

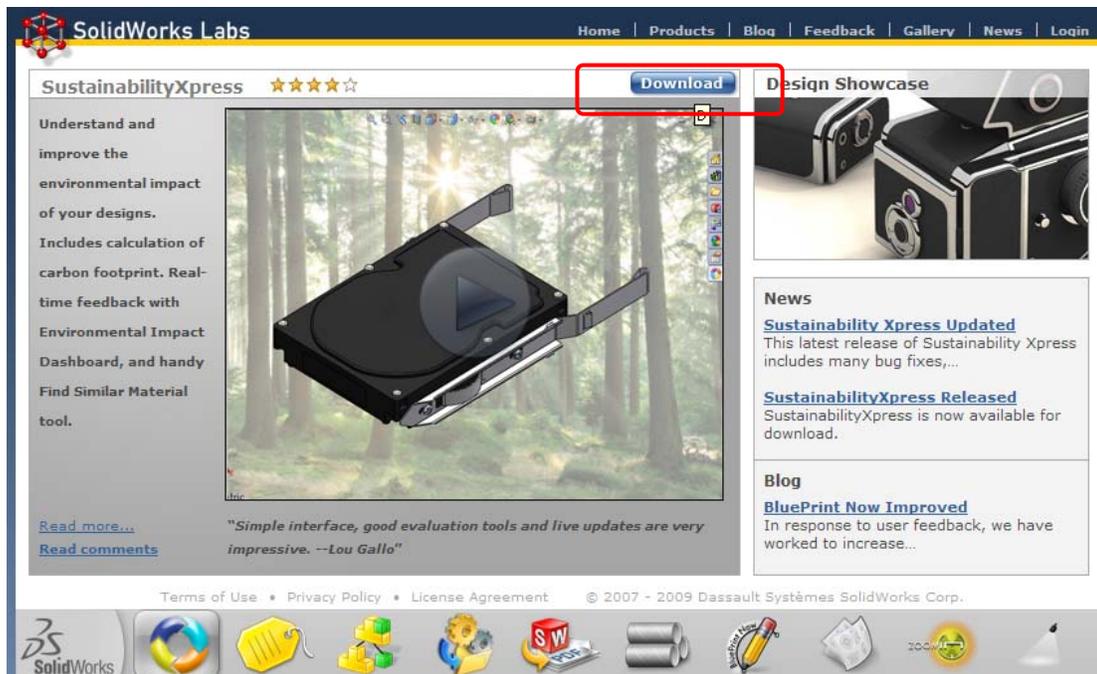


SolidWorks SustainabilityXpress Installation Instructions for SolidWorks Education Edition/ SolidWorks Student Edition 2009-2010

SolidWorks SustainabilityXpress Add-In

Note: An internet connection is required to access content. SolidWorks Education Edition, SolidWorks Student Edition, or SolidWorks SDK 2009-2010 is required.

1. Close SolidWorks application.
2. Enter <http://labs.solidworks.com/> in your internet browser.
3. Click the **Download** button from the SustainabilityXpress window.



4. Click **Download 32bit SustainabilityXpress** or **Download 64bit SustainabilityXpress** based on your computer configuration.

SolidWorks Labs Home | Products |

SustainabilityXpress [Download](#)

 Understand and improve the environmental impact of your designs. Includes calculation of carbon footprint. Real-time feedback with Environmental Impact Dashboard, and handy find Similar Material tool.

Life Cycle Assessment (LCA)

When determining the environmental impact of a product, LCA looks at everything that happens in the production, use, and final disposal of the product. This even includes all the transportation that occurs between the stages. Decisions on the material used, how it is manufactured, ... can result in vastly different effects on the environment. SustainabilityXpress shows you these impacts and helps you to improve your design.

Environmental Dashboard

When evaluating all of these stages, four environmental impacts are measured.

- Carbon Footprint – production of greenhouse gasses
- Total Energy Consumed – self explanatory
- Effect on Air – specifically the contributor to acid rain
- Effect on Water – which results in algae blooms in coastal waters

The values for these impacts update in real-time as you make changes to your design. This comprehensive view will give you confidence that the design decisions you make are truly better for the environment.

Find Similar Material

Material selection is an important contributor to determining the environmental impact of a design. It is also important in all other aspects of design. That is why SustainabilityXpress includes Find Similar. It allows you to quickly and easily search the built-in material database for close alternatives to your current material. Even if you don't do sustainable design, this is a handy utility for everyone.

Customizable Reports

Customizable report template allows you to instantly publish impressive reports that professionally communicate how you have reduced the environmental impact of your design.

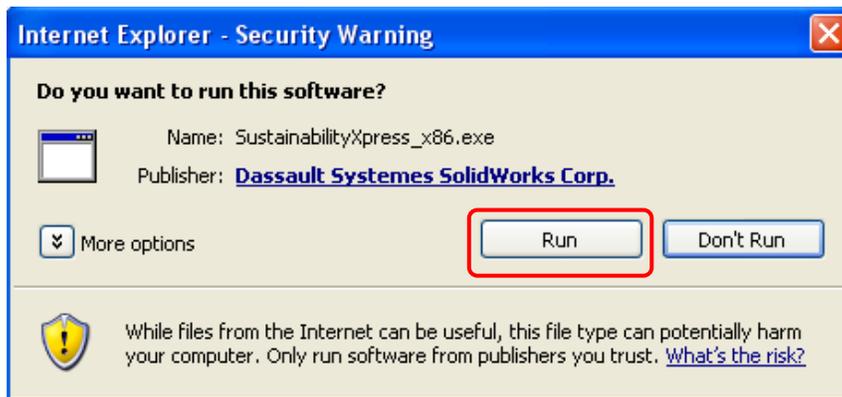
*Note: SustainabilityXpress is designed to work **specifically** with SolidWorks 2009.*

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[Download Tutorial](#)

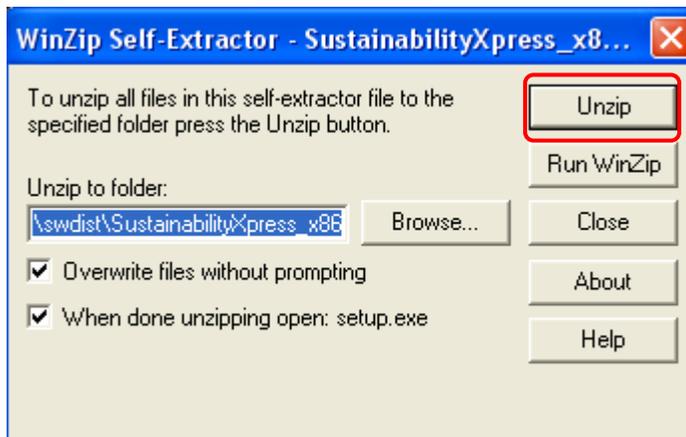
5. Click **Run**. The software downloads to a temporary file location.



6. Click **Run** to install SimulationXpress.



7. Click **Unzip** to Extract all files.



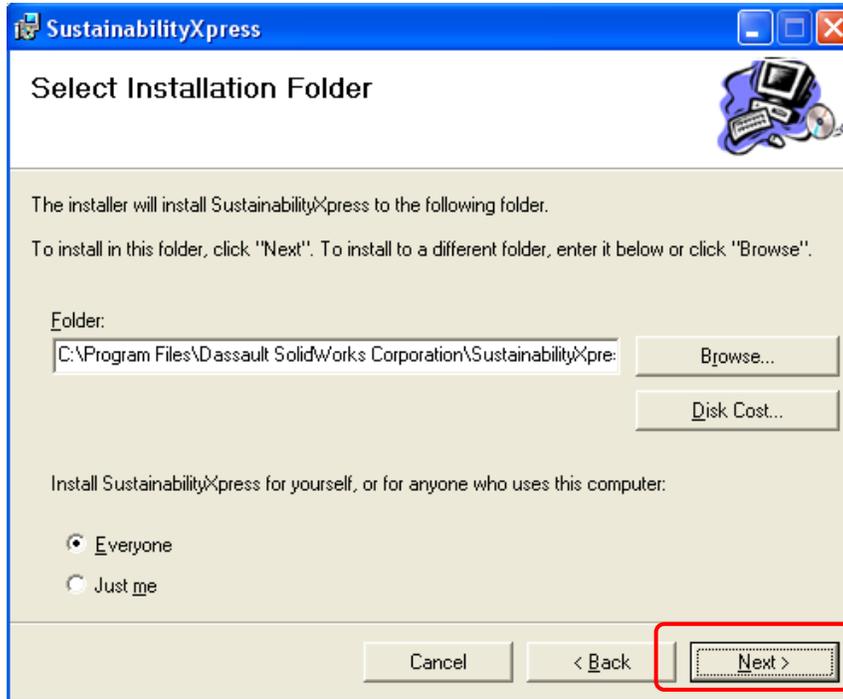
8. Click **OK**.



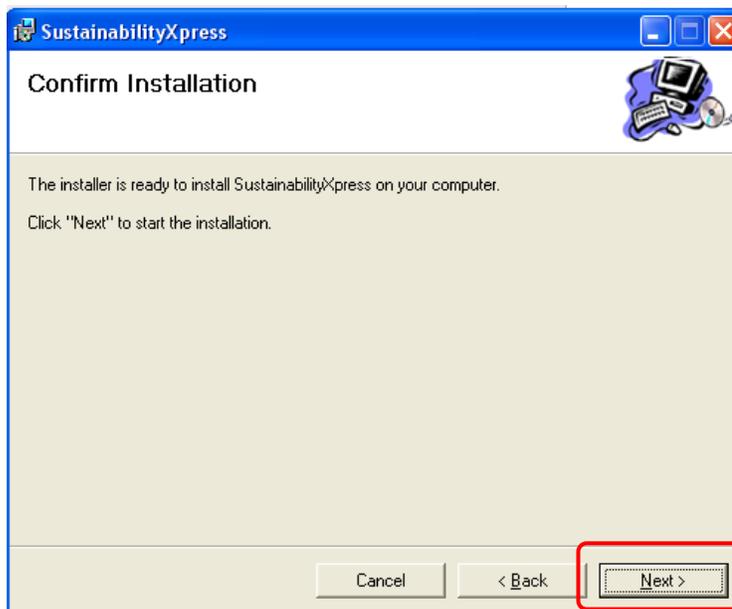
9. Click **Next** from Welcome to SustainabilityXpress Setup Wizard.



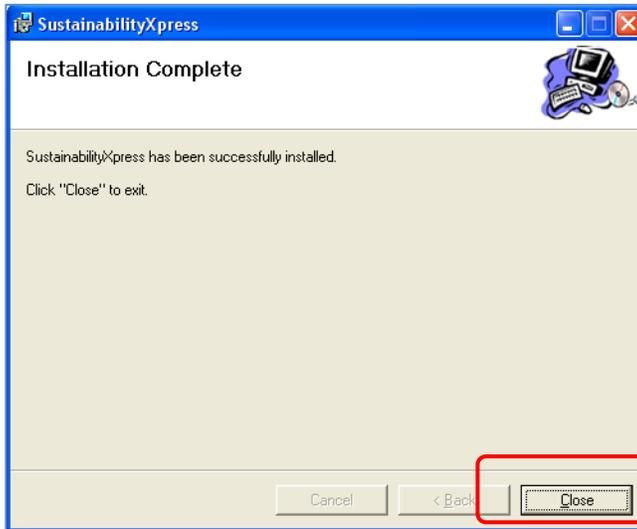
10. Click **Next** from the Select Installation Folder. *Note: The Add-In will be installed to the "Dassault SolidWorks Corporation" folder by default. You may wish to change this folder to match your SolidWorks installation folder.*



11. Click **Next** from Confirm Installation.



12. Click **Close** from Installation Complete.



13. Enter <http://labs.solidworks.com/> in your internet browser .
14. Click the **Download** button from SustainabilityXpress window.
15. Click **Download Tutorial**.

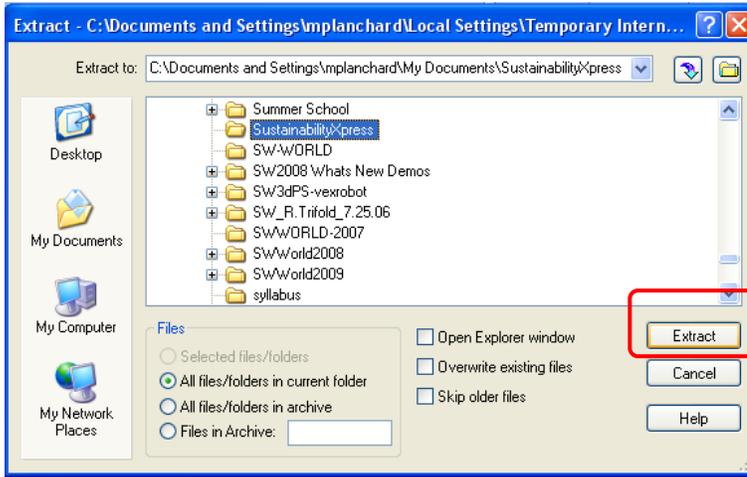
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16. Click **Open**. Click **Extract**.



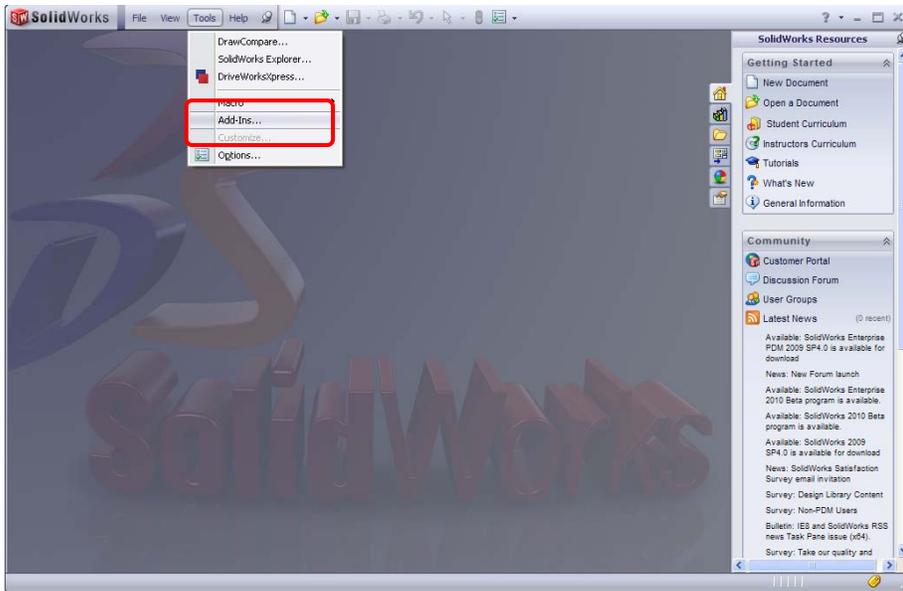
17. Click **Extract** and select a folder to Extract to, such as My Documents.



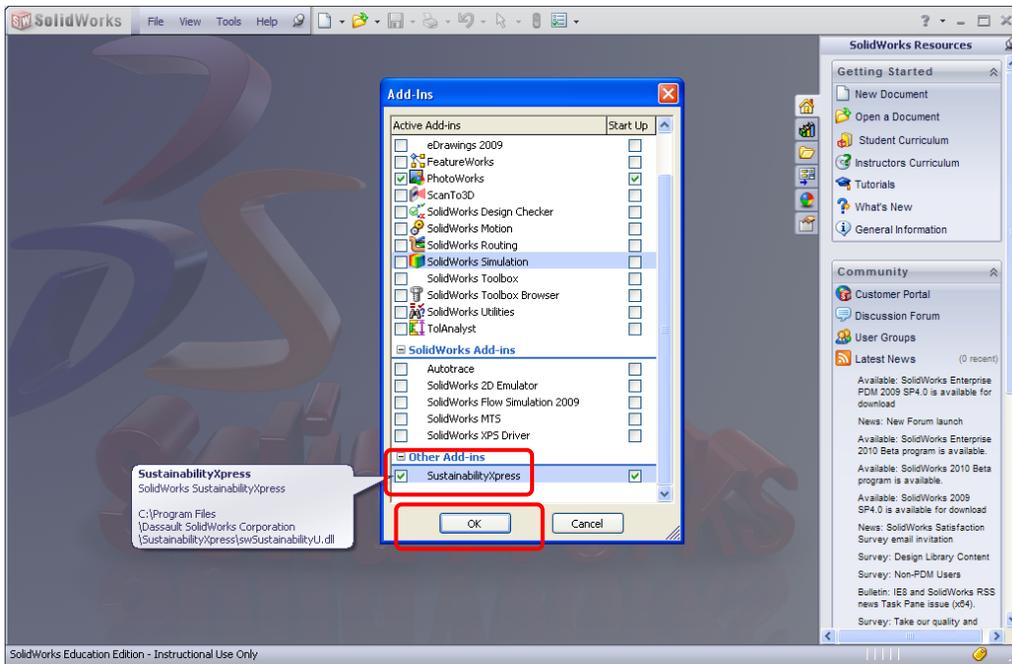
18. The part file, Drive Sled.sldprt and the Help file, OTSustainability.chm are extracted.



19. Click **SolidWorks**  from your desktop.
20. Click **Tools, Add-Ins...**

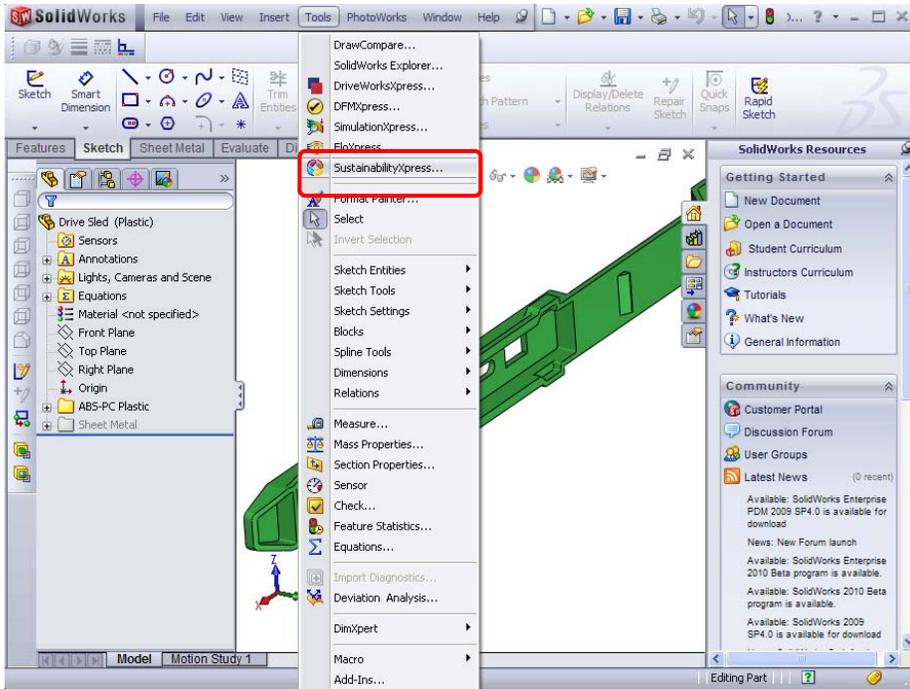


21. Check **SustainabilityXpress**. Click **OK**.



22. Click **Open**. Browse and select **Drive Sled.sldprt**.

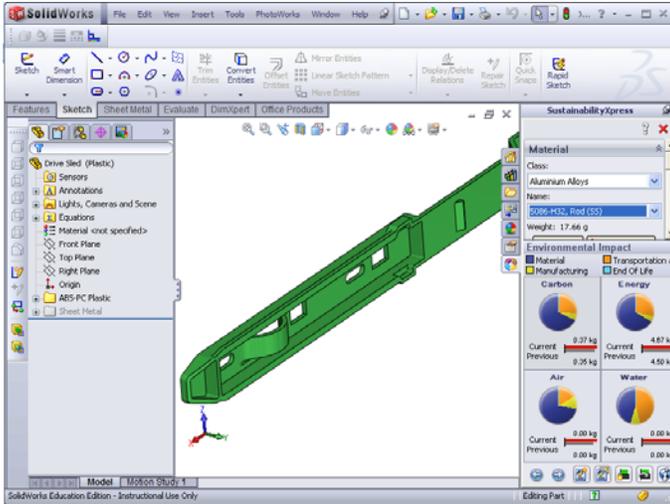
23. Click **Tools, SustainabilityXpress**.



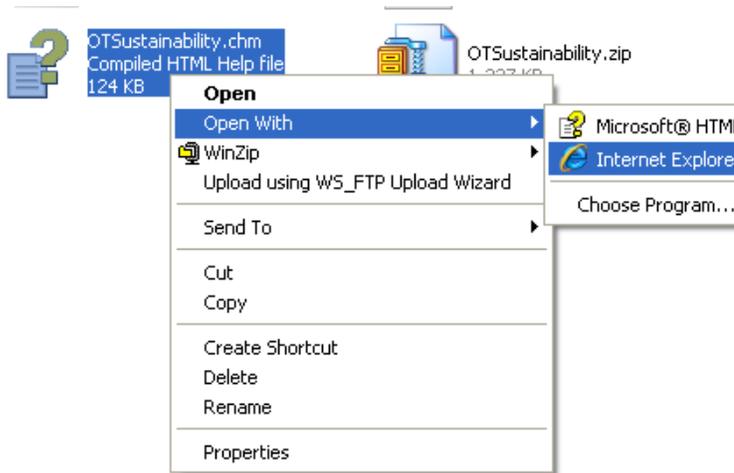
24. Click Continue. The SustainabilityXpress Task Pane is displayed.



25. Select values for Material, Manufacturing, and Use. A step-by-step tutorial is available from the Download Tutorial file, **OTSustainability.chm**.



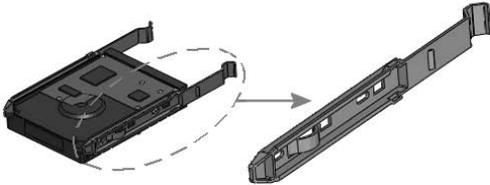
26. Right-click **OTSustainability.chm**. Click **Open With, Internet Explorer**. The Help file, OTSustainability.chm contains a step-by-step tutorial on using SolidWorks SustainabilityXpress Tutorial.



27. Review the SolidWorks Sustainability Tutorial.

Sustainability Overview

This example demonstrates using SustainabilityXpress to perform an environmental impact analysis of a part. You analyze a common part used in computers - the drive sled that holds drives in the computer case.



Sustainability measures these areas of environmental impact:

| | |
|-----------------------------|--|
| Carbon Footprint | A measure of carbon dioxide and equivalents, such as carbon monoxide and methane, that are released into the atmosphere primarily by burning fossil fuels, contributing to global warming. |
| Energy Consumed | All forms of nonrenewable energy consumed over the entire life cycle of the product. |
| Air Acidification | Acidic emissions, such as sulfur dioxide and nitrous oxides, which eventually lead to acid rain. |
| Water Eutrophication | Contamination of water ecosystems by waste water and fertilizers, resulting in algae blooms and the eventual death of plant and animal life. |

The software measures the environmental impact based on these parameters:

- Material used
- Manufacturing process and region
- Transportation and use region
- End of life

Follow these steps to analyze parts: