Defining Accessibility and Alt Text

Accessibility is a general term used to describe the degree to which a product, device, service, environment, document, or Web page, is available to as many people as possible — including people with disabilities.

One way to make an online document, such as a report or Web page, accessible is the addition of Alternative Text or “Alt Text.” Designed specifically for graphics, images, and figures, Alt Text is language added in the form of tags to electronic files. Those tags are converted to audio when read by a screen reader. Alt Text should be written to describe and summarize graphics, figures, images, and tables that are inserted as images, and should provide any information that a sighted person would infer by looking at graphics.
Federal and New York State law requires that all NYSERDA documents appearing on NYSERDA’s website be made accessible. Therefore, authors are required to provide Alt Text for all images in documents published by NYSERDA, in accordance with Section 508 of the Americans with Disabilities Act. Visit nyserda.ny.gov/About/Doing-Business-with-NYSERDA for a more detailed explanation of NYSERDA’s responsibilities to ensure accessibility.

2 Accessibility Basics

Accessibility should be considered early in the development of any document. What content is included in each figure and how the document is formatted are the two main components that can affect a document’s accessibility.

Here are some basic guidelines for creating accessible documents:

- Create simple tables with a logical header and data structure.
- Use Styles in Word 2007 or later to format all content in the document.
- Add Alt Text to all images, figures, and graphics.
- Do not use long URLs or “click here” as the text for a link.

2.1 Creating Graphics with Accessibility in Mind

Alt Text should not be an afterthought; it can figure into how the graphics in a document are prepared from inception. In many cases, some information such as color, texture, or even values in a graphic can add unnecessary complexity, which makes it difficult for a sighted person to understand and for writing the Alt Text to make the graphic accessible. If a component of a graphic is not absolutely necessary, consider omitting the component.

When preparing graphics, think about which types of information could be left out. Effectively describing charts, graphs, tables and diagrams involves:

- Communicating the purpose of the graphic.
- Determining which pieces of information are most significant.
- Establishing a logical, user-oriented order to the information communicated through the images.
In Figure 1, the map shown contains so many labels that you cannot read most of them. It would be better to select a map that contains only labels for pertinent locations. In contrast, the bar graph in Figure 2 is simple and direct, making the Alt Text much simpler as well. When describing an image, do not include a description of what type of image is pictured. Phrases such as “Photo of,” “a graph of,” or “a drawing of” should not be used.

**Figure 1. Overly complex figure**

This figure contains so much information that it and is hard to read and understand even for a sighted person.
Figure 2. Example graphic shows only pertinent information along with a succinct Alt Text description

1) Appropriate Alt Text: Nearly twice as many dogs were in the park on Saturday compared to Sunday, with 31 on Saturday and 17 on Sunday.

2) Inappropriate Alt Text: Two slightly three dimensional silver rectangles with some numbered blue dotted lines show how many dogs were in the park on Saturday and Sunday.

When included, items that repeat the main purpose of the image can be eliminated from the Alt Text to keep the image description succinct and easily interpreted. The image in Figure 3 is closely related to the subject matter of the page content but not directly discussed. The painting was inspired by the poem titled "the Lady of Shallot," which describes in detail Lady of Shallot in a boat, and appears on the page with the poem.
Figure 3. Example of repeating detail

1) Example of appropriate Alt text: Lady of Shallot in the boat.

2) Example of reinforcing details that may be eliminated from the Alt text: A photo of The Lady of Shallot who is wearing a flowing white dress. A large piece of intricately patterned fabric is draped over the side. In her right hand, she holds the chain mooring the boat. Her expression is mournful. She stares at a crucifix lying in front of her. Beside it there are three candles. Two have blown out.

2.2 Using Styles to Format Text in Word

Formatting text means distinguishing between various kinds of text, such as headings; body text; and figure, table, or other graphic captions, using different font types, sizes, colors, and spacing. In Word 2007, formatting is done by applying Styles. The styles also enable many of Word’s automated functions such as generating a Table of Contents, or creating bookmarks and tags for accessibility when converting to a PDF file.

In Word 2007, the Styles group is found on the Home Tab. To style text, select the desired text and click on the appropriate style.

NYSERDA Marketing has developed a report template that incorporates preferred formatting styles. Visit nyserda.ny.gov/About/Doing-Business-with-NYSERDA to get the report template.
3 Writing Alt Text for Graphics

Alt Text can be added at any time during the report development process, but is most effective if written at the same time that the figure is added to the document while the purpose of its inclusion is still fresh in the author’s mind. As shown in previous sections, Alt Text should not just simply repeat the graphic’s title and/or caption verbatim. Alt Text itself should be of appropriate length to explain the graphic as concisely as possible; that means some sentences will be short and some will be long. There is no minimum or maximum number of characters.

Some images will automatically import into Word with the graphic’s filename as Alt Text, but the Alt Text must be changed so that the description is clear. Descriptions for images should be easy to understand and use simple terms. Remember that Alt Text is what the screen reader is saying to the user who cannot see the image or figure.

Alt Text should be written as complete sentences and include punctuation, although phrases are acceptable.

When submitting Alt Text to NYSERDA Marketing, you may choose to apply the Alt Text in the Word document yourself (see Section 4), or you may choose to submit Alt Text in a separate Word document to Marketing at the same time the final draft is submitted for editing. If using a separate document, note the figure number for each piece of Alt Text.

3.1 Assessing Graphics

After the graphics are completed and before writing Alt Text, briefly assess each graphic by answering these three questions:

1. Is the information presented or written elsewhere in the document?
   If the graphic is described at length in the main text of the report, there is no need to repeat the same information again and the Alt Text can be short. If the information in the figure is not discussed in body text, then the Alt Text should be detailed and specific (see Figure 4).
Figure 4. Example of basic and detailed Alt Text Suggestions

1) Basic Alt text if data is described elsewhere in the report text: NYS Cleantech patent registration trends between 2001 and 2011.

2) Detailed Alt text if the data is not discussed in elsewhere in report text: Overall, Cleantech patents registered between 2001 and 2011 have increased from an average of 160 in 2001 to nearly 300 in 2011. Registrations spiked between 2002 and 2003 with a high of more than 200 registrations. However, 2004 through 2008 were low registration years, averaging only 150 registrations per year. The patent registration volume picked up again in 2009 at 185 patents, and spiked again in 2010 and 2011.

Patents for Electric/Hybrid/Fuel Cell Vehicles have been a consistent majority of the patents registered from 2001 through 2011. In 2011, there were nearly equal registrations of Batteries/Storage, Solar Photovoltaic, and Water Treatment and Wind Energy patents. Nuclear Power, Energy Infrastructure, and Biofuels/Biomass continue to be underrepresented sectors, averaging only 25-30 patents each in 2011.
2. Could a sighted reader draw necessary conclusions from the graphics?
If it is possible to draw conclusions when viewing the diagram or chart, those same conclusions must be drawn for the non-sighted reader. Those conclusions may be effectively described in body text, or by calling out specific messages (not necessarily every visual detail) of the graphic (see Figure 5).

Figure 5. Alt Text that conveys specific data from a pie chart

1) Specific Data Conveyed in Alt Text: Total Olympic Gold Medals; USA holds 44% of all gold medals; USSR holds 21% of all gold medals; Great Britain holds 13% of all gold medals; Italy holds 10% of all gold medals.

2) Unnecessary details that can be left out of the Alt Text Description: The blue section of the pie chart represents USA and is 44%; The red section represents USSR at 21%; the green section is Great Britain at 13%; The purple section is France at 12%; the teal section is Italy at 10%.

4 Applying Alt Text to Word Documents
After the Alt Text is written, it must be properly applied to the document using tag functions in Word. For example, in Word 2007, the Alt Text window is found in the Size function of the image. To apply properly, right click on the image, select size, and then select the Alt Text tab. Write a description of the images in the field provided, and then click OK. Tags will automatically be created when the file is converted to a PDF.

5 Contact
For questions related to creating Alt Text and adding it to Word documents, contact Diane Welch (x3276) in Marketing.