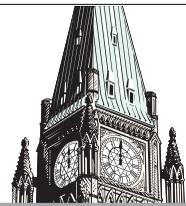


# ARGUMENTS



## Hudak charts a skewed course

Platform graphs that look too convenient to be true would be rejected in any first-year statistics course, **JIM STANFORD** writes

Mark Twain famously penned that there are “lies, damned lies, and statistics.” He could have added a fourth category: election platforms.

I did not expect to find much to agree with in the *Changebook*, the Conservative platform in the Ontario election. After all, as a

labour economist, my preferences in policy naturally lean in a different direction.

But as I read through the document, curiously, my attention was diverted away from its substantive policy content (tax cuts, spending cuts, etc.), focusing instead on the statistical graphs

featured in the platform. As I examined these graphs, niggling concerns gnawed away. The lines were too smooth. The contrasts too dramatic. The proportions too extreme.

I examined the graphs, comparing them to the numbers contained in the text. I double-

checked the data and the cited sources. I even got out a ruler to actually measure the bars and circles that were pictured.

There are 13 statistical graphs in the *Changebook*. Every single one reveals significant errors in labelling, citation, scaling, and proportion. In a few cases, the illustrated data is actually false. In almost all, axes and scaling have been skewed and manipulated, without proper labelling, to exaggerate political points. In

some cases, it appears the graphs were simply hand-drawn.

Whatever one thinks of a political party's platform, voters have the right to expect honesty and transparency in its presentation. The consistent pattern of distortion in the *Changebook's* 13 graphs reveals a willingness to sacrifice integrity for political optics. And that approach is consistent with the other controversies that have dogged the Conservative campaign so far.

### Tax savings from income splitting ...

Consider this graph, for example, from page 2 of the *Changebook*, which purports to show the tax savings from the Conservative proposal for income-splitting. First off, the graph fails to indicate that only some families get this benefit (namely, families with two tax-filers in two different tax brackets).

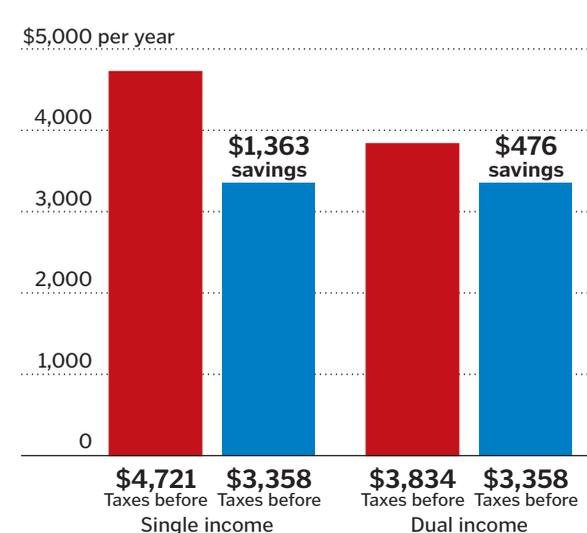
Then, the corresponding bars are manipulated to exaggerate the apparent tax saving. For a single-earner two-filer family, the Conservatives claim taxes will fall 27% — yet the graph visually implies they will fall 75%. The second set of bars (for two-earner two-filer families) manipulates the axis again — in a way not possibly consistent with the first bars. It, too, exaggerates the savings from income-splitting.

The graph at right shows a proper illustration of the Conservative claims. The picture is considerably less dramatic. Even if one accepts the Conservative claims, their misleading visual presentation raises doubts about the integrity of the whole document.

### ... as charted in the PC Changebook ...



### ... and charted accurately

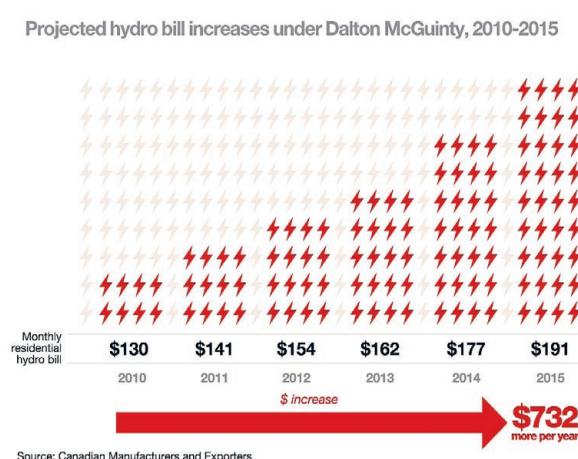


### Electricity price increases ...

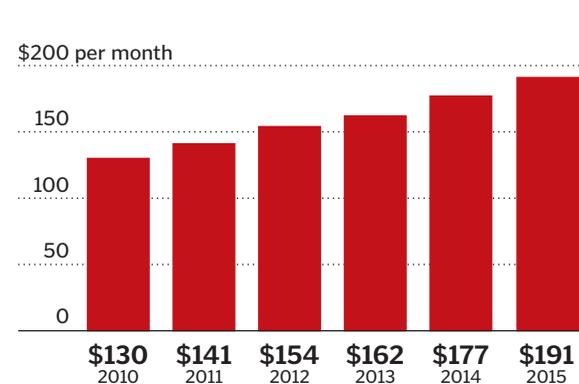
Consider another graph, from p. 6 of the *Changebook*, portraying the predicted rise in electricity prices in Ontario. The text of the platform predicts a 47% increase in monthly bills over the next five years. No appropriate citation is provided to allow readers to judge the credibility of this prediction, or even to define what exactly is being measured.

But the *Changebook's* authors went further, manipulating their graph to exaggerate this strong claim. For 2011, the graph shows a 50% increase in costs — while the text predicts an 8% increase. This exaggeration continues. By 2015 the graph suggests prices have risen more than fourfold, many times more than the stated prediction. It's a parody of empirical presentation that would be rejected outright in any first-year statistics course. (A true portrayal of the Conservative claim is presented on the right.) Similar problems haunt all the other graphs in the platform.

### ... as charted in the PC Changebook ...



### ... and charted accurately



**Jim Stanford** is an economist with the Canadian Auto Workers. A full critique of the 13 graphs is provided in his recent report, *Graphs for Dummies*, at [www.policyalternatives.ca](http://www.policyalternatives.ca).



### AT OTTAWACITIZEN.COM Checking the parties' charts

Judging by this photo from the Liberals' platform book, the PCs aren't the only ones using charts — or the illusion of them — to spin their policies. The Citizen checked the PC, Liberal and NDP policy books to see which cheated most on its charts.

See the slide show at [ottawacitizen.com/opinion](http://ottawacitizen.com/opinion)