Simple Slides
A Context presentation module

1 Introduction

This module provides an easy-to-use interface for creating simple slides/presentations in Context. The salient features of this module are:

- The module is meant for presentations which will be shown on a digital projector. They have no interactive elements (such as buttons or hyperlinks) and no navigational tools (such as table of contents).
- The module comes with several predefined styles; these styles are sober in appearance and meant for academic presentations. It also provides some macros to help in presenting slides with both pictures and text.
- Most styles allow for some degree of user-reconfigurability. Designing a new style is also easy.

This module provides a simple structure that will be suitable for beginning or intermediate users of Context, or someone who does not want to spend too much time playing around with different configuration options for Context. As such it focusses on different users than Hans's presentation modules that provide more fancier features. This module also offers much less features than the Latex `beamer` package. Its main strength is its ease of use; you should be able to write your first presentation after spending five minutes with this manual.

2 A bit of history

The idea of a module suitable for simple presentations took shape when Thomas started using Context for preparing his course presentations. Context comes with a bunch of modules for presentations (the files `s-pre-??.tex` in `$TEXMF/tex/context/base`) which are written by Hans Hagen. Hans usually creates a new presentation style whenever he gives a talk about Context. As such, his presentation styles highlight the fancy and bleeding edge features of Context, and are not the most suitable starting point for academic presentations.

Context does make creating your own presentation style relatively easy. So Thomas wrote some presentation related macros (see the PracTex article http://www.tug.org/pracjourn/2006-2/schmitz/). With time, he extended these macros into a collection of styles providing different visual effects, and later collected all of them in the taspresent module. He gave a talk about the taspresent module in in the second Context user meeting at Bohinj, and in the ensuing discussions, Aditya and Thomas decided to modularize and "Contextize" some of the internals of the module, giving rise to the current module. Most of the code in the current release has been contributed by Aditya.

3 Installation

The module is installed in the usual way: simply unzip the archive `t-simpleslides-<date>.zip` into one of your `$TEXMF` trees, and from a terminal run `mktexlsr` (for MkII) and `luatools –generate` (for MkIV). To verify that everything was installed correctly, from a terminal run `kpsewhich t-simpleslides.tex` (for MkII) and `luatools t-simpleslides.tex` (for MkIV); these commands should return the complete path of the files that you just installed.

A note about Tex-engines

We have extensively tested this module with pdftex and Luatex (that is, with MkII and MkIV). In spite of our best efforts, we have not been able to get this module to work reliably with Xetex. If you are a Xetex guru, and know how to fix some of the errors with Xetex, we will appreciate the help.

4 Quick start

First you must tell Context that you want to use this module. To do this simply write:

```
\usemodule[simpleslides]
```

This sets the paper size and font sizes to values that are suitable for presentations. Everything else is left like a default Context document. The module provides different styles that change the visual appearance of the presentation. The following styles are provided:

- BigNumber
- BottomSquares
- Boxed
- Ellipse
- Embossed
- Framed
- FramedTitle
- HorizontalStripes
- NarrowStripes
- RainbowStripe
- Rounded
- Shaded
- SideSquares
- Split
- Sunrise
- Swoosh
- ThickStripes

To use a style, say BigNumber, pass the `style=BigNumber` option to the `simpleslides` module as follows.

```
\usemodule[simpleslides]
          [style=BigNumber]
```

Some of the styles have a few variants that can be chosen using color and alternative keys. These are explained in Section 6.

By default, the Latin Modern Sans font is used. The module makes it easy to use other fonts that come with a typical Tex distribution. The following fonts are provided:

- LatinModern
- LatinModernSans
- Bookman
- Chancery
- Gothic
- Helvetica
- Palatino
- Schoolbook
- Times

To choose a font, say Helvetica, pass font=Helvetica option to the simpleslides module as follows.

```
\usemodule[simpleslides]
          [style=BigNumber,
            font=Helvetica]
```

By default, the chosen font is used at 17pt size. The font size can be changed using the size key.

More details about the fonts, including information on how to use your own fonts is given in Section 7.

The complete setup for using this module is

```
  \usemodule [.1.] [..,.2.,..]
                       OPTIONAL

1  simpleslides

2  style       =  BigNumber  BottomSquares  Boxed  Ellipse  Embossed
                  Framed  FramedTitle  HorizontalStripes  NarrowStripes
                  RainbowStripe  Rounded  Shaded  SideSquares  Split
                  Sunrise  Swoosh  ThickStripes

   size        =  DIMENSION

   font        =  LatinModern  LatinModernSans  Bookman  Chancery
                  Gothic  Helvetica  Palatino  Schoolbook  Times

   color       =  red  blue  green  bluered

   alternative =  square  stripe
```

Structure of a presentation

The simpleslides module has a very simple model of a presentation. A presentation consists of a title followed by a series of slides; the module provides macros to help create a presentation title page and slides.

Presentation title page

A presentation title page displays the title of the presentation, the names of the authors, and the date. These can be specified using \setupTitle as follows:

```
\setupTitle
  [ title={Title of the presentation},
   author={Name of authors},
     date={Date of presentation},
  ]
```

The macro \placeTitle places the title page in the presentation. It is possible to change the look of \placeTitle using some additional arguments to \setupTitle. These are explained in Section 8.

Presentation slide

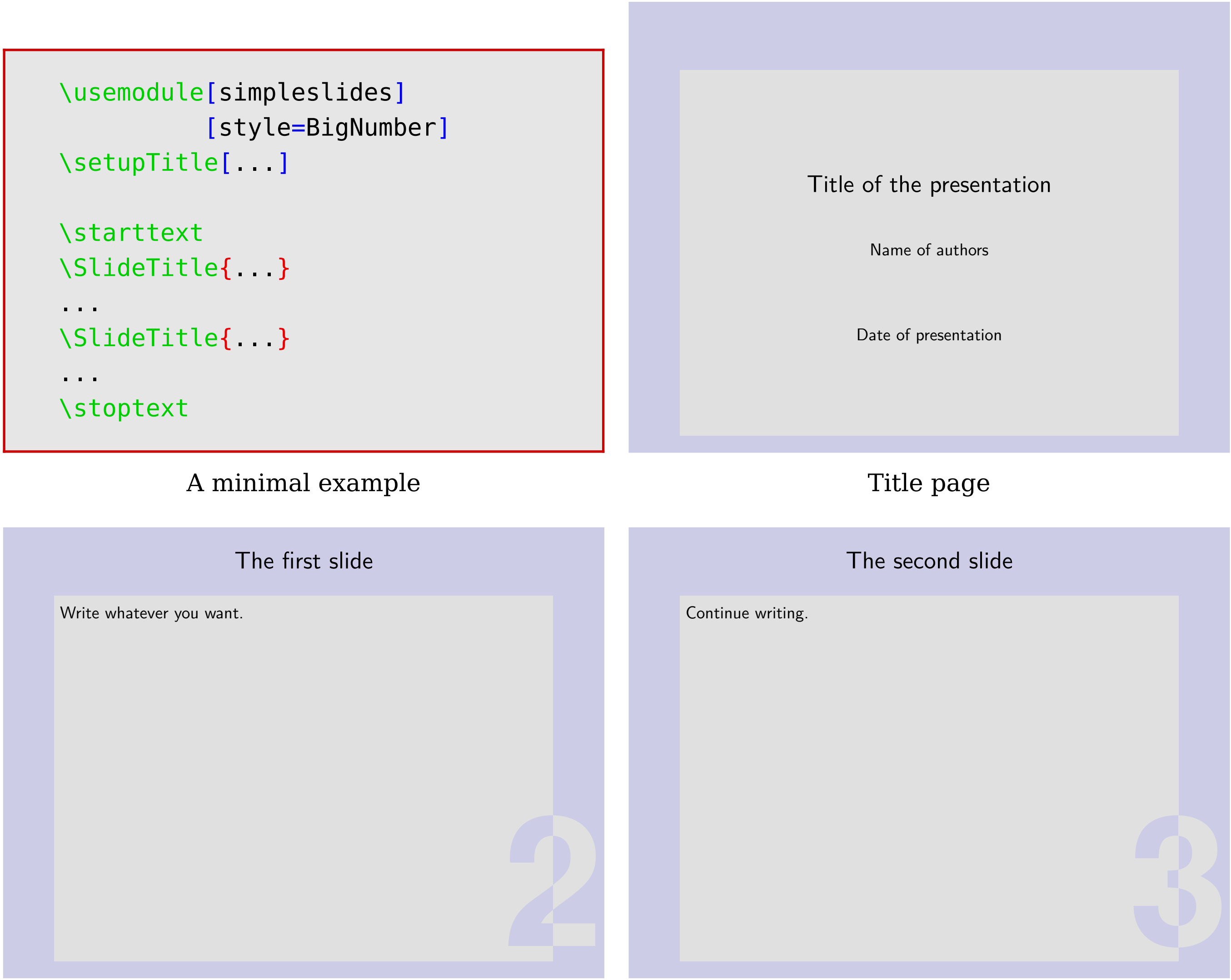
The simpleslides module provides a \SlideTitle macro, which starts a new slide (basically a new page), and typesets its argument as the title of the slide. It also takes care of increasing the page counters and progress bars, and setting up the background. The content of the slides follows after this command.

A slide is a normal Context page, so you can use any command or environment that you want. Each presentation style sets up a style for itemizations, and provides useful macros for placing pictures. These macros will be explained later.

A minimal presentation

A minimal presentation is shown below. The result is shown in Figure 1.

```
\usemodule[simpleslides]
          [style=BigNumber]

\setupTitle
  [ title={Title of the presentation},
   author={Name of authors},
     date={Date of presentation},
  ]

\starttext
\placeTitle

\SlideTitle {The first slide}
Write whatever you want.

\SlideTitle {The second slide}
Continue writing.

\stoptext
```



```
\usemodule[simpleslides]
          [style=BigNumber]
\setupTitle[...]

\starttext
\SlideTitle{...}
...
\SlideTitle{...}
...
\stoptext
```

A minimal example

Title of the presentation

Name of authors

Date of presentation

Title page

The first slide

Write whatever you want.

2

First slide

The second slide

Continue writing.

3

Second slide

Figure 1 A minimal presentation

5 Placing pictures

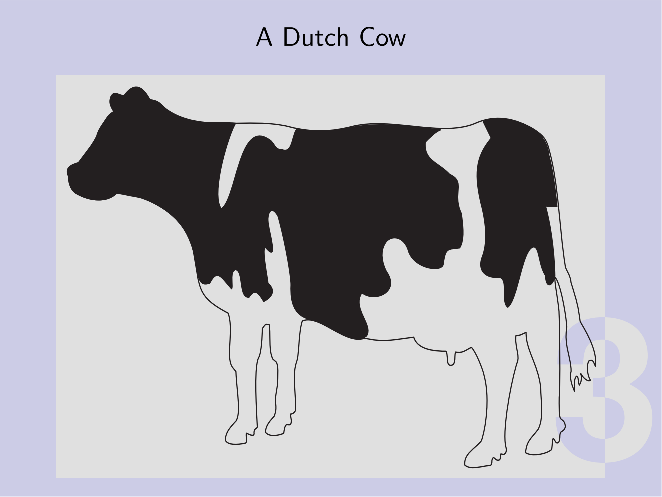
If you want to place pictures in your slides, you can always use Context's `\externalfigure` macro. This module also provides a macro, `\IncludePicture`, for preconfigured picture layouts. Two layouts are provided:

- `horizontal`: the picture is placed under the title of the slide, so that it fits in the available space.
- `vertical`: the slide is divided into two columns; the picture is placed on the left column and text is placed on the right column.

  These layouts are shown in Figure 2.

```
  \usemodule[simpleslides]
            [...]
  \starttext
  ...
  \IncludePicture
      [horizontal]
      [cow]
      {A Dutch Cow}
  ...
  \stoptext
```

A horizontal picture

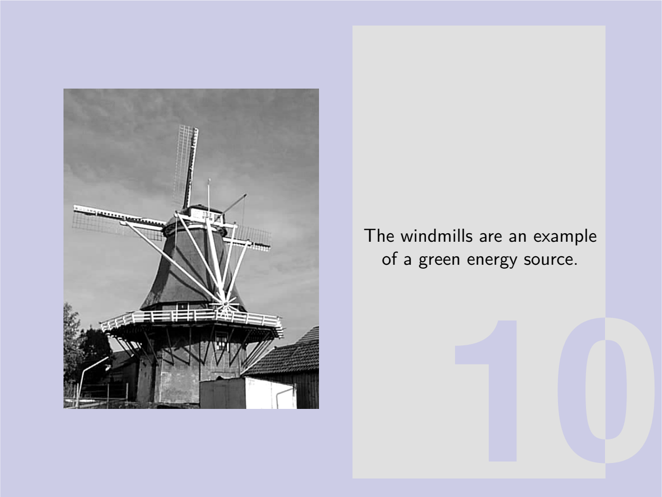


A Dutch Cow

A horizontal picture

```
  \usemodule[simpleslides]
            [...]
  \starttext
  ...
  \IncludePicture
      [vertical]
      [mill]
      {The windmills are an example of
a green energy source}
  ...
  \stoptext
```

A vertical picture



The windmills are an example of a green energy source.

A vertical picture

Figure 2 Example of `horizontal` and `vertical` options for `\IncludePicture` macro

A horizontal picture is placed as follows:

```
\IncludePicture
  [horizontal]
  [filename]  % Name of the file that contains the picture
  {Title of the slide}
```

while a vertical picture is placed as follows:

```
\IncludePicture
  [vertical]
  [filename]  % Name of the file that contains the picture
  {Text that is placed on the right of the picture}
```

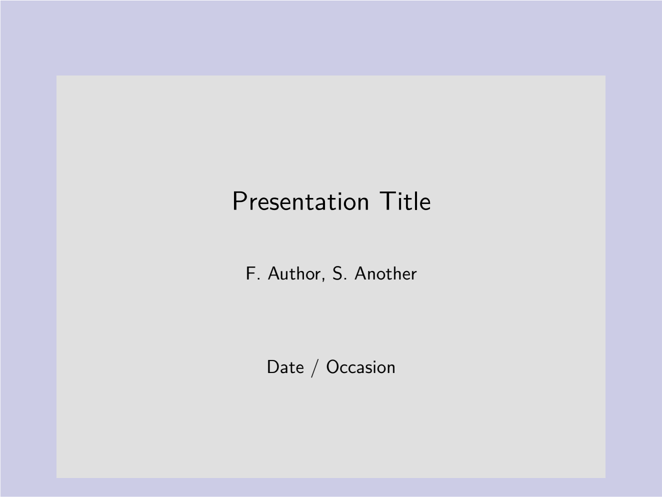
It is possible to change the height and width of the pictures, or highlight them with circles and arrows. These details can be found in Section 10

6 Changing presentation styles

The style key to \setupmodule[simpleslides] determines the look of the presentation. Some of the styles come with variants, that can be chosen using color and alternative keys. The available styles are shown below along with the details of their variants.

BigNumber: with color=blue (also accepts color=red)

This is a style with subdued and quiet colors; its characteristic feature is the page number on the lower right border of the text area. This detail was inspired by *split* style (s-pre-14) by Hans.

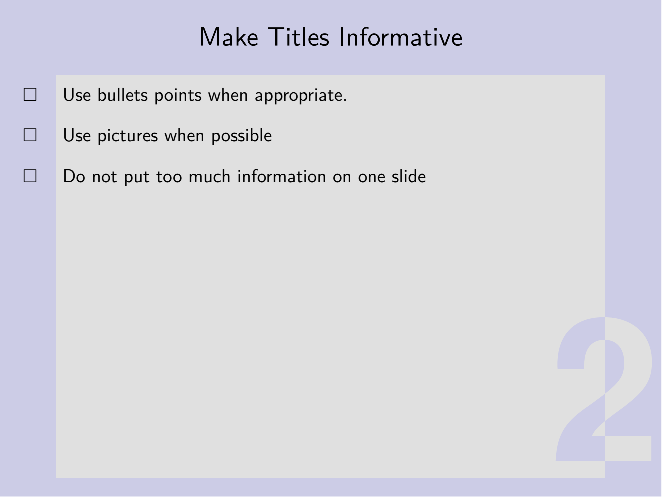


Presentation Title

F. Author, S. Another

Date / Occasion

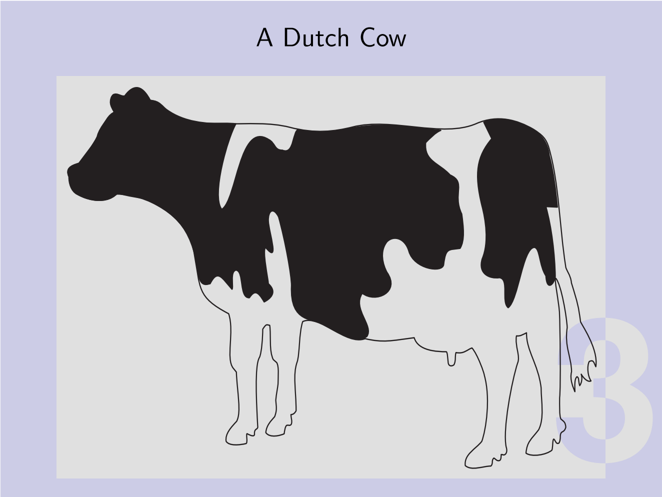
Title Page



Make Titles Informative

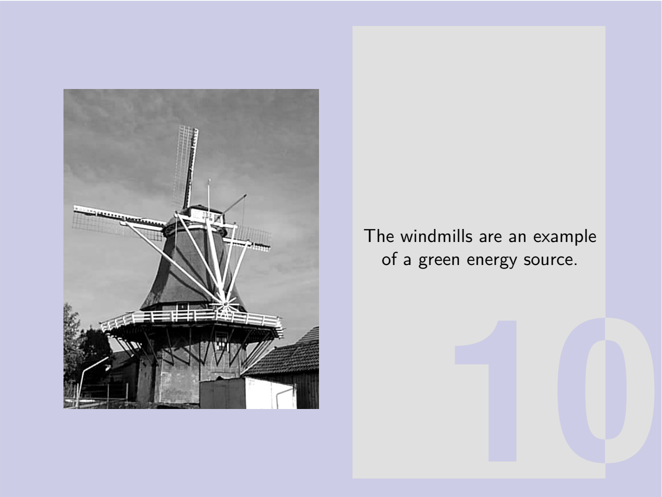
- □ Use bullets points when appropriate.
- □ Use pictures when possible
- □ Do not put too much information on one slide

Normal Slide



A Dutch Cow

Horizontal Picture

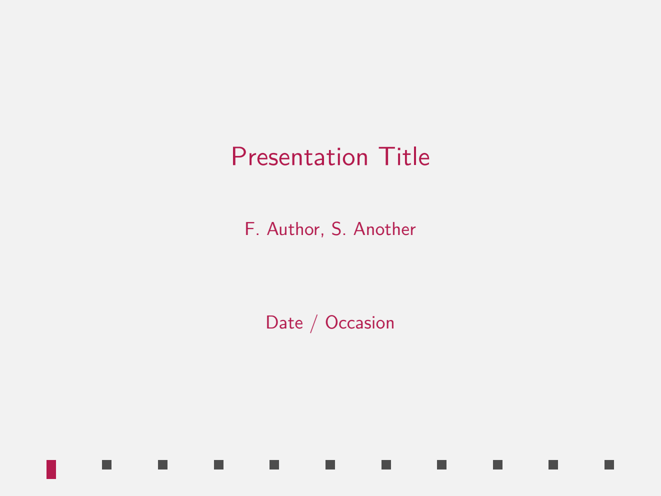


The windmills are an example of a green energy source.

Vertical Picture

BottomSquares

This minimalistic style is inspired by a presentation Taco gave at EuroTeX 2006.

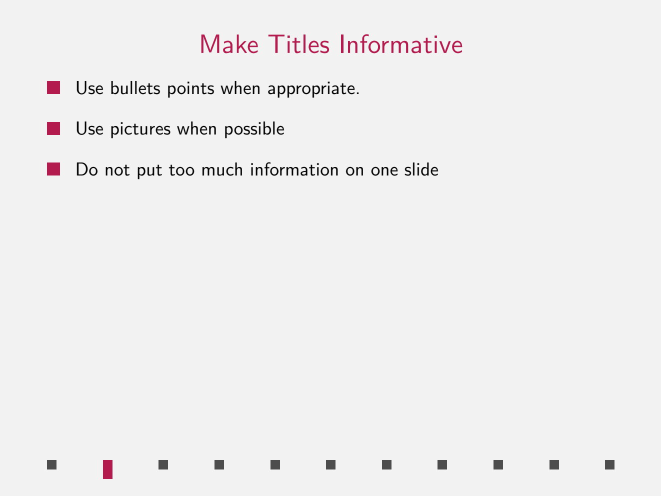


Presentation Title

F. Author, S. Another

Date / Occasion

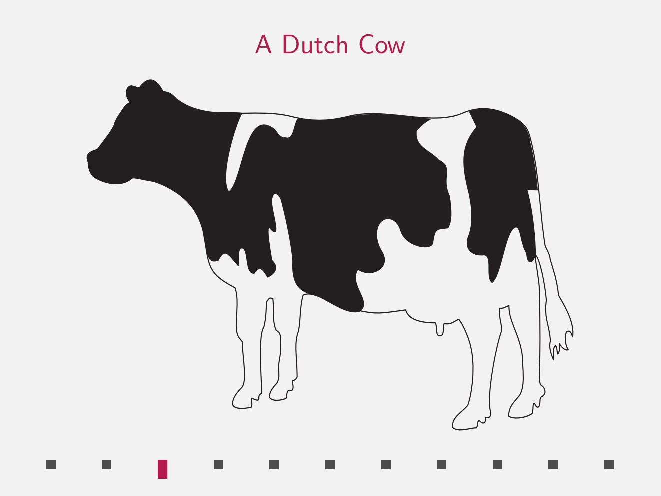
Title Page



Make Titles Informative

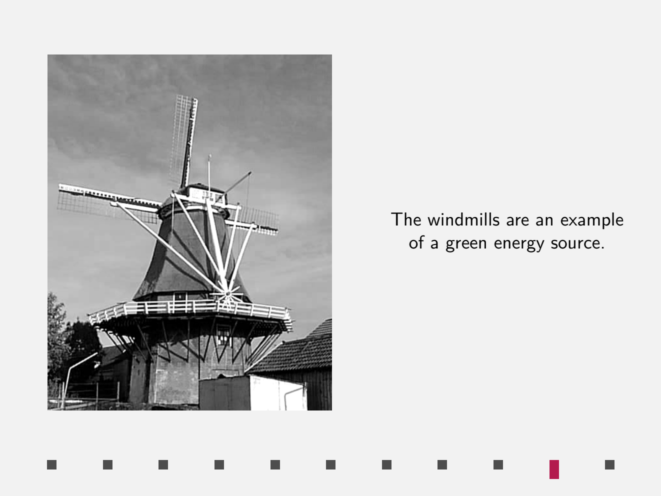
- Use bullets points when appropriate.
- Use pictures when possible
- Do not put too much information on one slide

Normal Slide



A Dutch Cow

Horizontal Picture

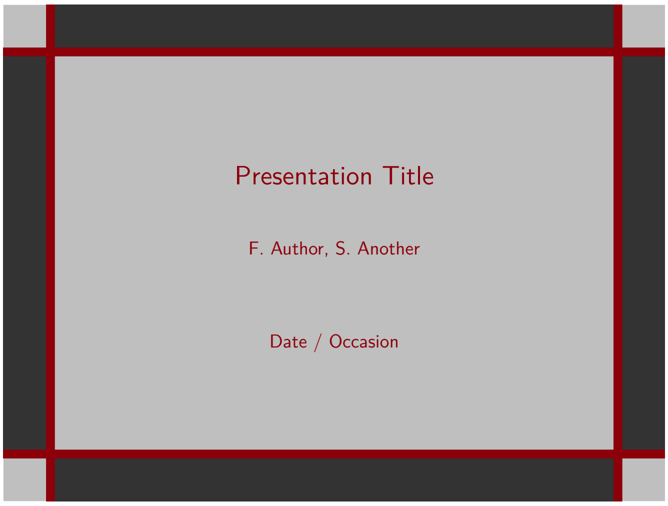


The windmills are an example of a green energy source.

Vertical Picture

Boxed

This style is inspired by the screen version of the Metafun manual. Watch the small gray circles at the bottom!

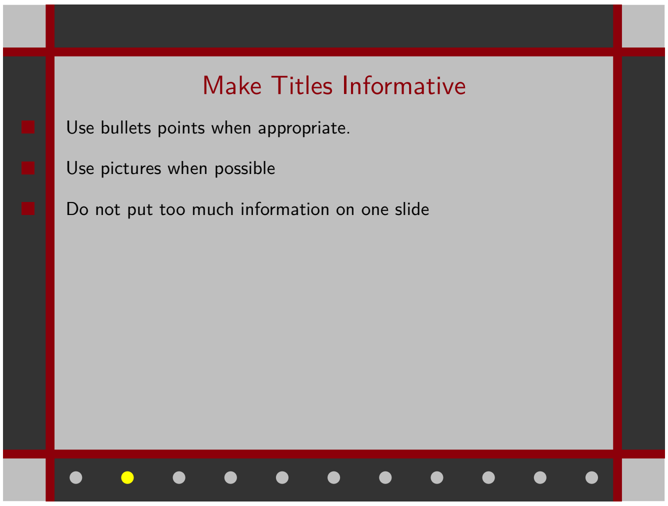


Presentation Title

F. Author, S. Another

Date / Occasion

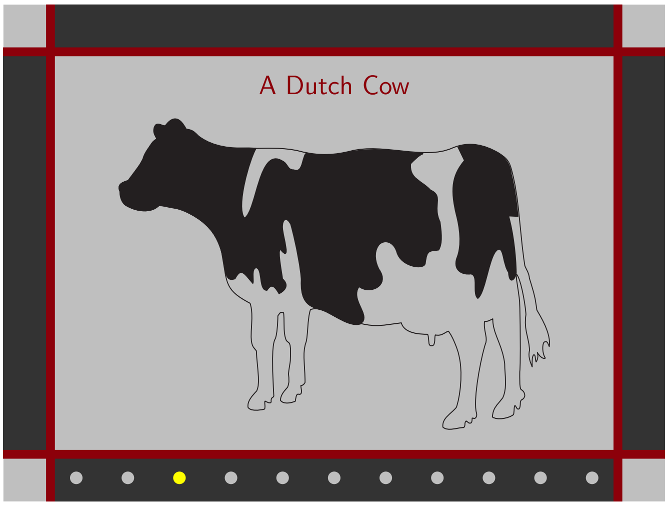
Title Page



Make Titles Informative

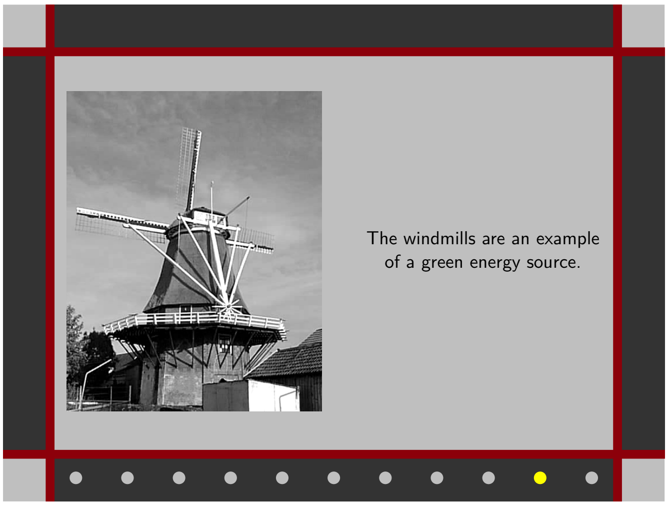
- Use bullets points when appropriate.
- Use pictures when possible
- Do not put too much information on one slide

Normal Slide



A Dutch Cow

Horizontal Picture

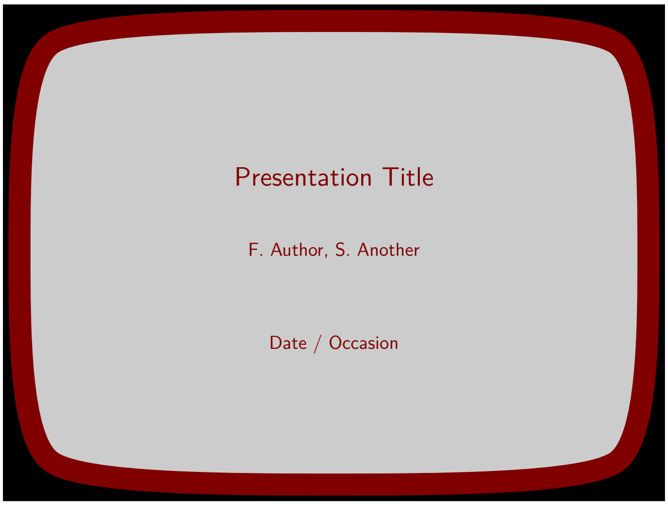


The windmills are an example
of a green energy source.

Vertical Picture

Ellipse

This style is inspired by *funny* style (`s-pre-03`) by Hans. The light red stripe marks the progress.

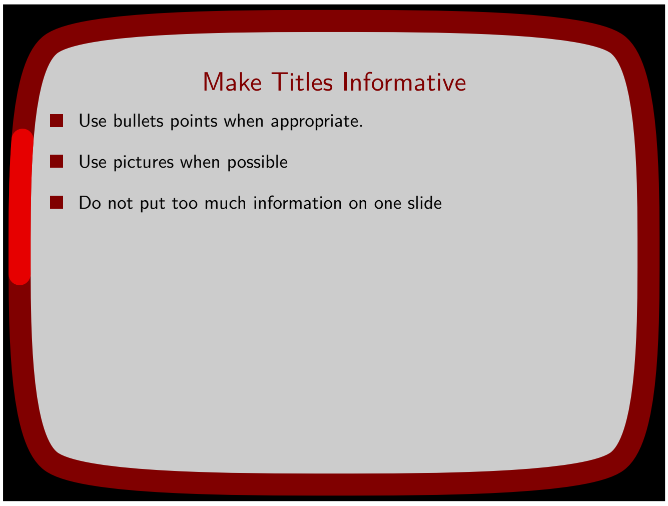


Presentation Title

F. Author, S. Another

Date / Occasion

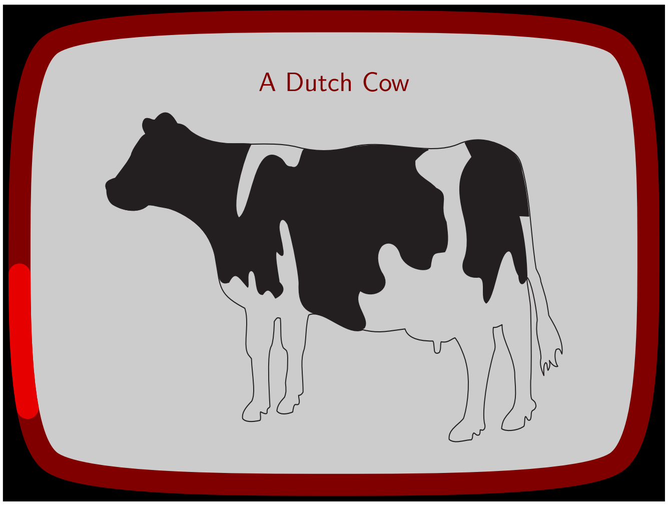
Title Page



Make Titles Informative

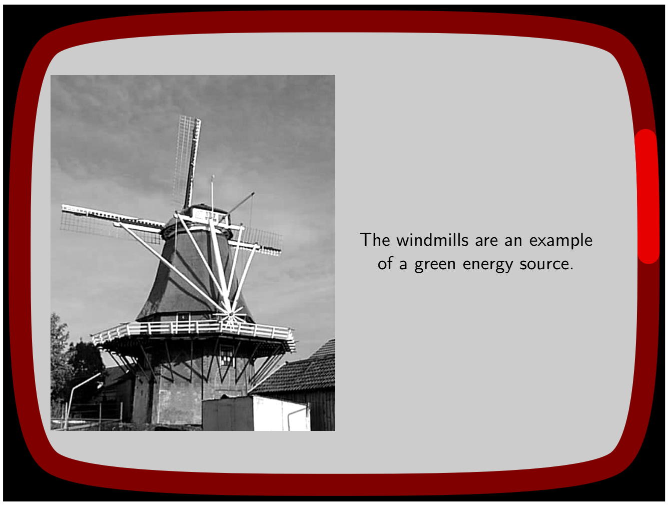
- Use bullets points when appropriate.
- Use pictures when possible
- Do not put too much information on one slide

Normal Slide



A Dutch Cow

Horizontal Picture

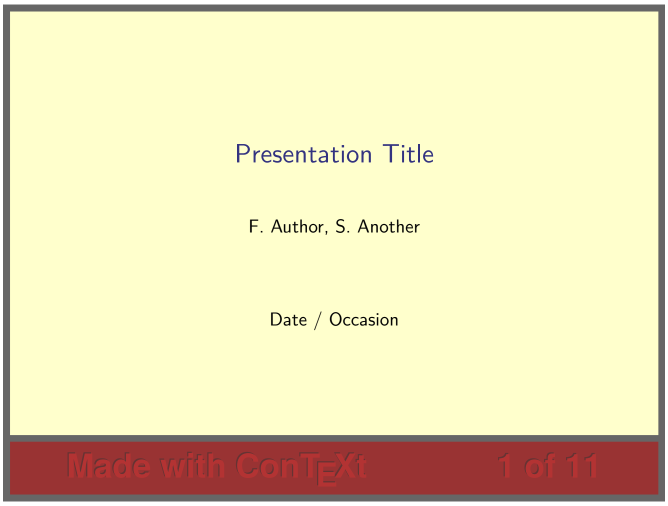


The windmills are an example of a green energy source.

Vertical Picture

Embossed

Spread the word, don't be shy! Show your pride in using Context. The color theme will probably look familiar; I copied it from the enattab manual.



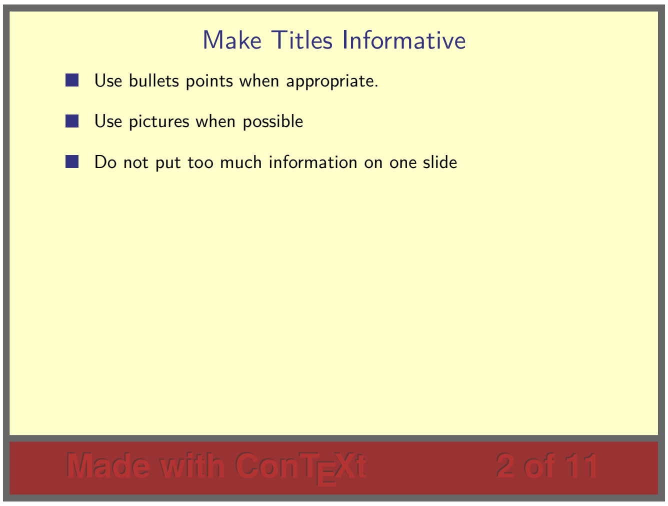
Presentation Title

F. Author, S. Another

Date / Occasion

Made with ConTEXt 1 of 11

Title Page

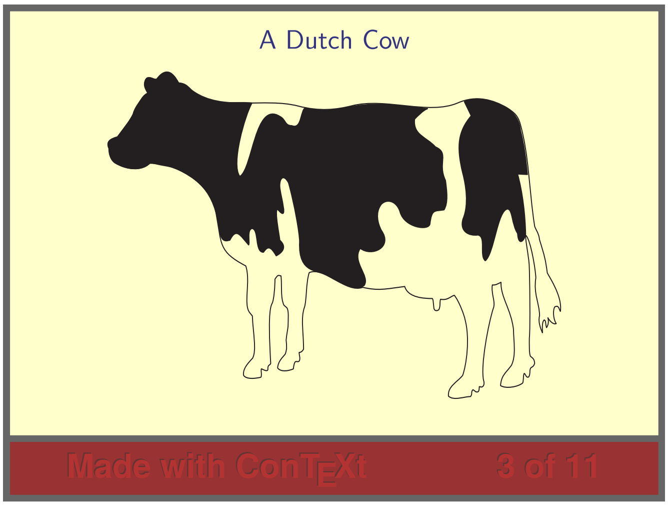


Make Titles Informative

- Use bullets points when appropriate.
- Use pictures when possible
- Do not put too much information on one slide

Made with ConTEXt 2 of 11

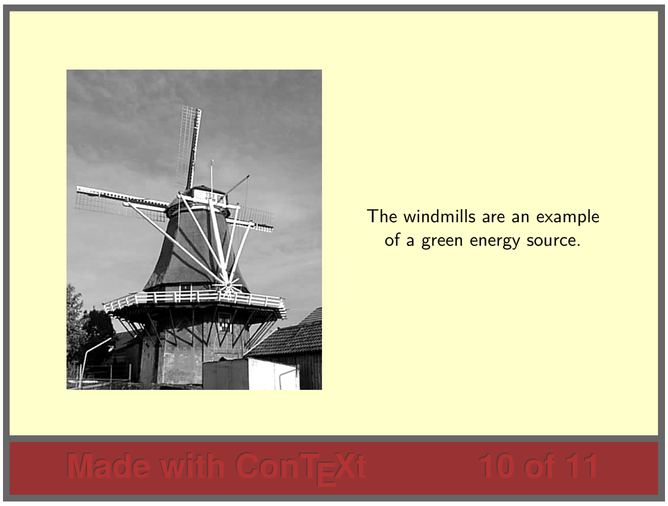
Normal Slide



A Dutch Cow

Made with ConTEXt 3 of 11

Horizontal Picture



The windmills are an example of a green energy source.

Made with ConTEXt 10 of 11

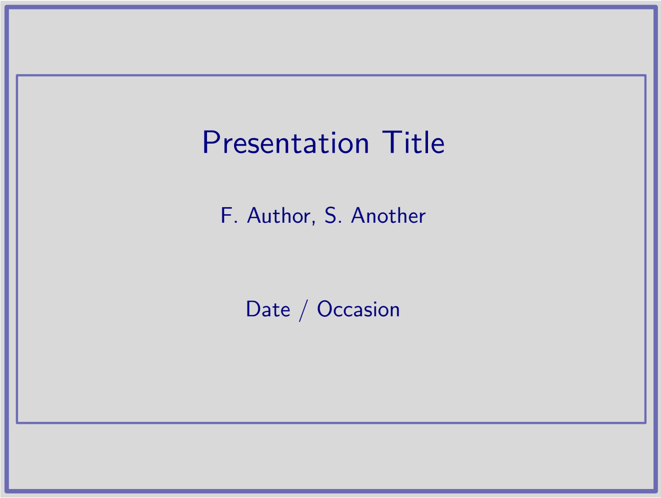
Vertical Picture

If you are shy, or narcissistic, you can change the emblem by

```
\setuplabeltext  [simpleslidesemblem={I made this presentation}]
```

Framed: with alternative=square

This style was inspired by *green* style (`s-pre-02`) by Hans. It has a thick blue frame around the entire slide area and a thinner frame around the text area. The style has two options for alternative: `alternative=stripe` will display a shaded blue area which will grow with each slide; `alternative=square` displays a row of blue squares at the bottom which also measure the presentation’s progress.

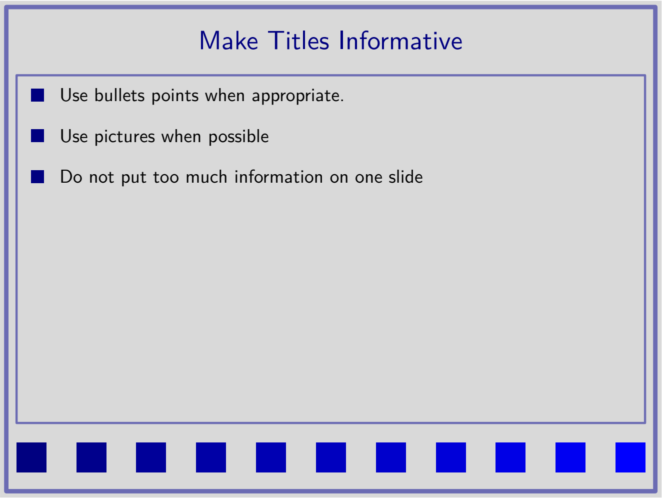


Presentation Title

F. Author, S. Another

Date / Occasion

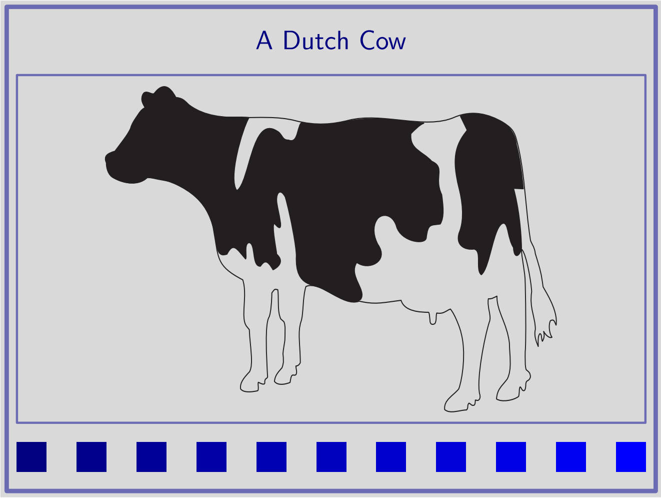
Title Page



Make Titles Informative

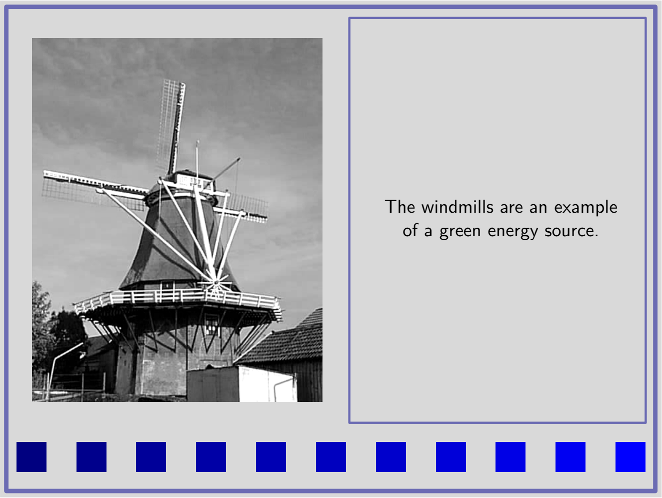
- Use bullets points when appropriate.
- Use pictures when possible
- Do not put too much information on one slide

Normal Slide



A Dutch Cow

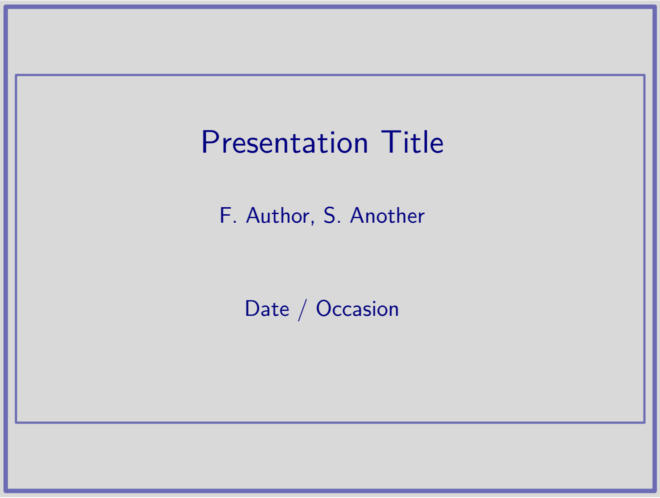
Horizontal Picture



The windmills are an example of a green energy source.

Vertical Picture

Framed: with `alternative=stripe`

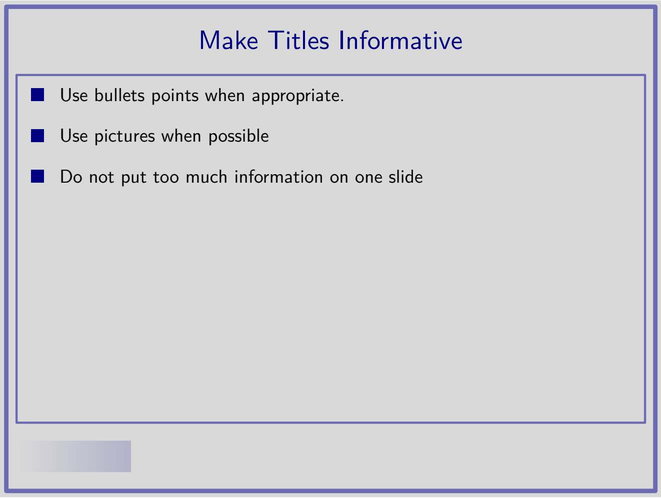


Presentation Title

F. Author, S. Another

Date / Occasion

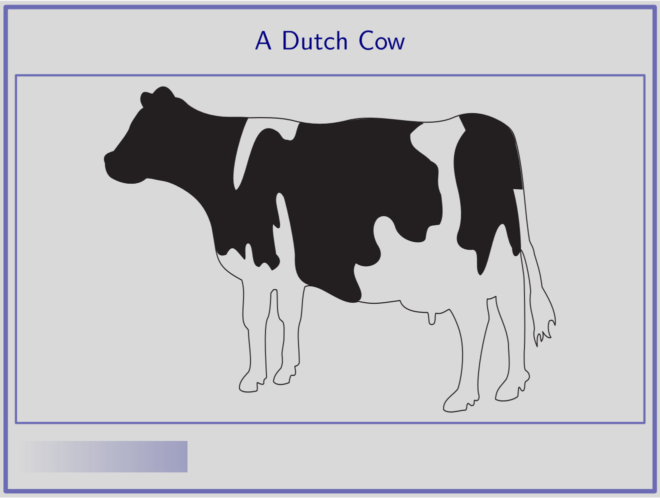
Title Page



Make Titles Informative

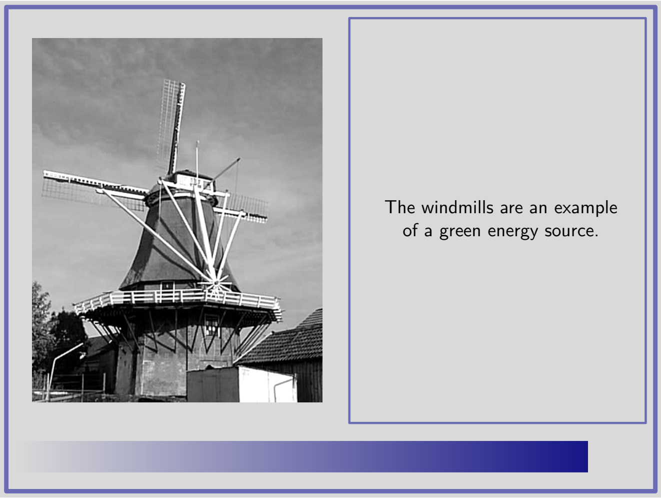
- Use bullets points when appropriate.
- Use pictures when possible
- Do not put too much information on one slide

Normal Slide



A Dutch Cow

Horizontal Picture

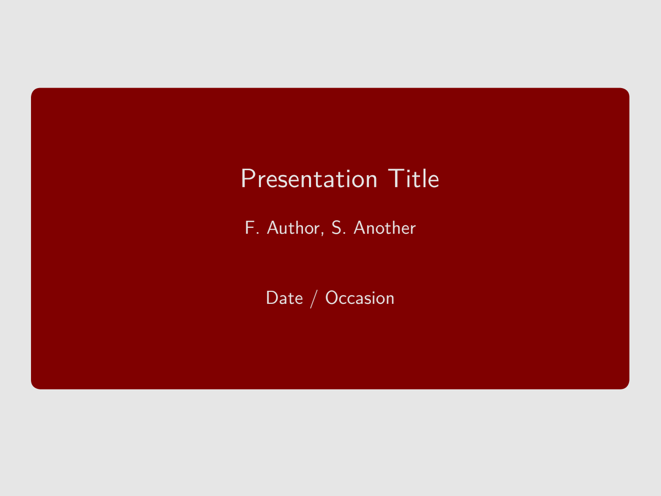


The windmills are an example of a green energy source.

Vertical Picture

FramedTitle

This is a style with loud titles. Its characteristic feature is the *scratch counter* at the bottom. These are derived from Section 7.2 of the Metafun manual.

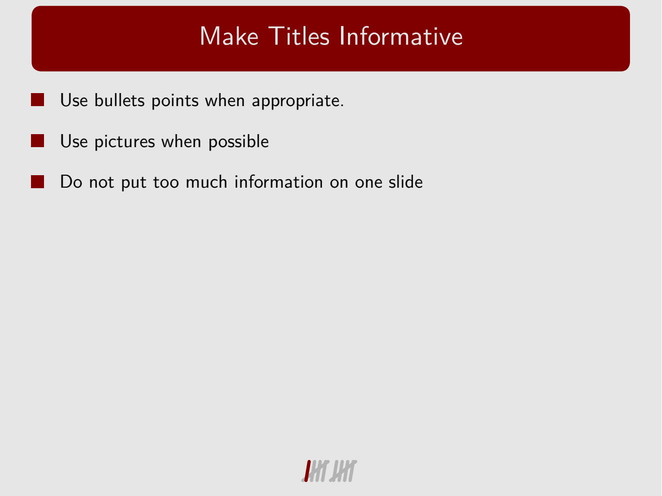


Presentation Title

F. Author, S. Another

Date / Occasion

Title Page



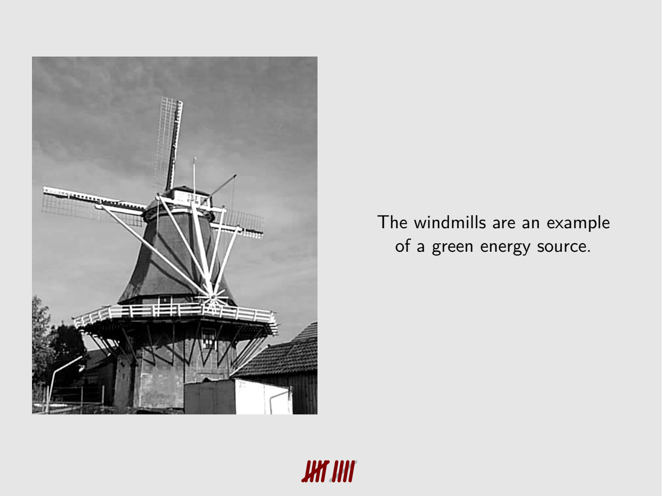
Make Titles Informative

- Use bullets points when appropriate.
- Use pictures when possible
- Do not put too much information on one slide

Normal Slide

A Dutch Cow

Horizontal Picture

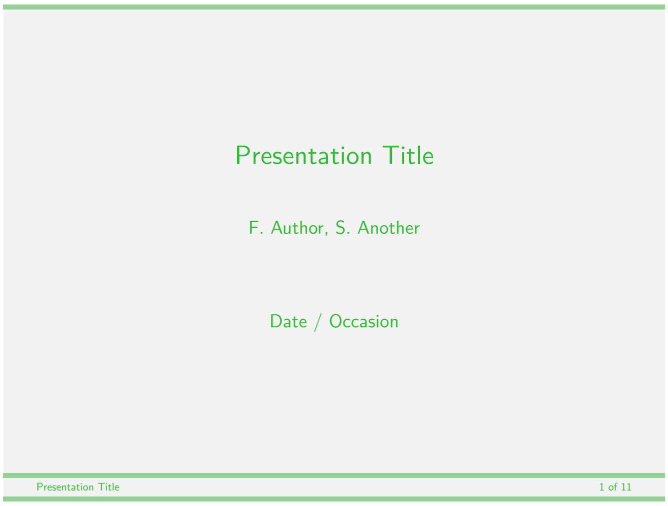


The windmills are an example of a green energy source.

Vertical Picture

HorizontalStripes: with `color=green` (also accepts `color=blue` and `color=red`)

A sober style with an emphasis on horizontal lines, inspired by the *Szeged* theme in Latex's `beamer` package.



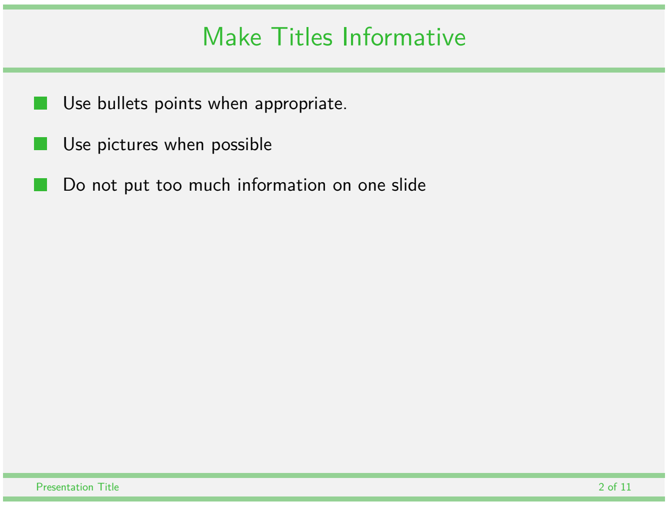
Presentation Title

F. Author, S. Another

Date / Occasion

Presentation Title 1 of 11

Title Page

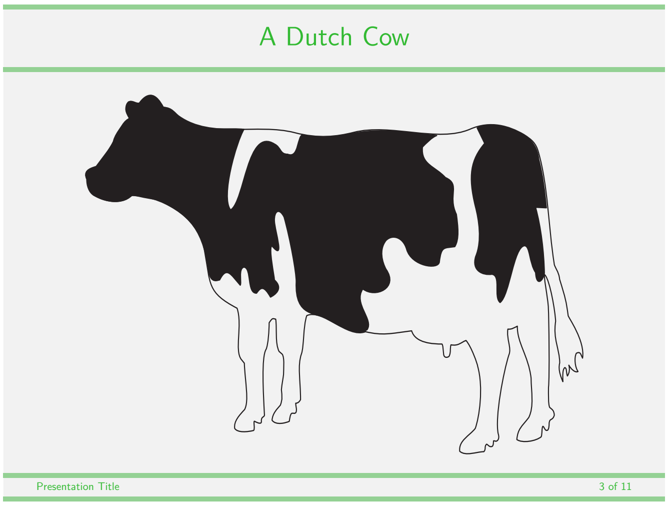


Make Titles Informative

- Use bullets points when appropriate.
- Use pictures when possible
- Do not put too much information on one slide

Presentation Title 2 of 11

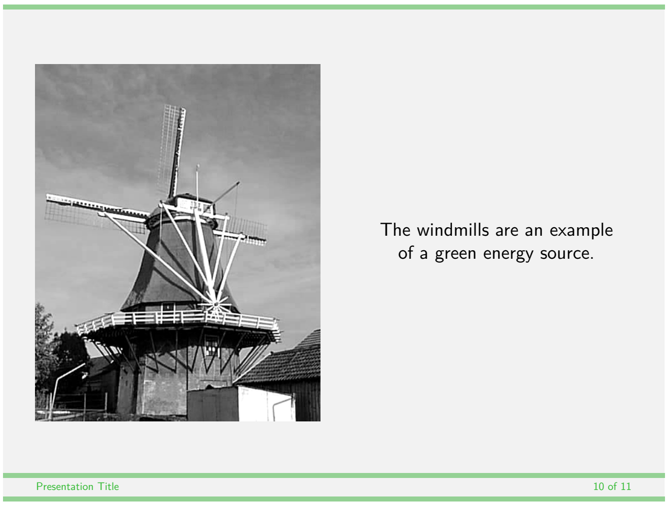
Normal Slide



A Dutch Cow

Presentation Title 3 of 11

Horizontal Picture



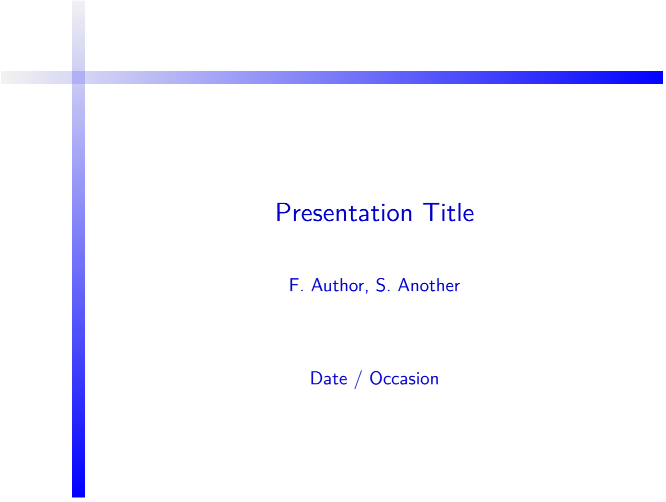
The windmills are an example of a green energy source.

Presentation Title 10 of 11

Vertical Picture

NarrowStripes: with `color=green` (also accepts `color=blue` and `color=red`)

A very simple and sober style, with shaded narrow stripes.

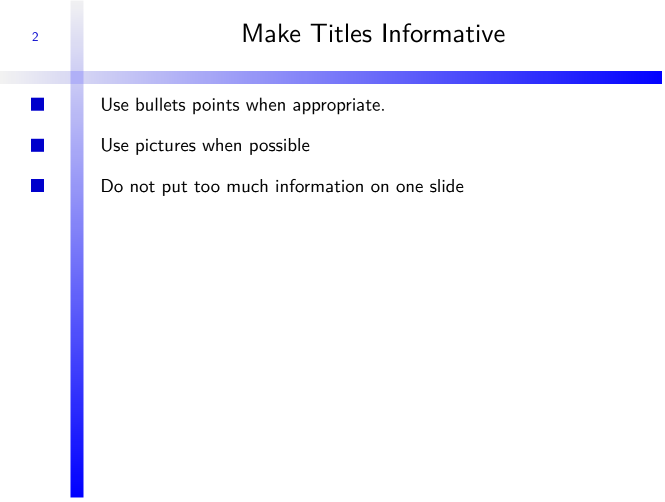


Presentation Title

F. Author, S. Another

Date / Occasion

Title Page

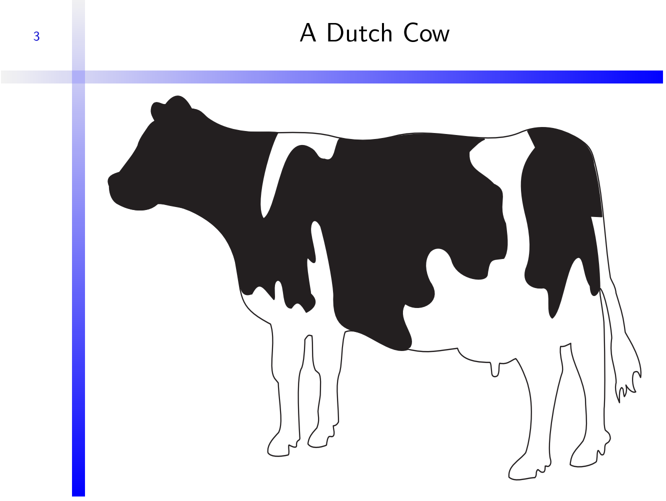


2

Make Titles Informative

- Use bullets points when appropriate.
- Use pictures when possible
- Do not put too much information on one slide

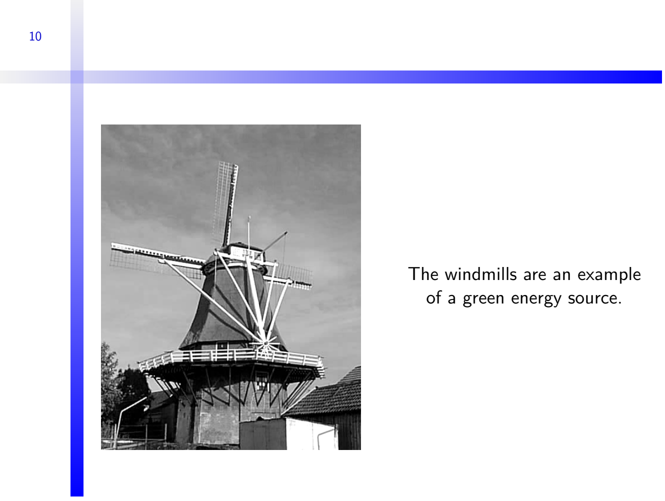
Normal Slide



3

A Dutch Cow

Horizontal Picture



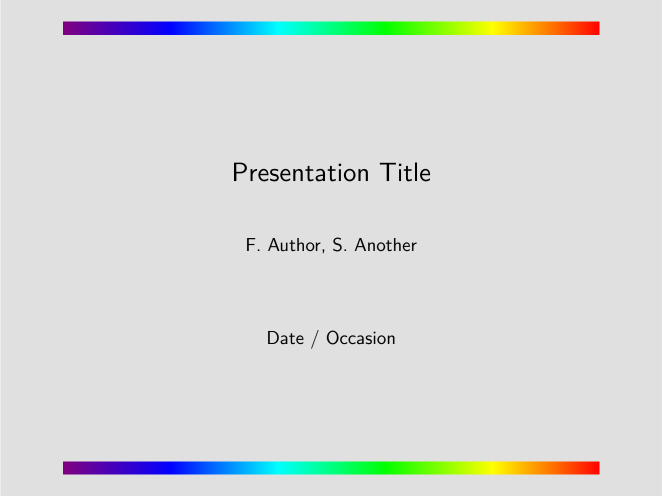
10

The windmills are an example of a green energy source.

Vertical Picture

RainbowStripe

A colorful style for daring presenters. The black line which marks the progress is reminiscent of absorption lines in star spectra, so this style may be apt for astrophysical presentations?

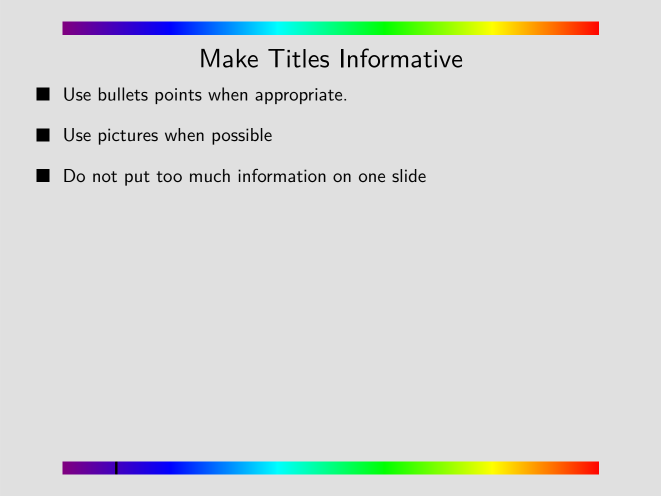


Presentation Title

F. Author, S. Another

Date / Occasion

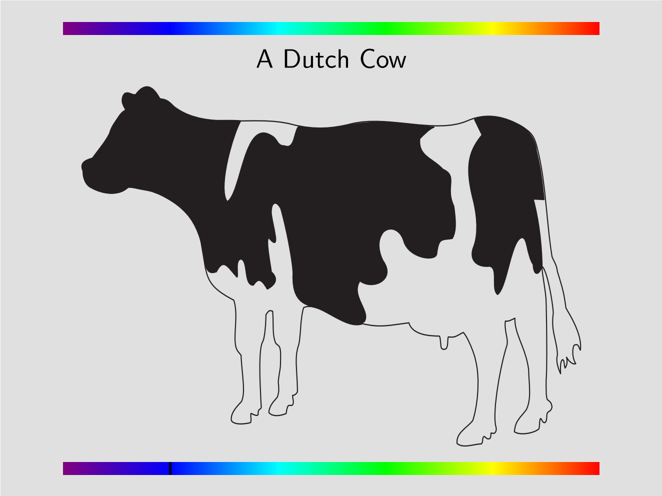
Title Page



Make Titles Informative

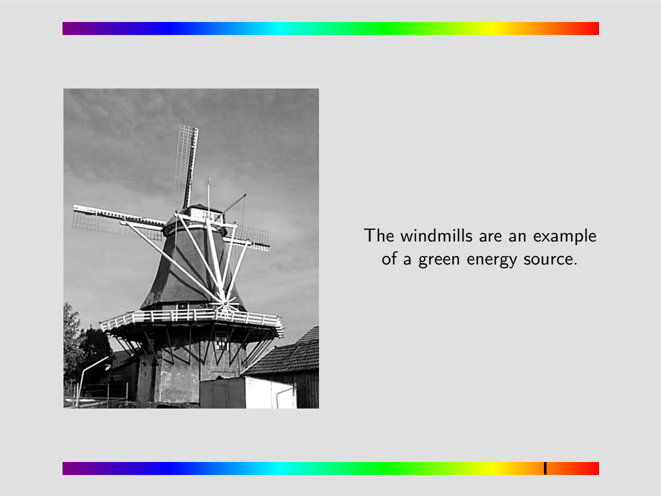
- Use bullets points when appropriate.
- Use pictures when possible
- Do not put too much information on one slide

Normal Slide



A Dutch Cow

Horizontal Picture

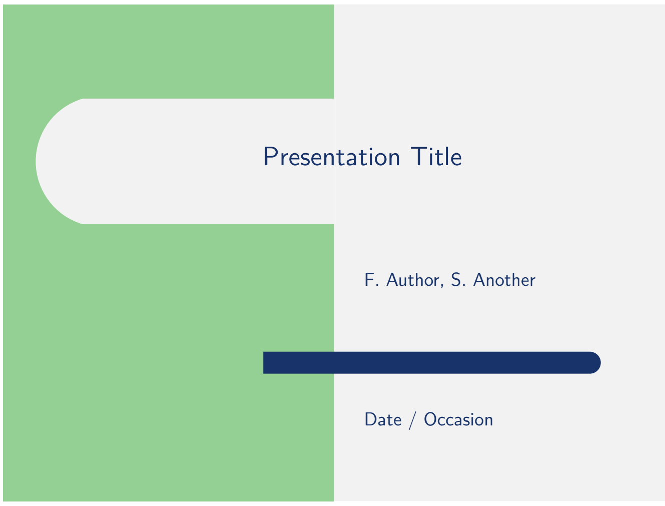


The windmills are an example of a green energy source.

Vertical Picture

Rounded

This style has cool colors and lots of white space; it is probably best suited for presentations with relatively little text.

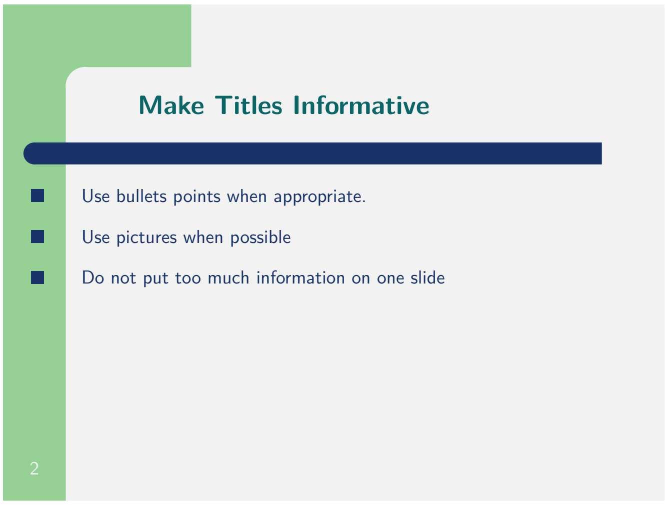


Presentation Title

F. Author, S. Another

Date / Occasion

Title Page

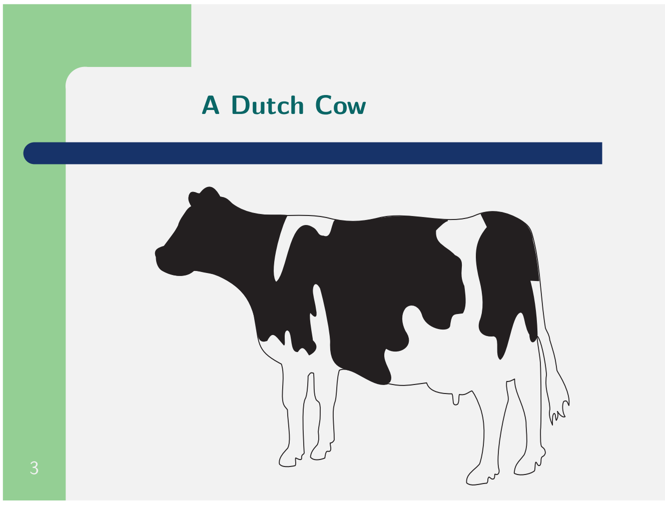


Make Titles Informative

- Use bullets points when appropriate.
- Use pictures when possible
- Do not put too much information on one slide

2

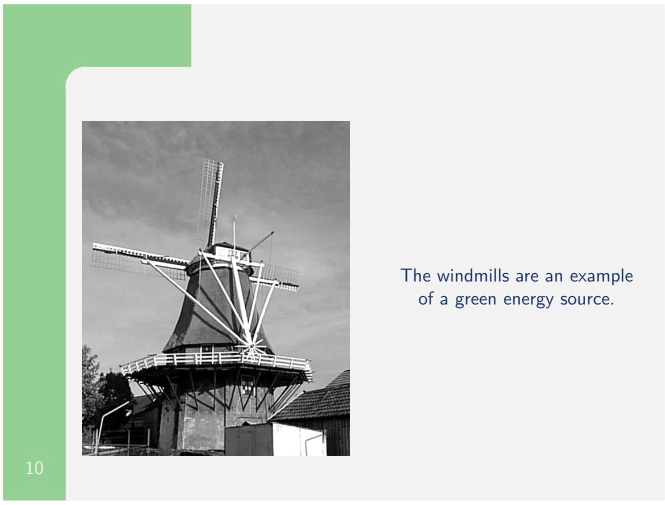
Normal Slide



A Dutch Cow

3

Horizontal Picture



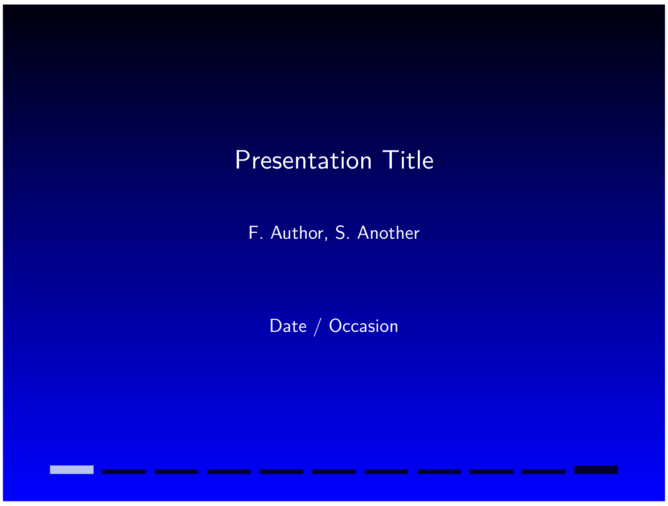
The windmills are an example of a green energy source.

10

Vertical Picture

Shaded: with `color=blue` (also accepts `color=green` and `color=bluered`)

The only ornament to this style is the dark shaded background. It uses Context's `interactionbar` mechanism to show the progress of the presentation. It provides much space for text.

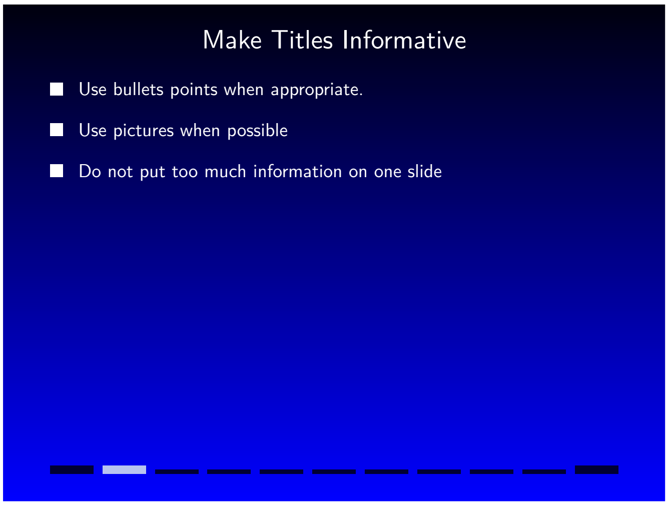


Presentation Title

F. Author, S. Another

Date / Occasion

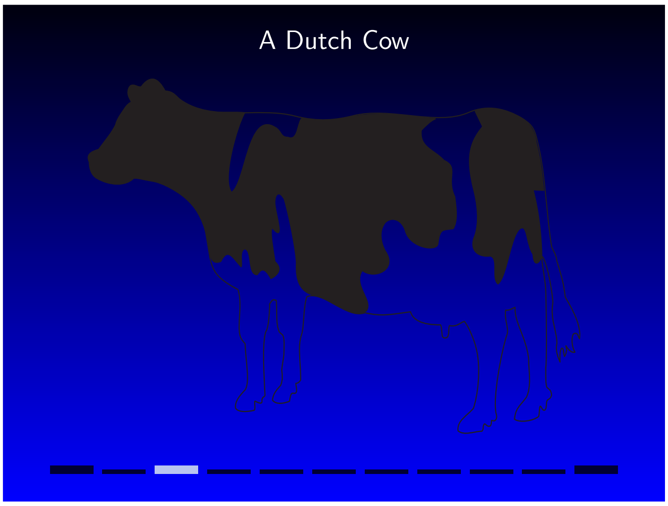
Title Page



Make Titles Informative

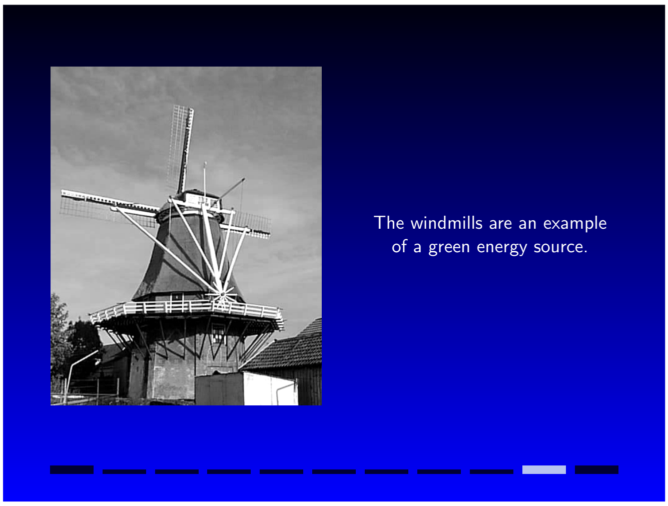
- Use bullets points when appropriate.
- Use pictures when possible
- Do not put too much information on one slide

Normal Slide



A Dutch Cow

Horizontal Picture

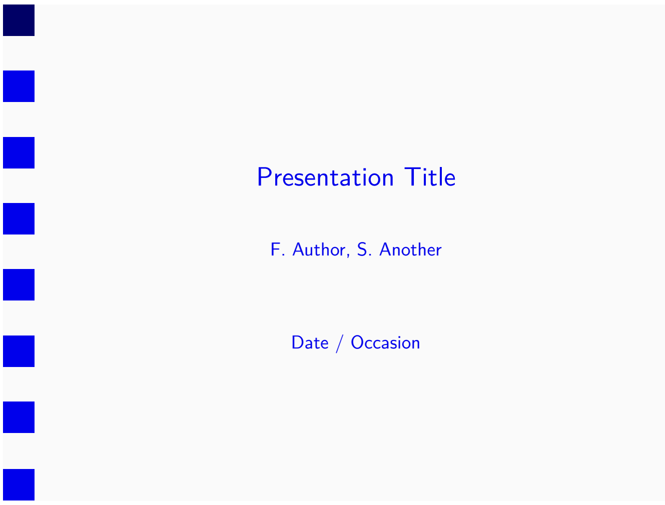


The windmills are an example of a green energy source.

Vertical Picture

SideSquares

This style is inspired by the colors and corporate look of Thomas's university. It is very sober and offers much space for text and images. There is a rough progress meter built into the blue quadrangles.

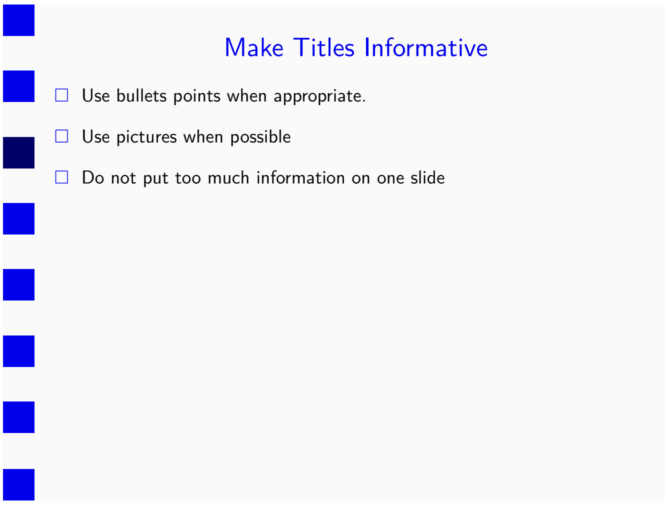


Presentation Title

F. Author, S. Another

Date / Occasion

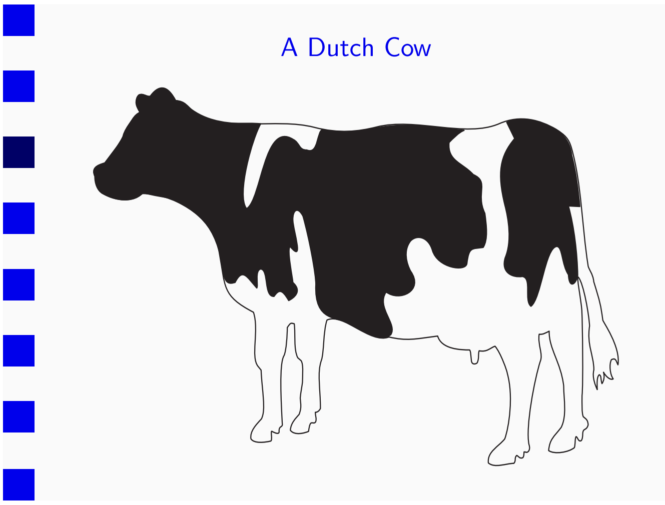
Title Page



Make Titles Informative

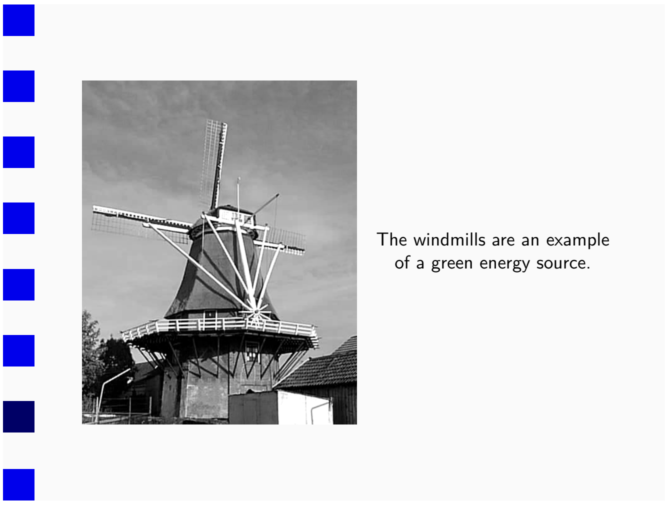
- □ Use bullets points when appropriate.
- □ Use pictures when possible
- □ Do not put too much information on one slide

Normal Slide



A Dutch Cow

Horizontal Picture

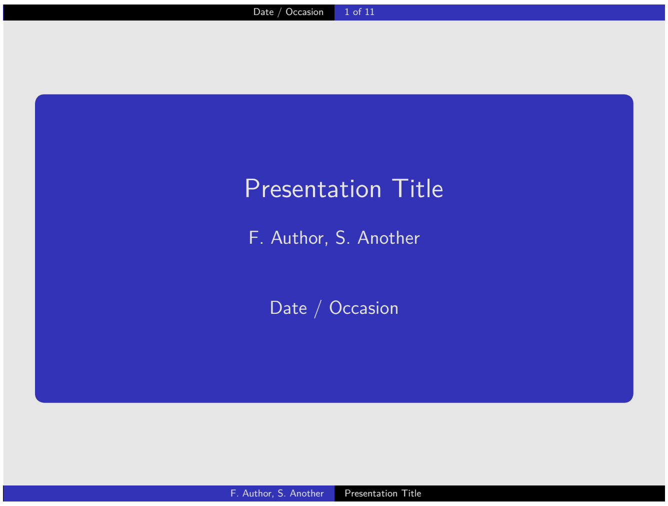


The windmills are an example of a green energy source.

Vertical Picture

Split

This style is inspired by the *Copenhagen* theme of the Latex's `beamer` package. The narrow blue and black stripes at the top and the bottom of the slides display the date and slide number (top) and the title and author of the presentation.



Date / Occasion 1 of 11

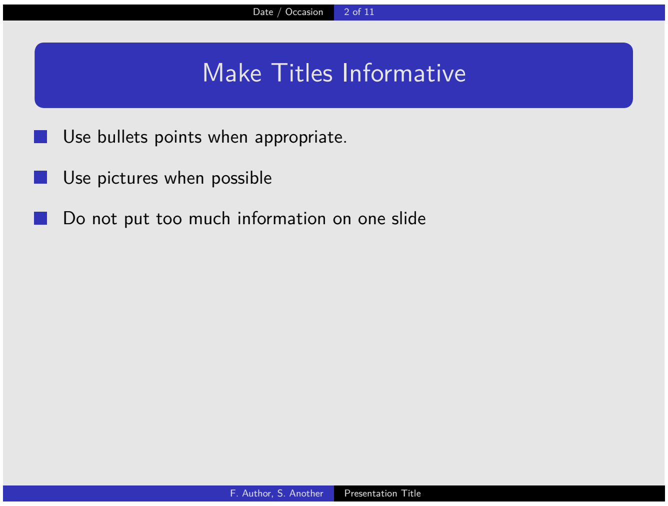
Presentation Title

F. Author, S. Another

Date / Occasion

F. Author, S. Another Presentation Title

Title Page



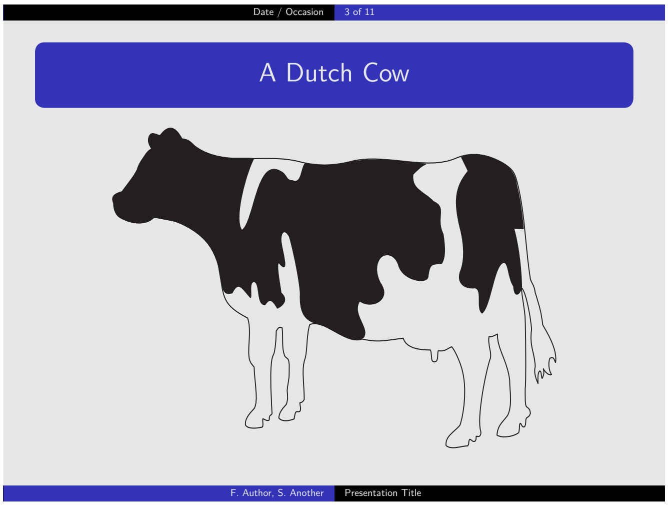
Date / Occasion 2 of 11

Make Titles Informative

- Use bullets points when appropriate.
- Use pictures when possible
- Do not put too much information on one slide

F. Author, S. Another Presentation Title

Normal Slide

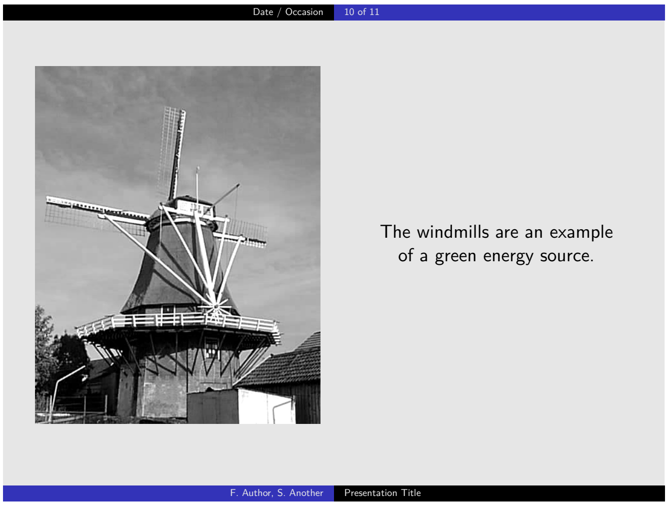


Date / Occasion 3 of 11

A Dutch Cow

F. Author, S. Another Presentation Title

Horizontal Picture



Date / Occasion 10 of 11

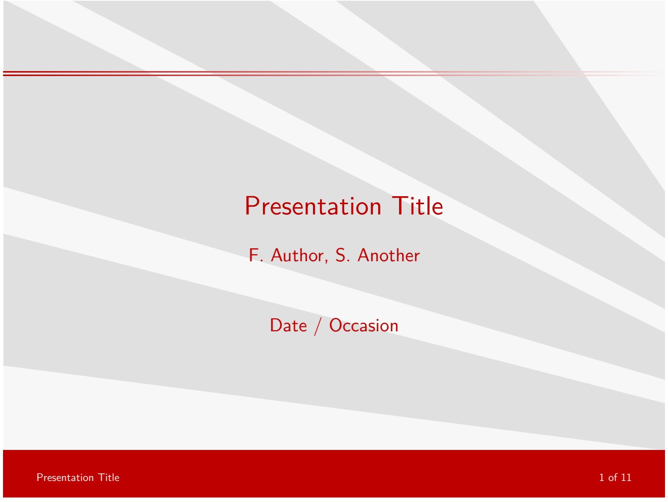
The windmills are an example of a green energy source.

F. Author, S. Another Presentation Title

Vertical Picture

Sunrise

This style is inspired by the *husky* theme of the Latex's `powerdot` package.



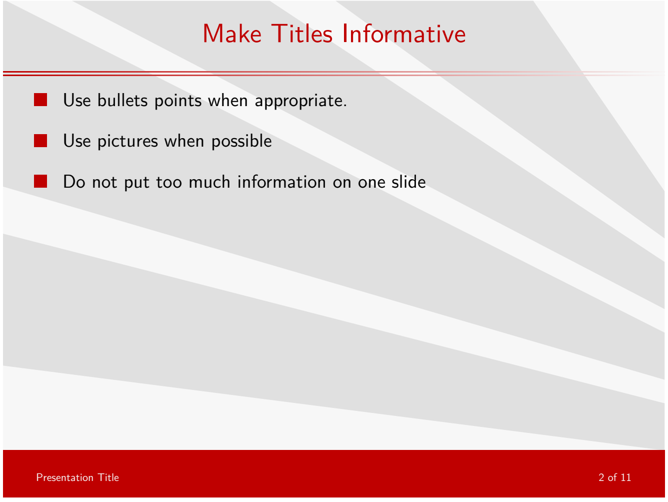
Presentation Title

F. Author, S. Another

Date / Occasion

Presentation Title 1 of 11

Title Page

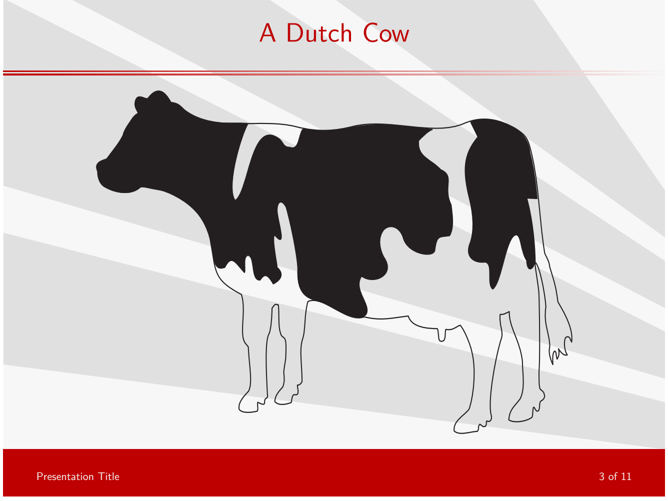


Make Titles Informative

- Use bullets points when appropriate.
- Use pictures when possible
- Do not put too much information on one slide

Presentation Title 2 of 11

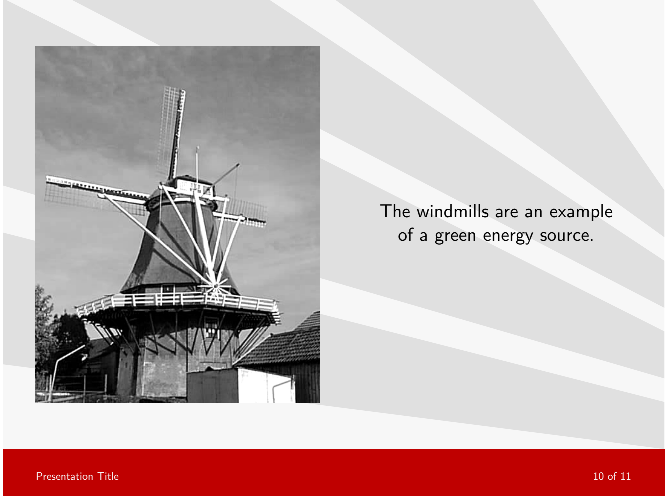
Normal Slide



A Dutch Cow

Presentation Title 3 of 11

Horizontal Picture



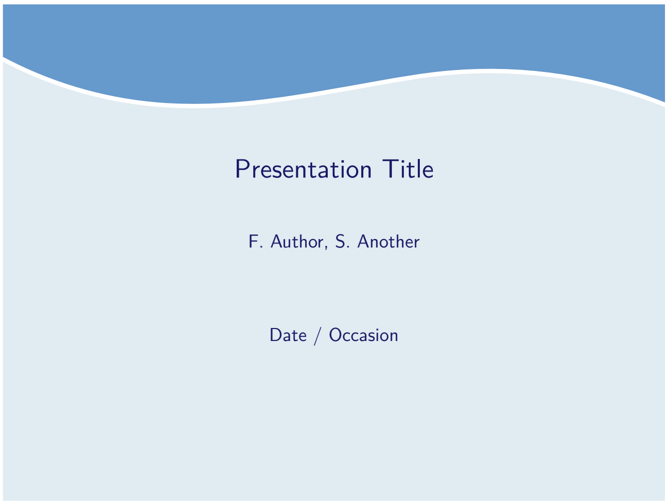
The windmills are an example of a green energy source.

Presentation Title 10 of 11

Vertical Picture

Swoosh

Take a break from the right angles and straight lines. Use swooshy curves. This style also has a fancy page counter at the bottom.

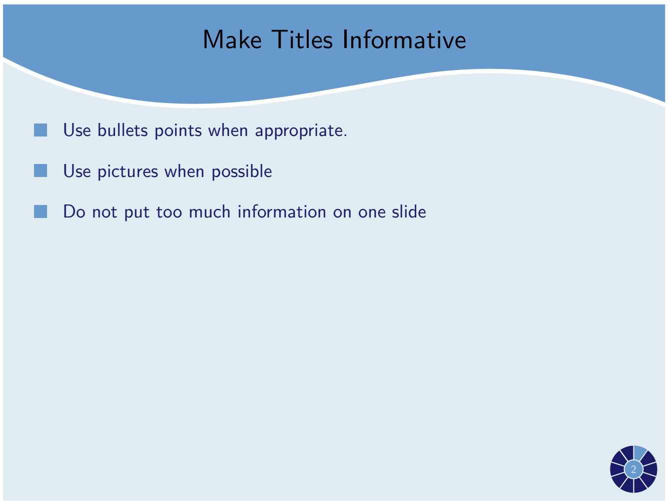


Presentation Title

F. Author, S. Another

Date / Occasion

Title Page

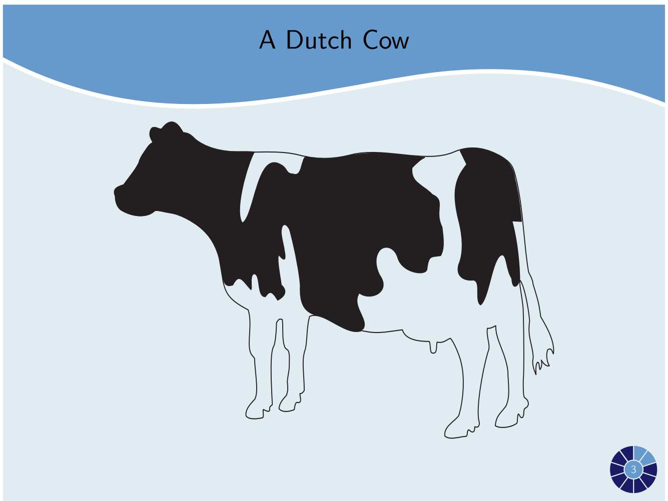


Make Titles Informative

- Use bullets points when appropriate.
- Use pictures when possible
- Do not put too much information on one slide

2

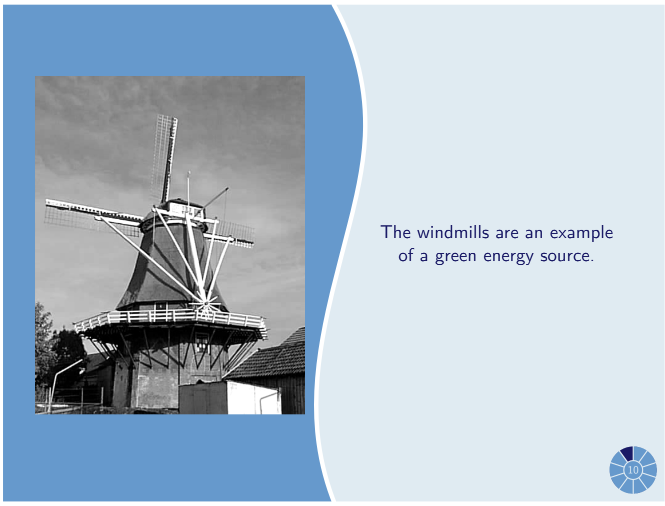
Normal Slide



A Dutch Cow

3

Horizontal Picture



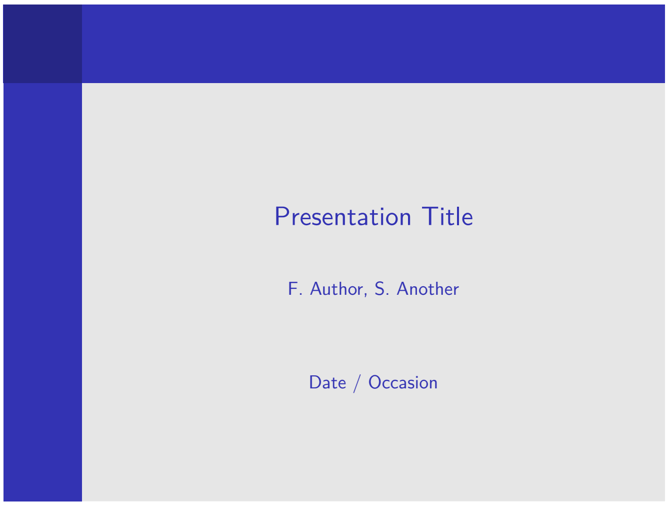
The windmills are an example
of a green energy source.

10

Vertical Picture

ThickStripes

This theme is inspired by the *Berkeley* style of the Latex's `beamer` package. It has a stop watch at the bottom, which keeps tracks of the number of slides.

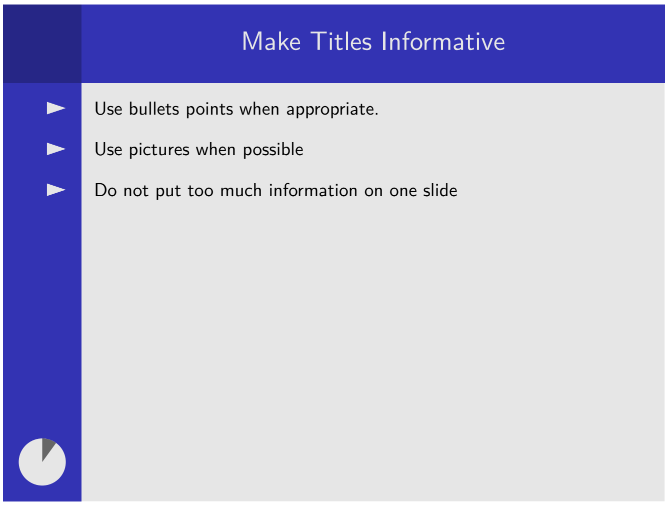


Presentation Title

F. Author, S. Another

Date / Occasion

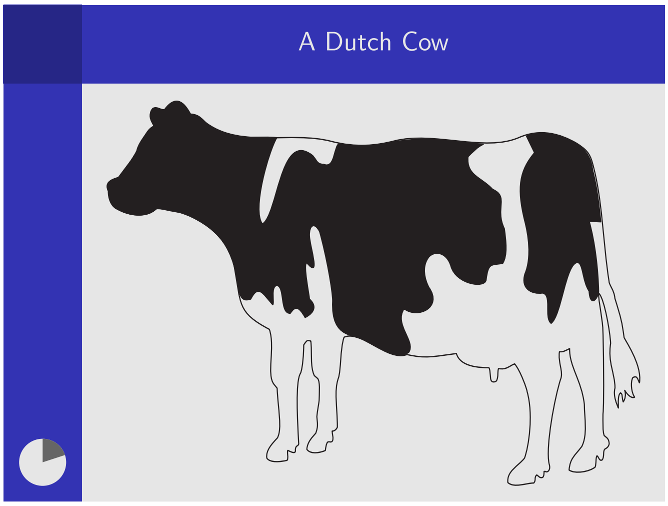
Title Page



Make Titles Informative

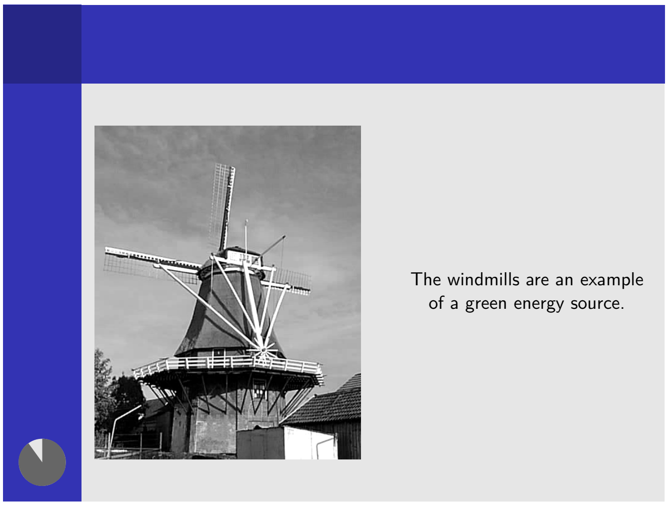
- Use bullets points when appropriate.
- Use pictures when possible
- Do not put too much information on one slide

Normal Slide



A Dutch Cow

Horizontal Picture



The windmills are an example of a green energy source.

Vertical Picture

7 Changing presentation fonts

The `font` and the `size` keys to `\setupmodule[simpleslides]` determine the font and font size for the main text of the presentation. The default font is Latin Modern Sans at 17pt.

- The `font` key can take the following values.

`LatinModern`	typesets in Latin Modern Serif
`LatinModernSans`	typesets in Latin Modern Sans
`Bookman`	typesets in TexGyre Bonum (a Bookman clone)
`Chancery`	typesets in TexGyre Chorus[1] (a Zapf Chancery clone)
`Gothic`	typesets in TexGyre Adventor (a Gothic clone)
`Helvetica`	typesets in TexGyre Heros (a Helvetica clone)
`Palatino`	typesets in TexGyre Pagella (a Palatino clone)
`Schoolbook`	typesets in TexGyre Schola (a Schoolbook clone)
`Times`	typesets in TexGyre Termes (a Times clone)

- The `size` key can be any valid Tex dimension.

Choosing your own font

If you want to set up your own font, pick any value for the `font` key (or leave it empty). Use the `size` key to choose the font size. Then *after* loading the module, choose any font using the normal Context commands. Make sure to set the bodyfont at size `\NormalSize`. So, if you have your own typescript for a font, your setup will look like this:

```
\usemodule[simpleslides][...]
....
\usetypescriptfile[type-myfont]    % The typescript for your font
\usetypescript[Mytypescript]       % As set in your typescript file
\setupbodyfont[Myfont,\NormalSize] % Note the \NormalSize here
```

Internally, the font size is stored in the macro `\NormalSize`. The main text is set at size `\NormalSize`; the title page and the slide title are set at size `\TitleSize`. The module uses some heuristics to select a reasonable value of `\TitleSize`. If you do not like the size of the title page and slide titles, you can change the value to `\TitleSize` to whatever you like.

8 Changing the title page

It is possible to change the look of `\placeTitle` using `\setupTitle`. This feature is intended for authors creating a new style, but may also be useful for someone who likes to tweak the presentation style. You should normally only set the `title`, `authors`, and `date` keys. If `date` is not set, then the module will default to `\currentdate`.

[1] Please be aware that Chorus is a calligraphic font. It has no italic or bold.

```
                      *
  \setupTitle [..,..=..,..]

* title        = TEXT
  author       = TEXT
  date         = TEXT
  style        = normal bold slanted boldslanted type cap
                 small... COMMAND
  color        = IDENTIFIER
  align        = inner outer left right flushleft flushright
                 middle center normal no yes
  before       = COMMAND
  after        = COMMAND
  titlestyle   = normal bold slanted boldslanted type cap
                 small... COMMAND
  titlecolor   = IDENTIFIER
  titlealign   = inner outer left right flushleft flushright
                 middle center normal no yes
  authorstyle  = normal bold slanted boldslanted type cap
                 small... COMMAND
  authorcolor  = IDENTIFIER
  authoralign  = inner outer left right flushleft flushright
                 middle center normal no yes
  titlestyle   = normal bold slanted boldslanted type cap
                 small... COMMAND
  titlecolor   = IDENTIFIER
  titlealign   = inner outer left right flushleft flushright
                 middle center normal no yes
  datestyle    = normal bold slanted boldslanted type cap
                 small... COMMAND
  datecolor    = IDENTIFIER
  datealign    = inner outer left right flushleft flushright
                 middle center normal no yes
  beforetitle  = COMMAND
  beforeauthor = COMMAND
  beforedate   = COMMAND
  aftertitle   = COMMAND
  afterauthor  = COMMAND
  afterdate    = COMMAND
```

9 Changing the slide titles

It is possible to change the look of \SlideTitle using \setupSlideTitle. Like \setupTitle, this feature is intended for authors creating a new style. You can use this command to make a minor change in an existing style, if you want.

```
                     *
\setupSlideTitle [..,..=..,..]

* page        = yes  no  IDENTIFIER
  style       = normal  bold  slanted  boldslanted  type  cap  small...
                COMMAND
  before      = COMMAND
  after       = COMMAND
  align       = TEXT
  alternative = normal  layer
```

10 Special macro for including pictures

As explained earlier, the \IncludePicture macro facilitates the placement of pictures. It takes four arguments (one of which is optional, and as such wasn't mentioned in the previous description).

```
                  1     2        3         4
\IncludePicture [...] [...] [..,..=..,..] {...}
                               OPTIONAL

1 horizontal  vertical
2 IDENTIFIER
3 inherits from \setupPicture
4 TEXT
```

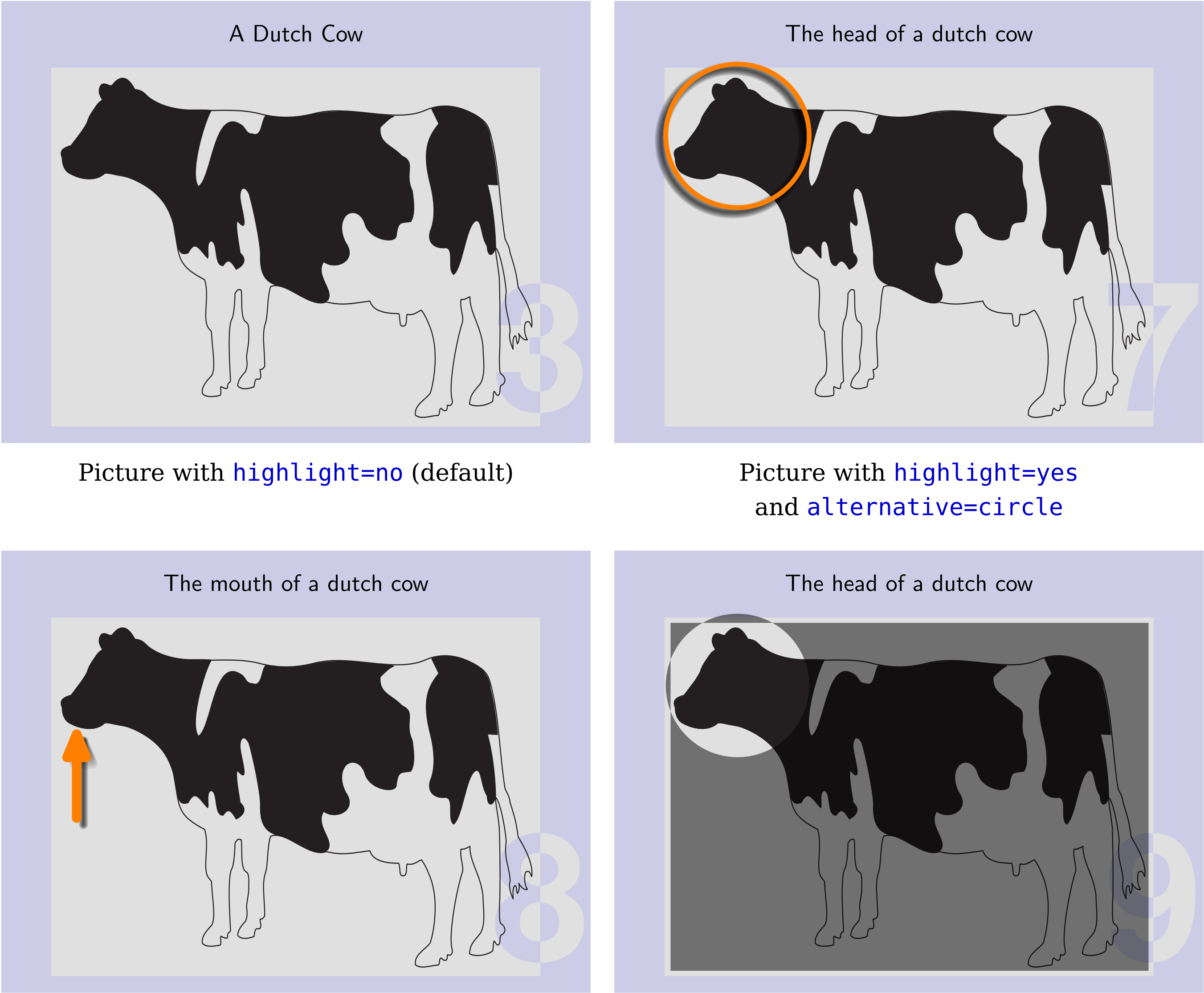
As explained earlier, the first argument determines whether the picture will be placed in horizontal or vertical layout; for examples, see Figure 2. The second argument is the filename of the picture that you want to include. The third argument is an optional argument useful for highlighting the picture. The fourth argument (in braces) is the text accompanying the picture. For horizontal pictures, this text is placed as a \SlideTitle; for vertical pictures this text is placed opposite to the picture, centered horizontally and vertically.

The third argument is the most complex. It specifies picture dimensions and highlights. If you want all pictures to share a common value (like color or shadow), specify them using \setupPicture.

```
                          *
  \setupPicture [..,..=..,..]

* height          =  DIMENSION
  width           =  DIMENSION
  highlight       =  yes  no
  alternative     =  none  circle  arrow  focus
  color           =  IDENTIFIER
  rulethickness   =  DIMENSION
  x               =  NUMBER
  y               =  NUMBER
  xscale          =  NUMBER
  yscale          =  NUMBER
  length          =  DIMENSION
  direction       =  NUMBER
  opacity         =  NUMBER
  length          =  DIMENSION
  shadow          =  yes  topleft  topright  bottomright  bottomleft  no
  shadowcolor     =  IDENTIFIER
  grid            =  yes  no
  subgrid         =  yes  no
  gridcolor       =  IDENTIFIER
  steps           =  NUMBER
```

Below is a brief explanation of what the different parameters do:

- `width` and `height`
  Unsurprisingly, these set the width and height of the picture. Normally, the module will automatically scale your pictures to fill the available space, so you only need to set one of these values if you want to override this mechanism.
- `highlight`
  This key determines the highlighting of the picture. If you set, `highlight=yes`, then you can use one of the three available highlights: `circle`, `arrow`, and `focus`. These highlights are shown in Figure 3. The specific highlight is chosen using the `alternative` key. The location of the highlight is specified using the `x` and `y` keys. The scaling and rotation of the highlights is set using `xscale`, `yscale`, `length` and `direction`.
- `alternative`
  When `highlight=yes`, three different highlights are available: `circle`, `arrow`, and `focus`.



Picture with highlight=no (default)

Picture with highlight=yes
and alternative=circle

Picture with highlight=yes
and alternative=arrow

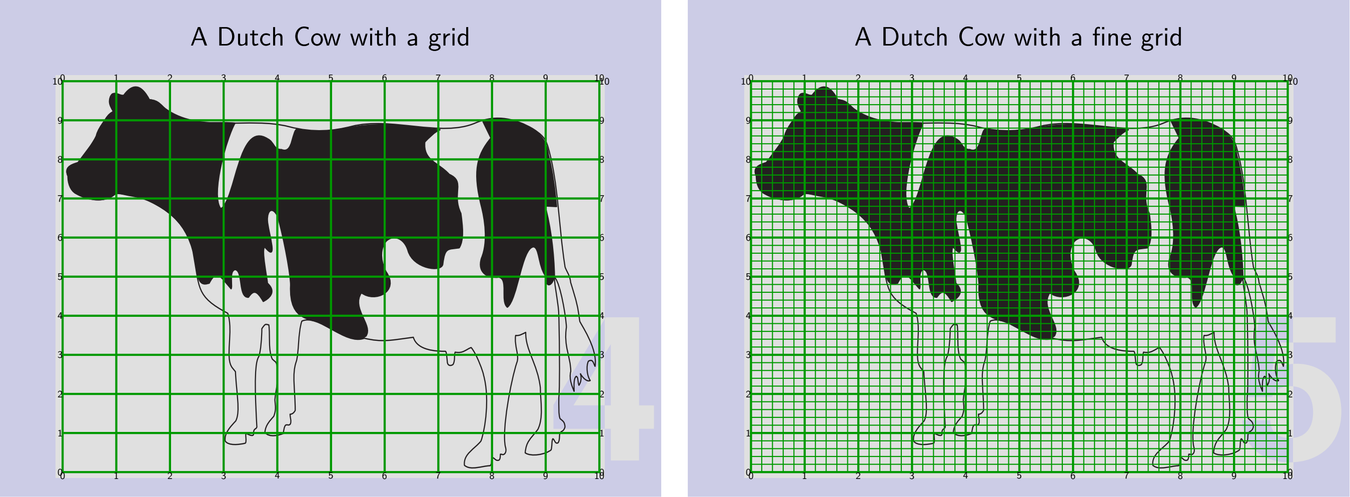
Picture with highlight=yes
and alternative=focus

Figure 3 Different highlight options available

Units for dimensions

All dimensions are specified relative to the width and height of the image, so you do not have to change the location of your highlights if you change the presentation style. The dimensions x and y should be a number between 0 and 10. The x is scaled by 1/10 times the width of the image; the y value is scaled by 1/10 times the height of the image. The easiest way to understand this is to look at a scaled grid superimposed on the picture, as in Figure 4. The grid is configured as follows:

- grid and subgrid
  These options determine whether or not to show the grid and sub-grid. The grid divides the height and width of the picture into 10 sections; this is helpful for determining the exact position where you want to place circles and arrows. The subgrid divides the grid into a finer grid. Each cell is divided into steps times steps cells.



Picture with highlight=yes and grid=yes

Picture with highlight=yes, grid=yes and subgrid=yes

Figure 4 Grids for help in determining the location of highlight

- gridcolor
  This option determines the color in which the grid is drawn. It can be any Context color identifier. The default value is green.
- steps
  The number of subdivisions for the subgrid. The default value is 5.

Highlighting by a circle

Now lets see how different highlight alternatives are specified. Suppose we want to place the picture of a cow and highlight its head. To help determine the center of the circle, we can first superimpose a fine grid on the picture, and read the value for the center. From Figure 4, x=1.4 and y=8.2 seems like a good value. Next we need to decide on the radius of the circle. The radius can either be specified in terms of the “x units” (1/10th of the picture width) or “y units” (1/10th of the picture height). Lets try a radius of 1.5 “x units”. This can be specified as xscale=1.5. If we wanted something in terms of “y units”, we could have used yscale. If both xscale and yscale are specified, we will get an ellipse. Thus, to draw the circle highlight shown in Figure 3, we wrote

```
\IncludePicture
  [horizontal]
  [cow] % Name of the image
  [highlight=yes,
   alternative=circle,
   x=1.4,
   y=8.2,
   xscale=1.5,
   shadow=bottomleft]
  {The head of a dutch cow}
```

If direction key is specified, the circle (or the ellipse) will be rotated by that amount (in degrees) in the counter clockwise direction. The color in which the circle is drawn is specified using color key. The thickness of the line is determined by rulethickness key. By default, color=orange and rulethickness is 1/100th of the picture width.

In summary, the different keys related to alternative=circle are:

- highlight=yes and alternative=circle
  These are needed to specify a circle highlight.
- x and y
  The center of the circle in terms of scaled units. Their values should be between 0 and 10.
- xscale and yscale
  The radius of the circle if only one options is specified. The major and minor radii of the ellipse if both options are specified.
- direction
  The amount by which the circle is rotated. This only makes sense if we are actually drawing an ellipse.
- rulethickness
  The line width of the circle.
- color
  The color of the circle.

Highlighting by an arrow

Suppose we want to include a picture of a cow and point out its mouth using an arrow. An arrow is specified by three things, the location of its tip, given by x and y keys; the length of the arrow, given by length key; and the direction of the tail, given by direction key. Thus, to draw the arrow highlight shown in Figure 3, we wrote

```
\IncludePicture
  [horizontal]
  [cow] % Name of the image
  [highlight=yes,
   alternative=arrow,
   x=0.4,
   y=6.8,
   direction=-90,
   length=3cm,
   shadow=bottomleft]
  {The mouth of a dutch cow}
```

The different keys related to alternative=arrow are:

- highlight=yes and alternative=arrow
  These are needed to specify a arrow highlight.
- x and y
  The tip of the arrow in terms of scaled units. Their values should be between 0 and 10.

- length
  The length of the arrow. This is a dimension.
- direction
  The amount by which the arrow is rotated.
- rulethickness
  The line width of the arrow. (Actually the line width of the arrow is twice the given value. This is so that both arrows and circles look good with the same value of rulethickness.)
- color
  The color of the arrow.

Highlighting by focus

Suppose we want place the picture of a cow, focus its head, and dull out rest of the picture. The area to be focused is a circle (or an ellipse) and it can be specified using x and y to indicate the center, xscale and yscale to indicate the radius, and direction to indicate the rotation. The keys rulethickness and color do not have any effect. The area other than the focussed area is washed out with a transparent color. The degree to which it is washed out is determined by opacity (default value 0.5), and the color of the unfocussed area is determined by shadowcolor (default value black). Thus, to draw the focus highlight shown in Figure 3, we wrote

```
\IncludePicture
  [horizontal]
  [cow] % Name of the image
  [highlight=yes,
   alternative=focus,
   x=1.4,
   y=8.2,
   xscale=1.5]
  {The head of a dutch cow}
```

The different keys related to alternative=focus are:

- highlight=yes and alternative=focus
  These are needed to specify a focus highlight.
- x and y
  The center of the circle in terms of scaled units. Their values should be between 0 and 10.
- xscale and yscale
  The radius of the circle if only one options is specified. The major and minor radii of the ellipse if both options are specified.
- direction
  The amount by which the circle is rotated. This only makes sense if we are actually drawing an ellipse.
- opacity
  The opacity of the unfocussed area. opacity=0 is transparent, while opacity=1 is completely opaque.

- `shadowcolor`
  The color of the unfocused area.

Adding shadows

When a circle or arrow highlight is used, adding a shadow to the highlight makes them stand out more. The key related to shadows is:

- `shadow`
  This key determines whether shadows are placed or not. By default, shadows are disabled. If not set to `no`, this key determines where the shadow is placed: at `topleft`, `topright`, `bottomleft`, or `bottomright`. Setting this key to `yes` puts the shadow at `bottomright`.