend on Green IT projects?





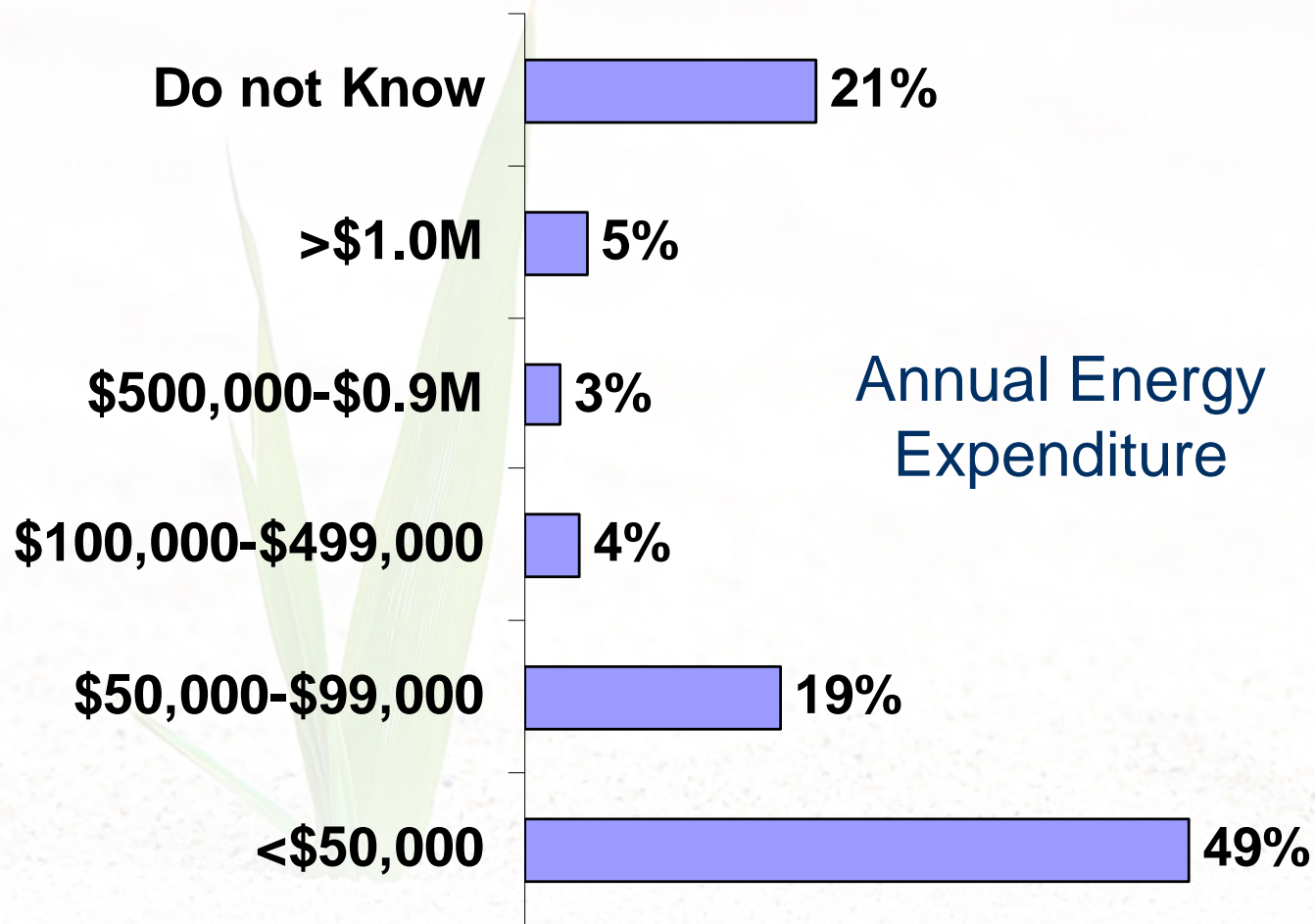
Programs to Grow Green IT Industry

Would your organization be interested in government programs to grow the Green IT industry (for e.g. a Green IT section in IT trade show under the iDA umbrella)?



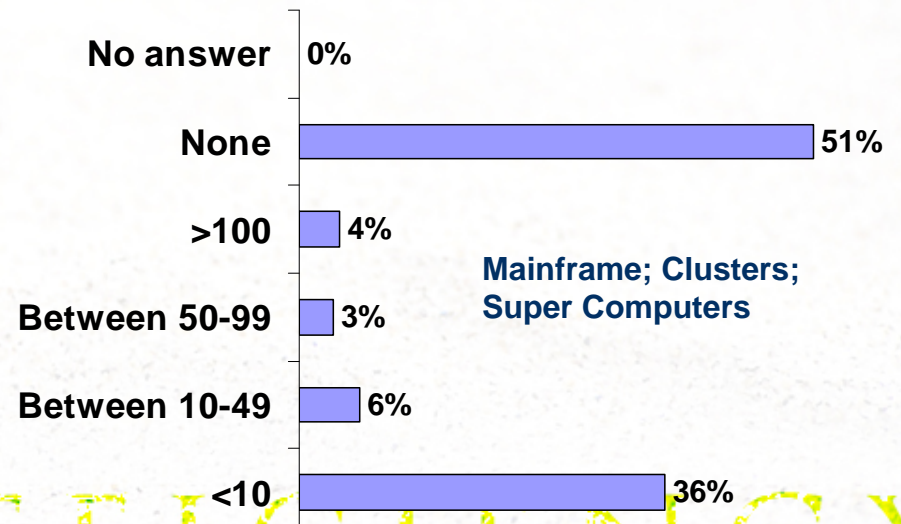
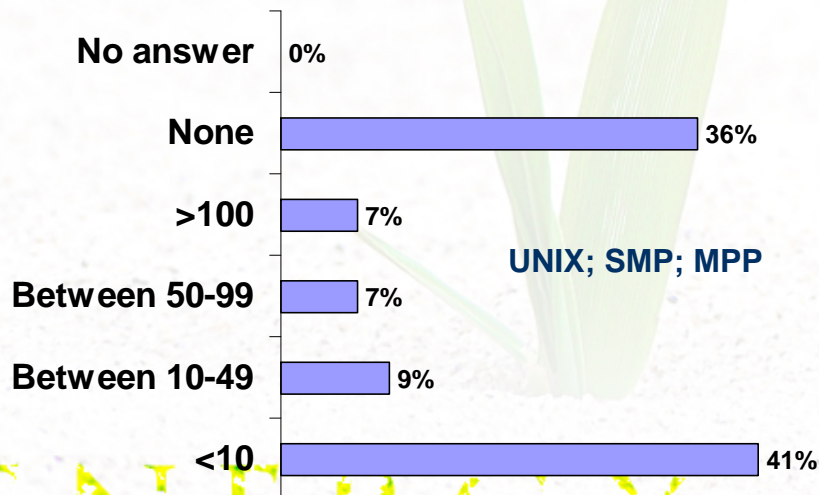
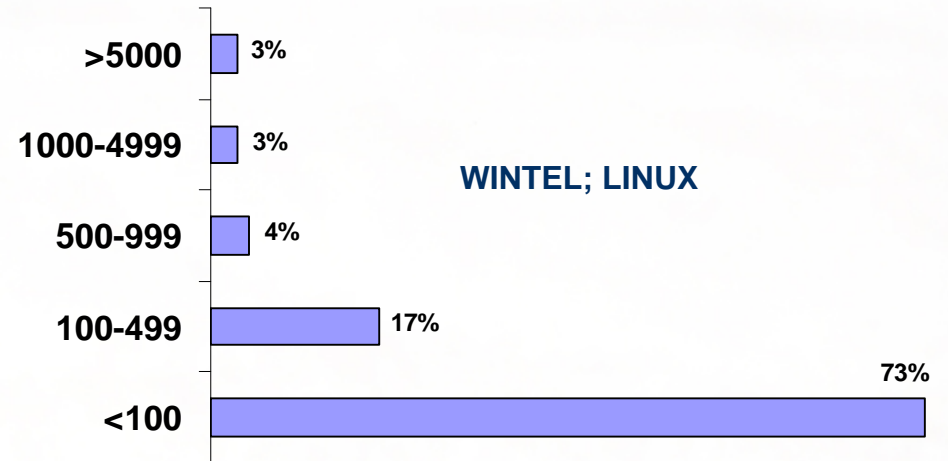
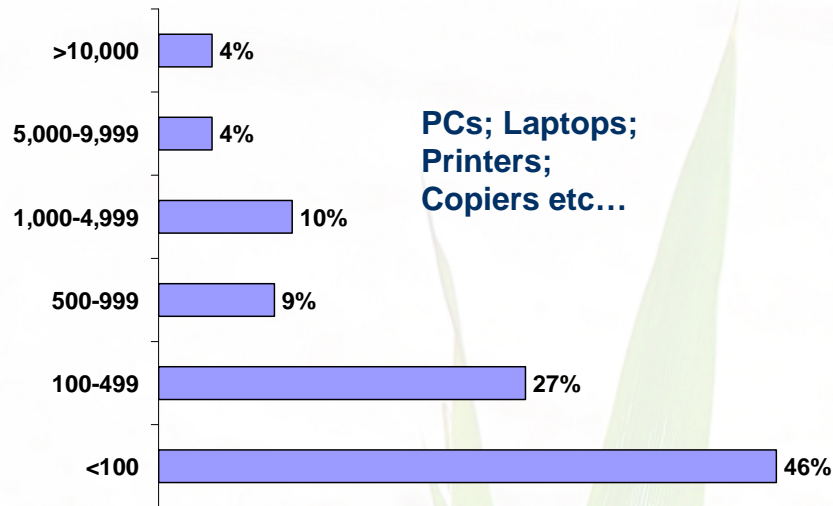


Annual Energy Bill

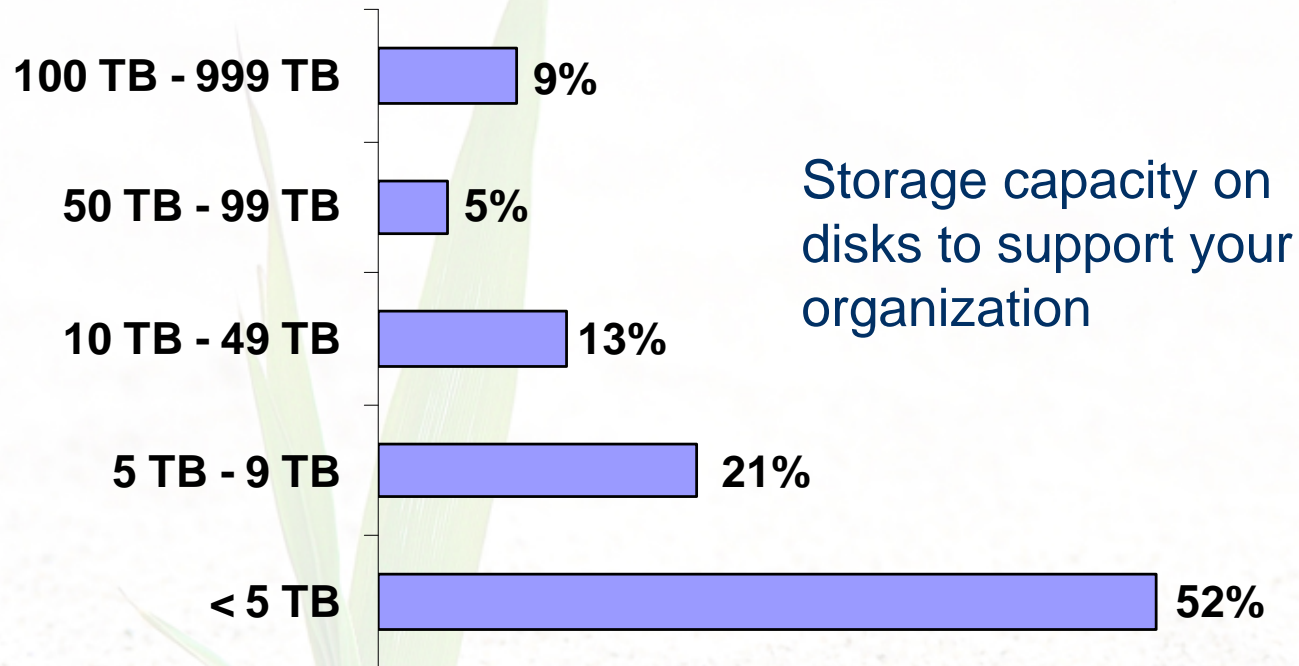




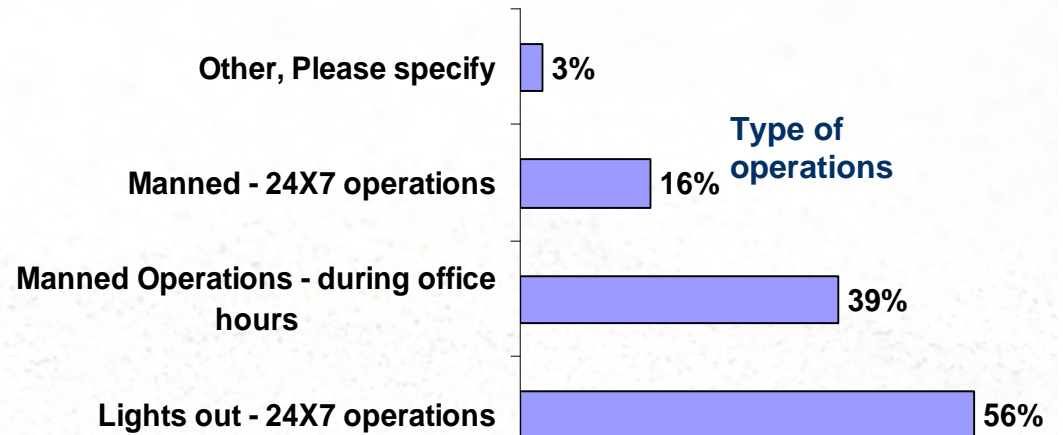
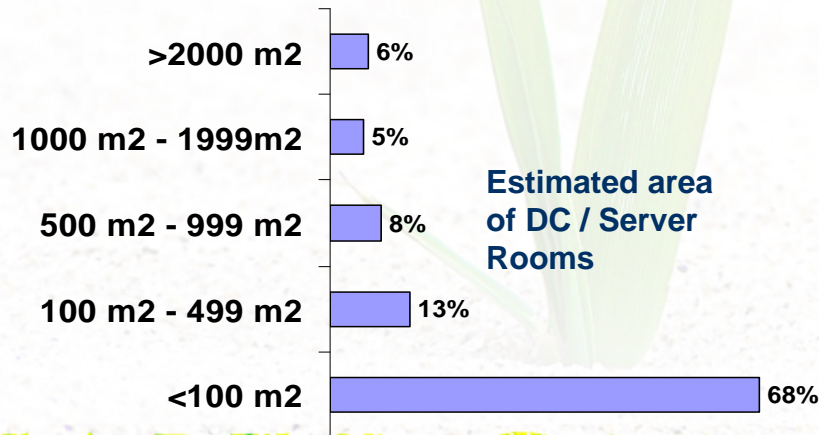
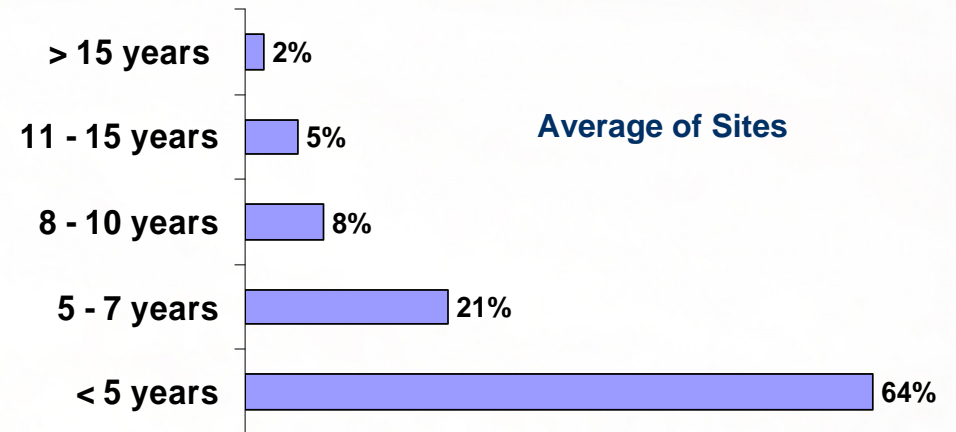
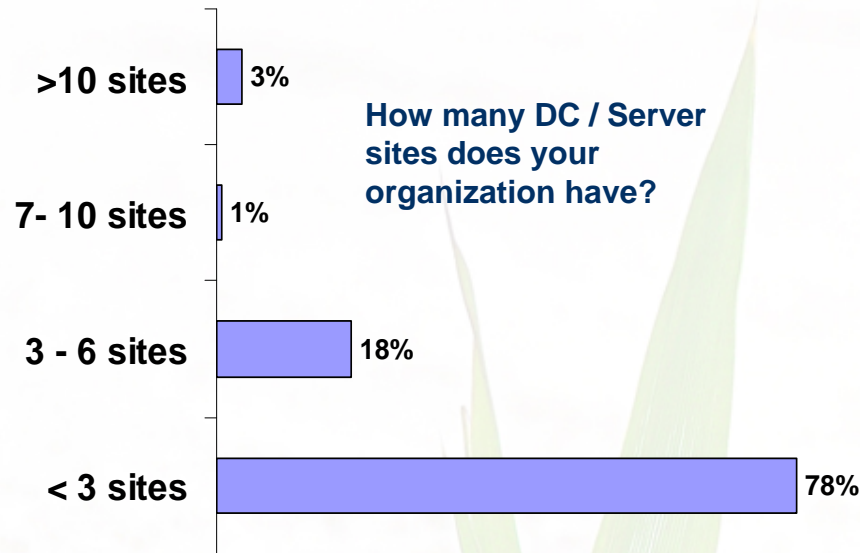
Productivity Equipment



Data Storage Capacity

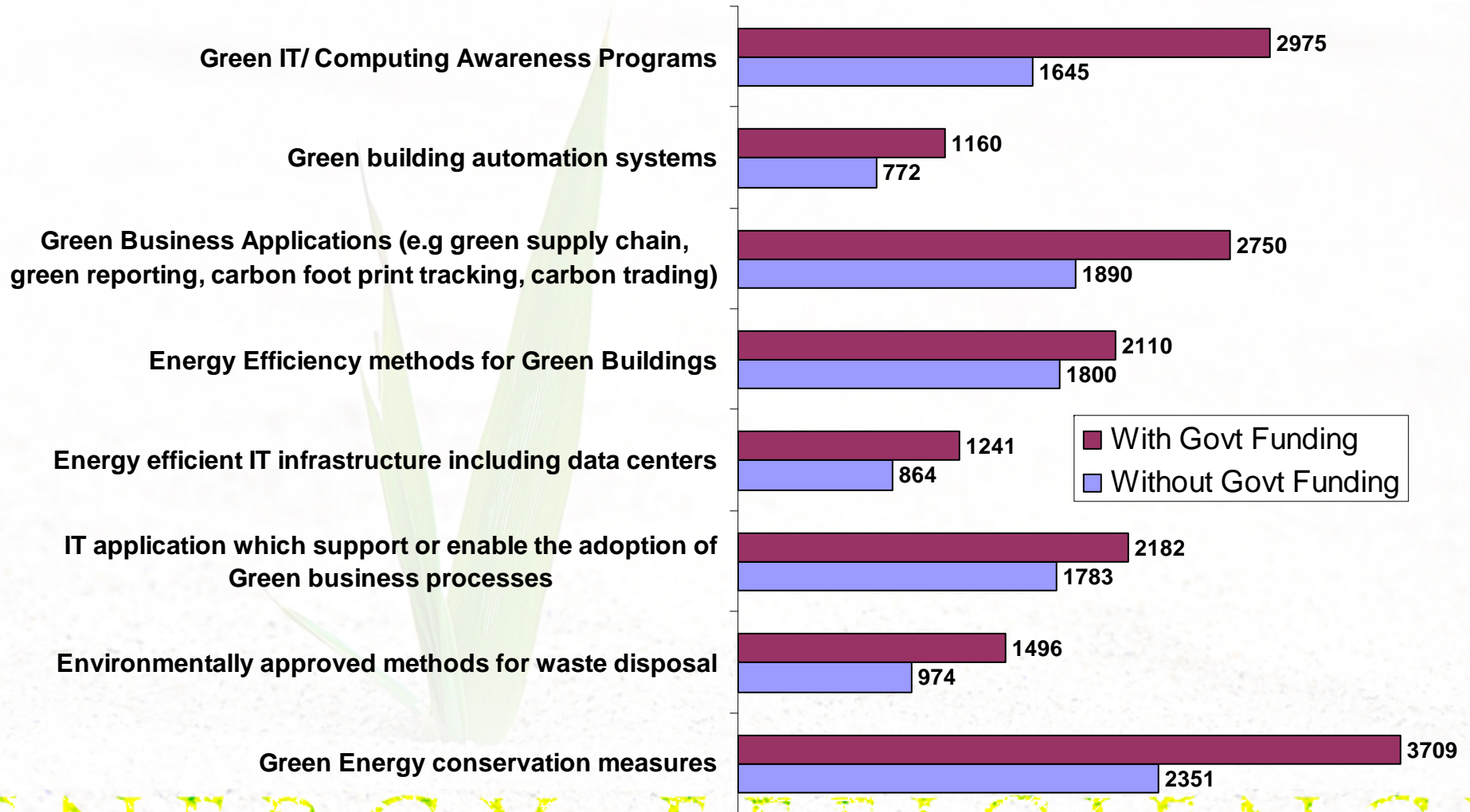


Data Center / Server Rooms...





Government Funding + Training





Survey Summary (1)

1. Determine Singapore's current interests, adoption and implementation plans in Green IT

- 54% indicated that they are unaware of Green IT and its benefits
- Green IT is still at an infancy stage in Singapore

2. Determine the potential market value to businesses and industries

- Has tremendous growth potential since there is an increasing level of interest; incentives; training; adoption & implementation
- There is a willingness to invest in Green IT technology; best practices; training and other Green programs





Survey Summary (2)

3. Derive critical information required to roll-out an effective implementation plan for National Green IT training, adoption & implementation

- Many respondents have indicated that they are not familiar with the various government incentives that they are potentially eligible to leverage on
- Respondents have over whelming indicated that they are keen to have the help from the Government
- Co-funding of Green IT implementations
- Tax breaks
- Training incentives





Insights & Next Steps

- Global warming awareness
- Current economic down turn and the impact of Green IT and its benefits
- Setup of Green IT Technical Committee under the purview of IT Standards Committee

