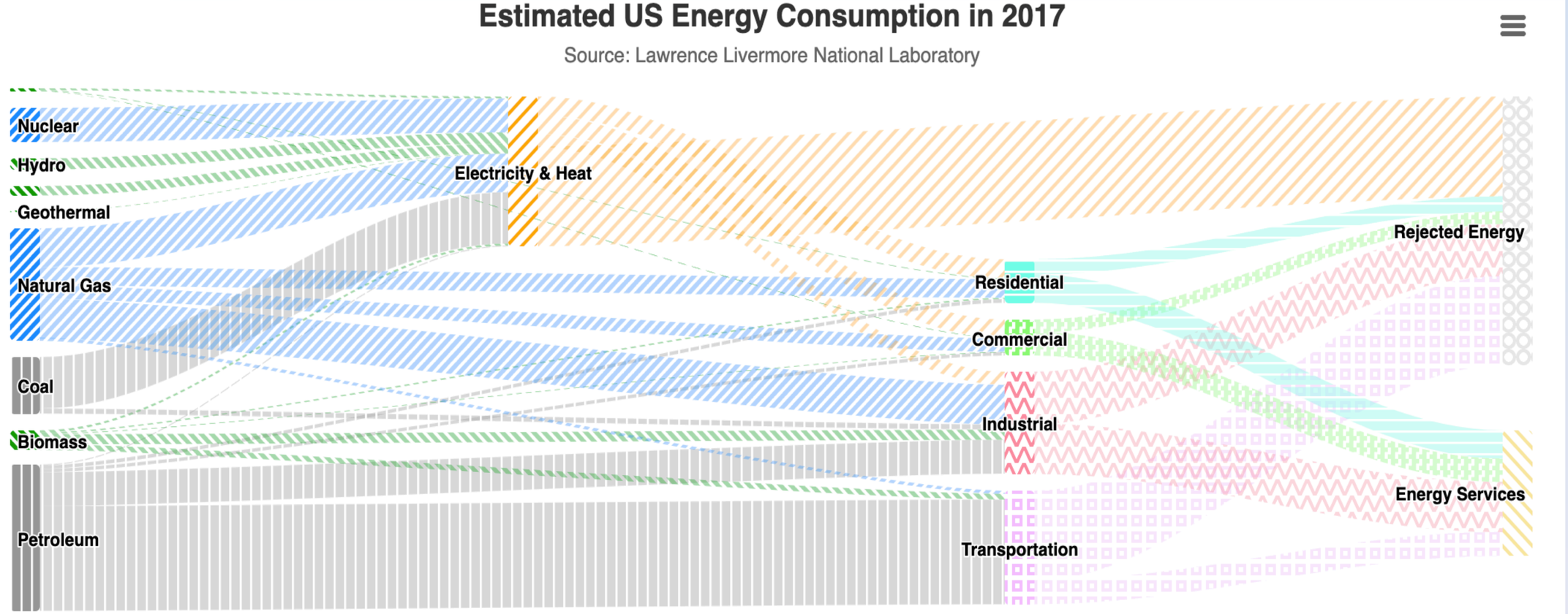
Chapter 3, Episode 4: **Flexible barriers**

What about this visualization might be a barrier?



Sankey charts are used to visualize data flow and volume between nodes. The wider lines indicate larger volumes.

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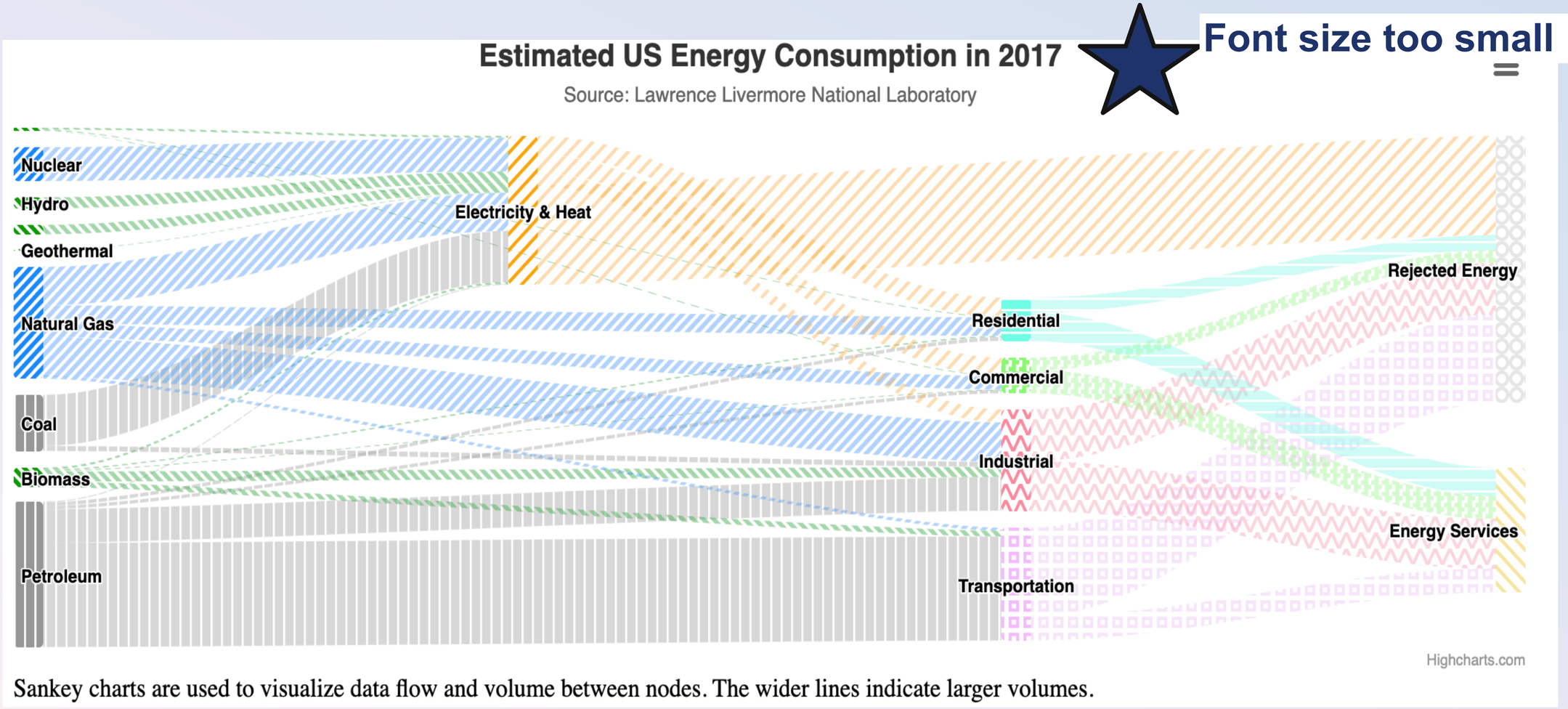

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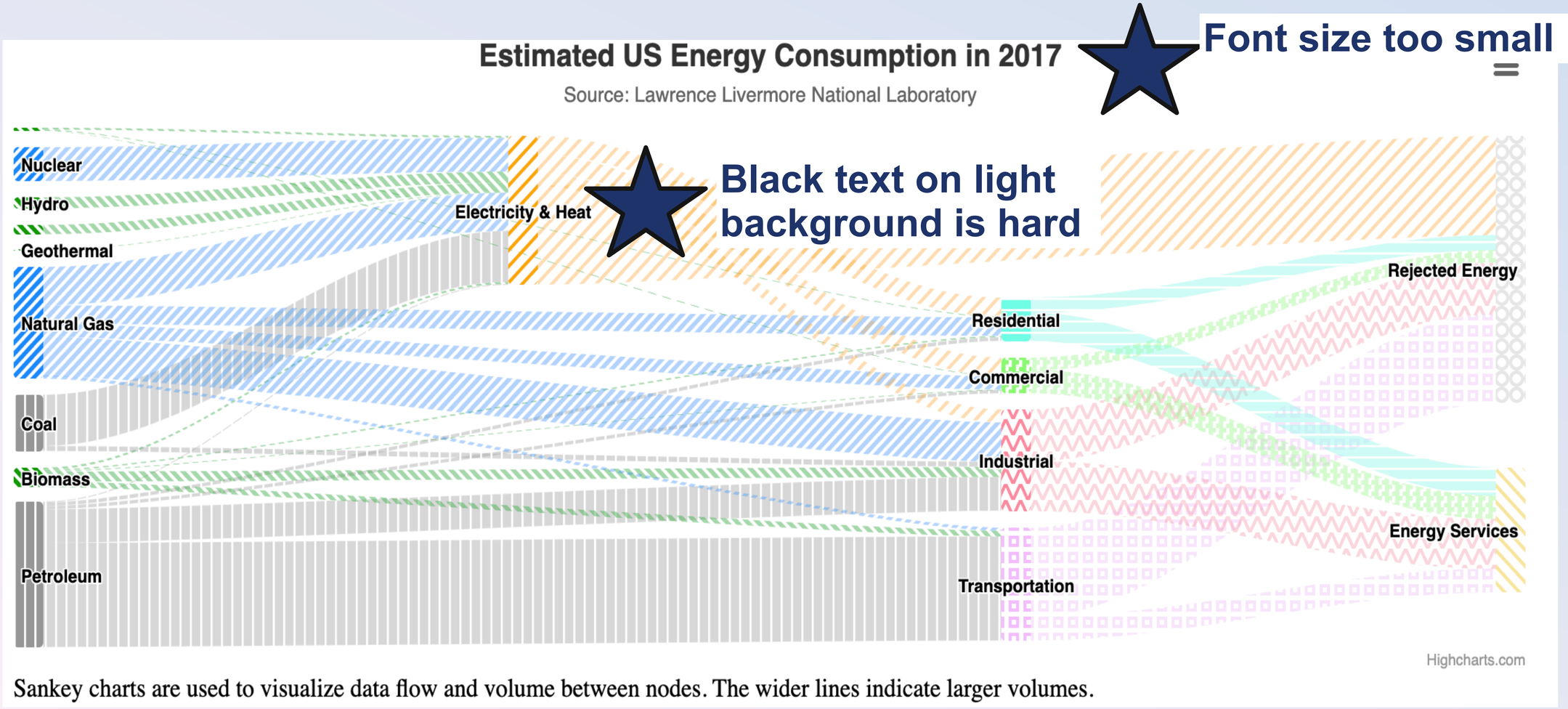

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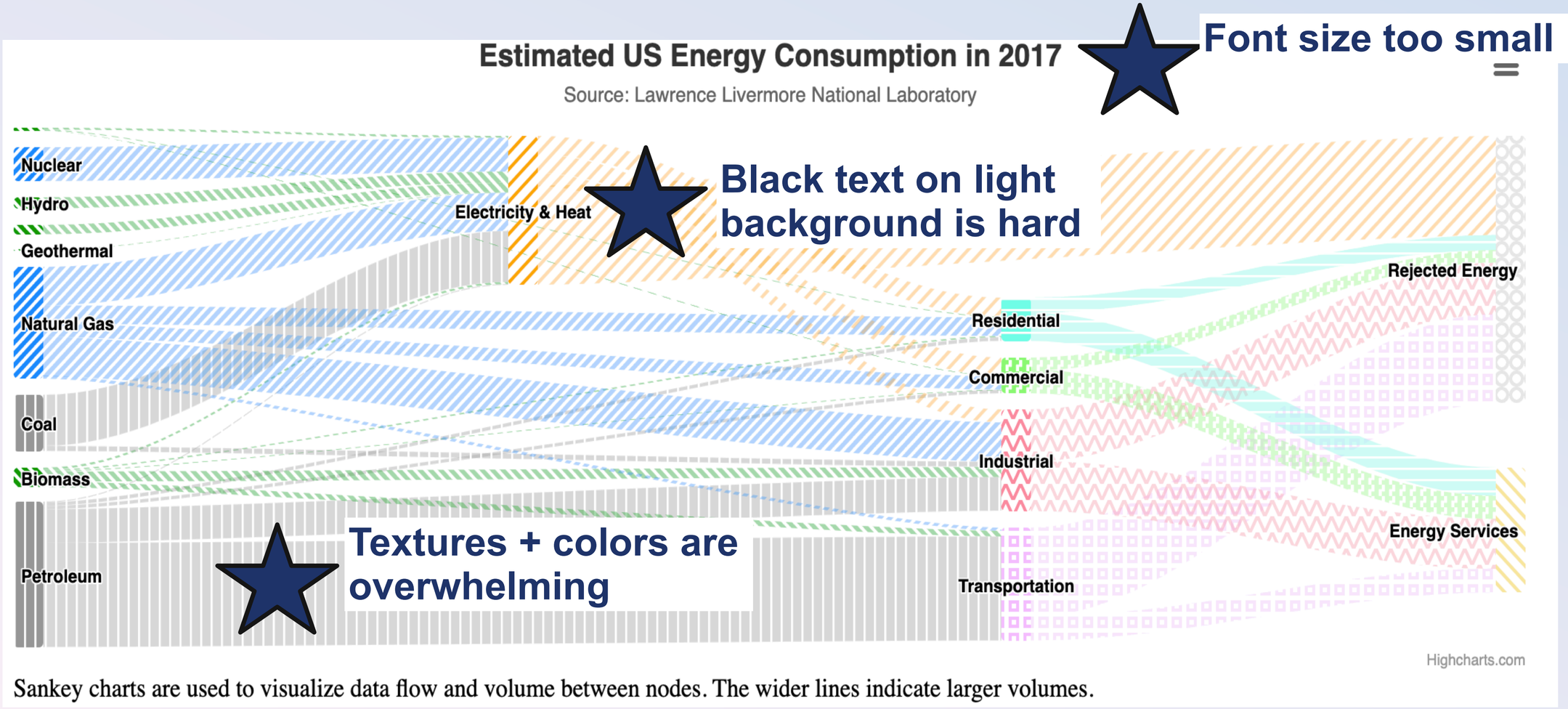

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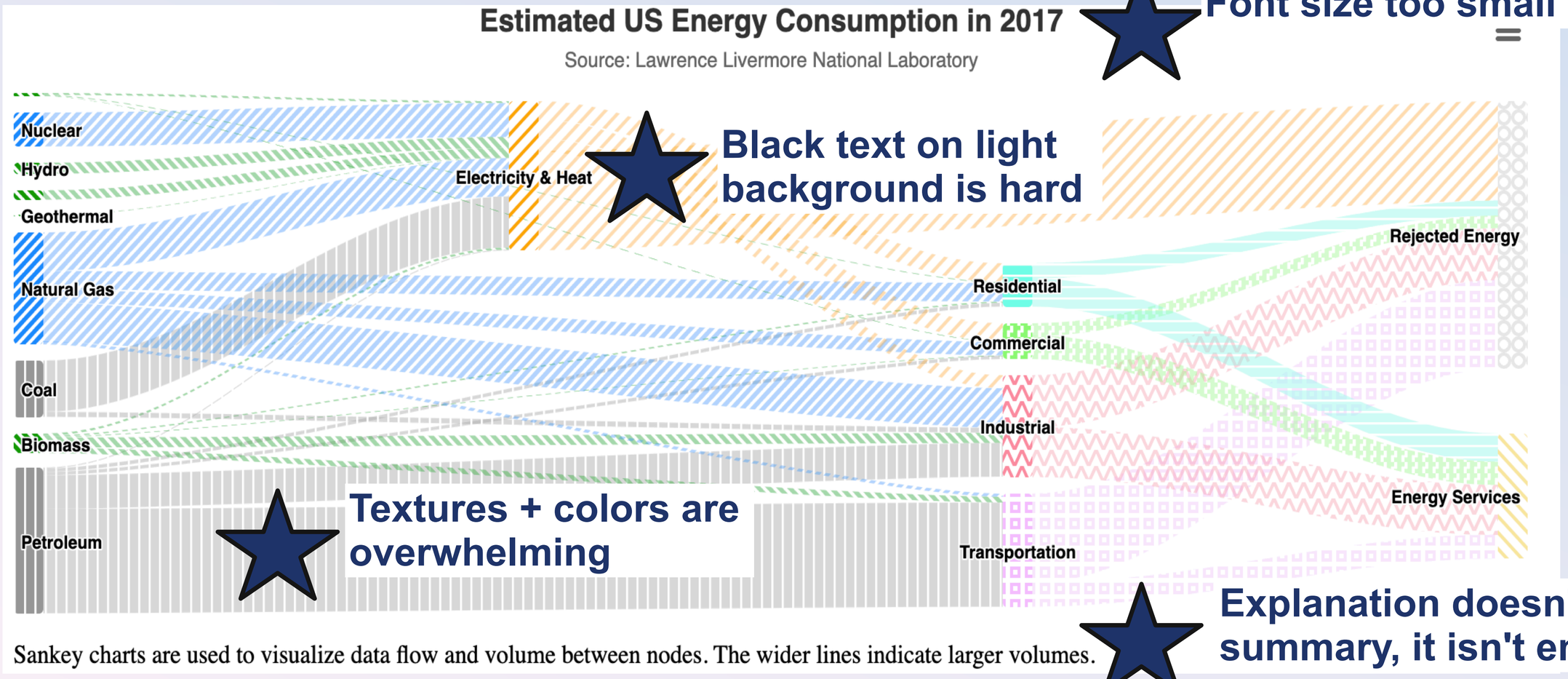
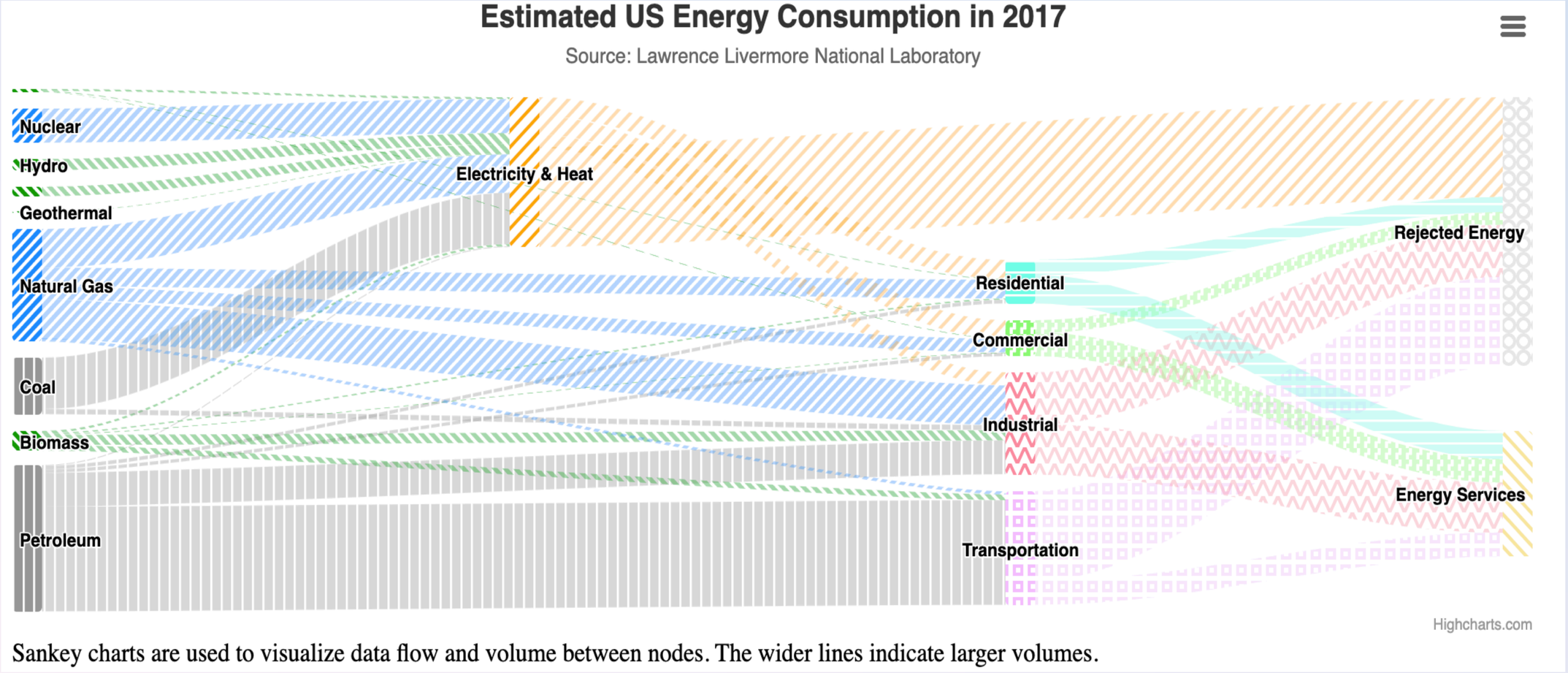


Can we fix this?



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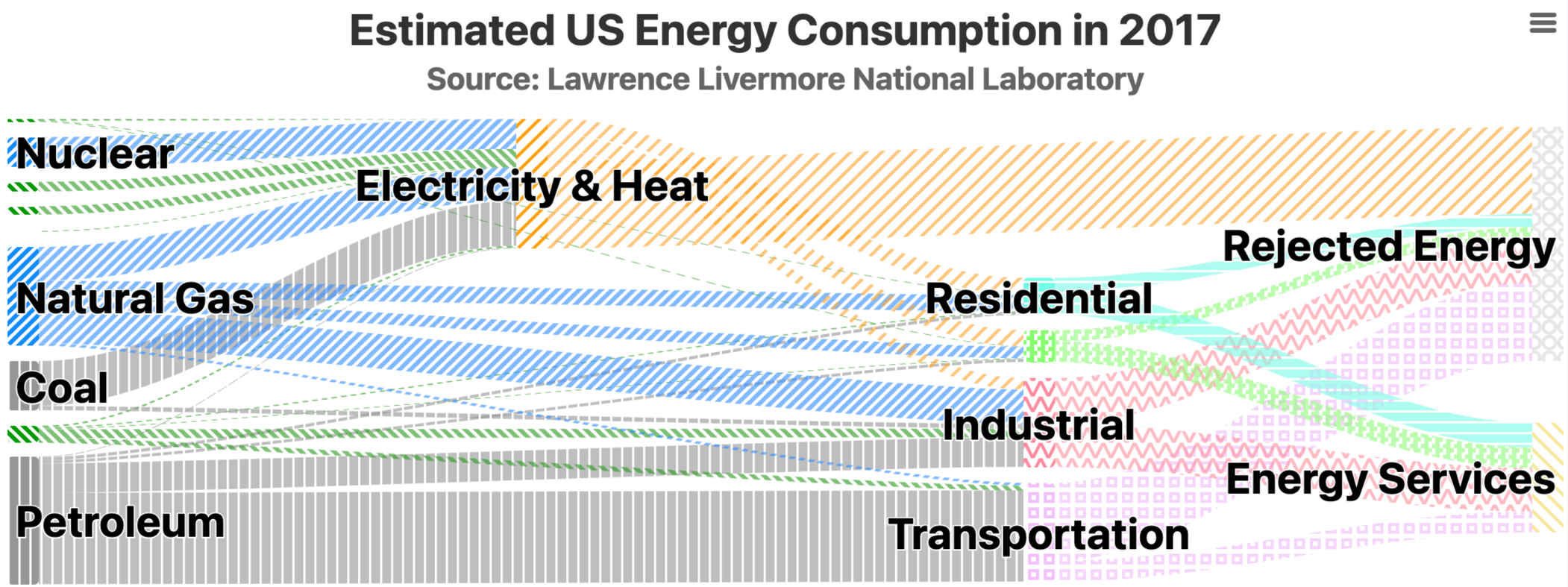
Maybe we can bump up the text size



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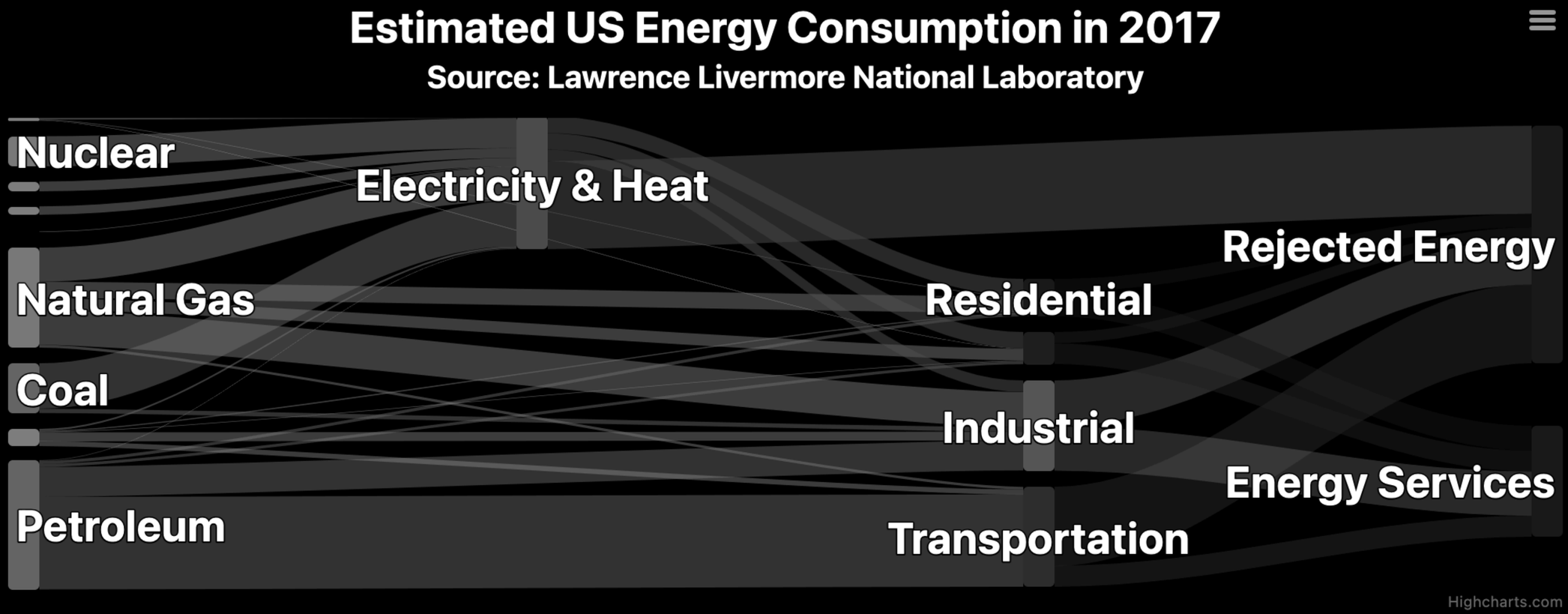
We can reduce visual complexity too



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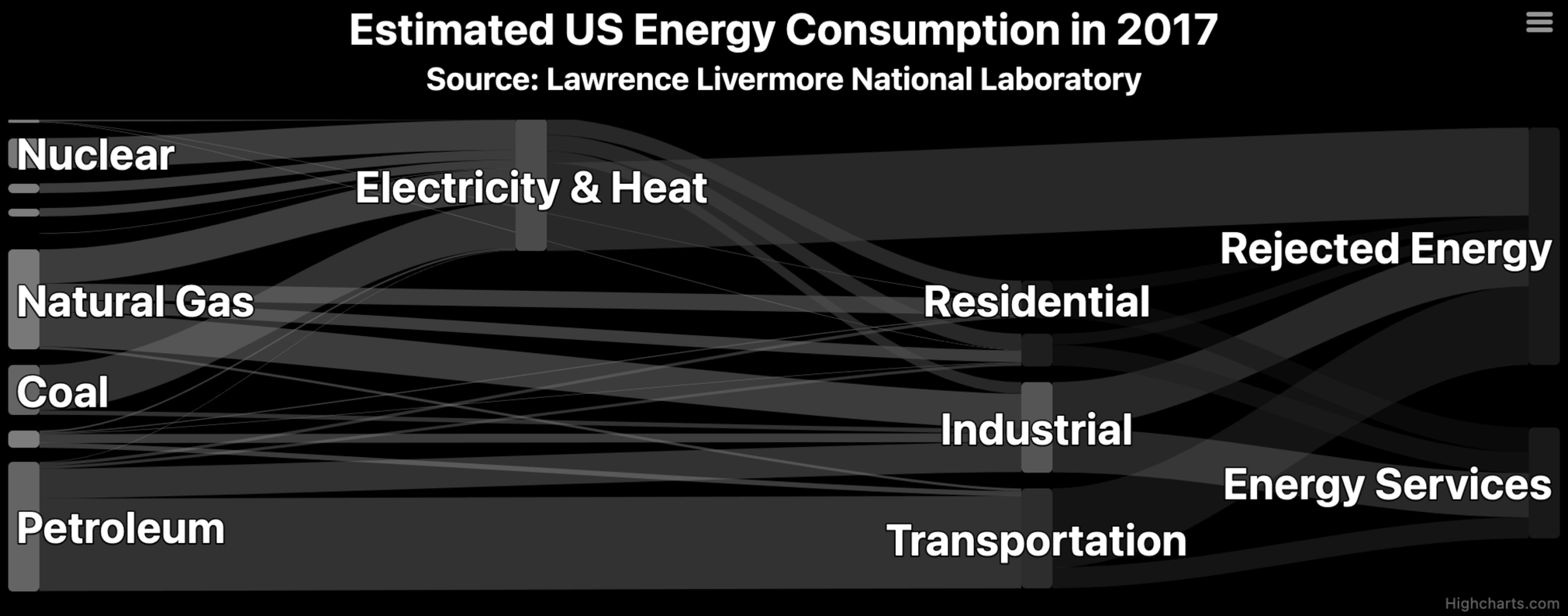
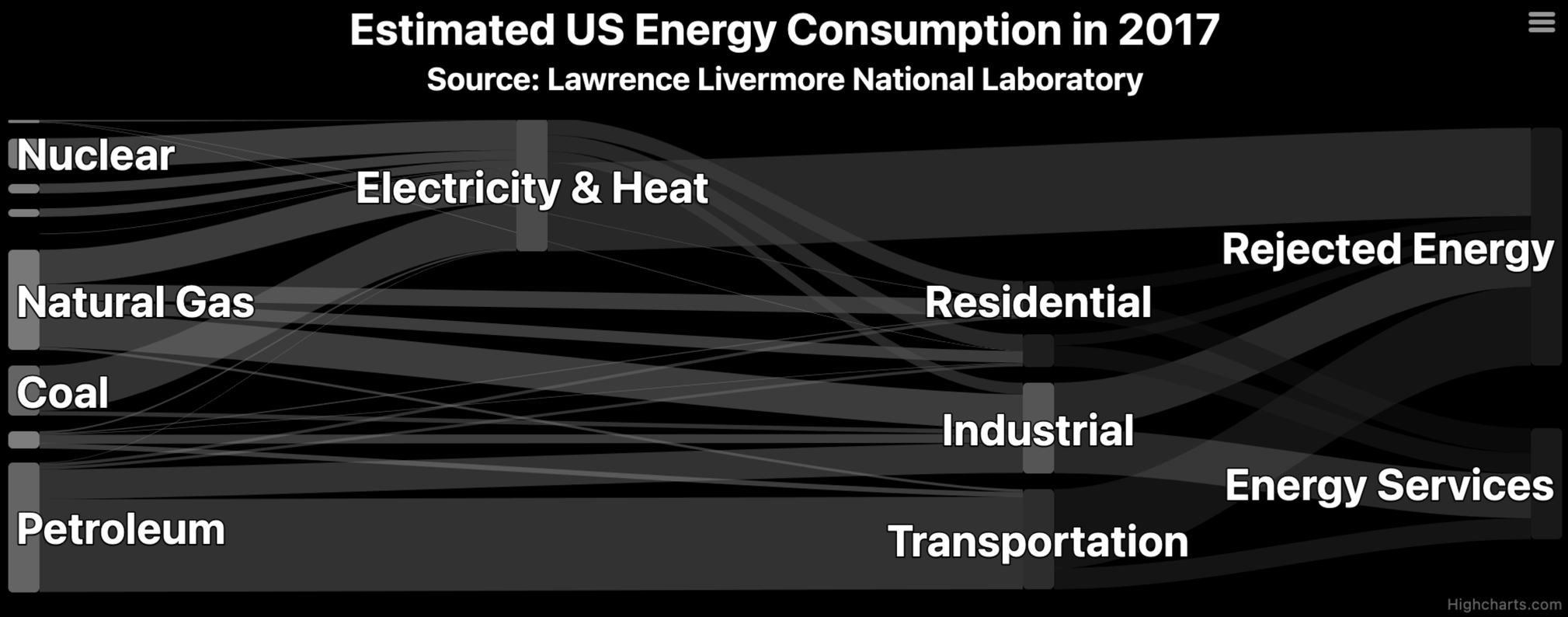
We can add a more descriptive explanation



Sankey charts are used to visualize data flow and volume between nodes. Visually wider lines indicate larger volumes. This chart is showing energy consumption and types. Interacting with this chart by selecting a node or flow (such as with a click) will update the stacked bar chart below.

Is this the *perfect*, most accessible design?



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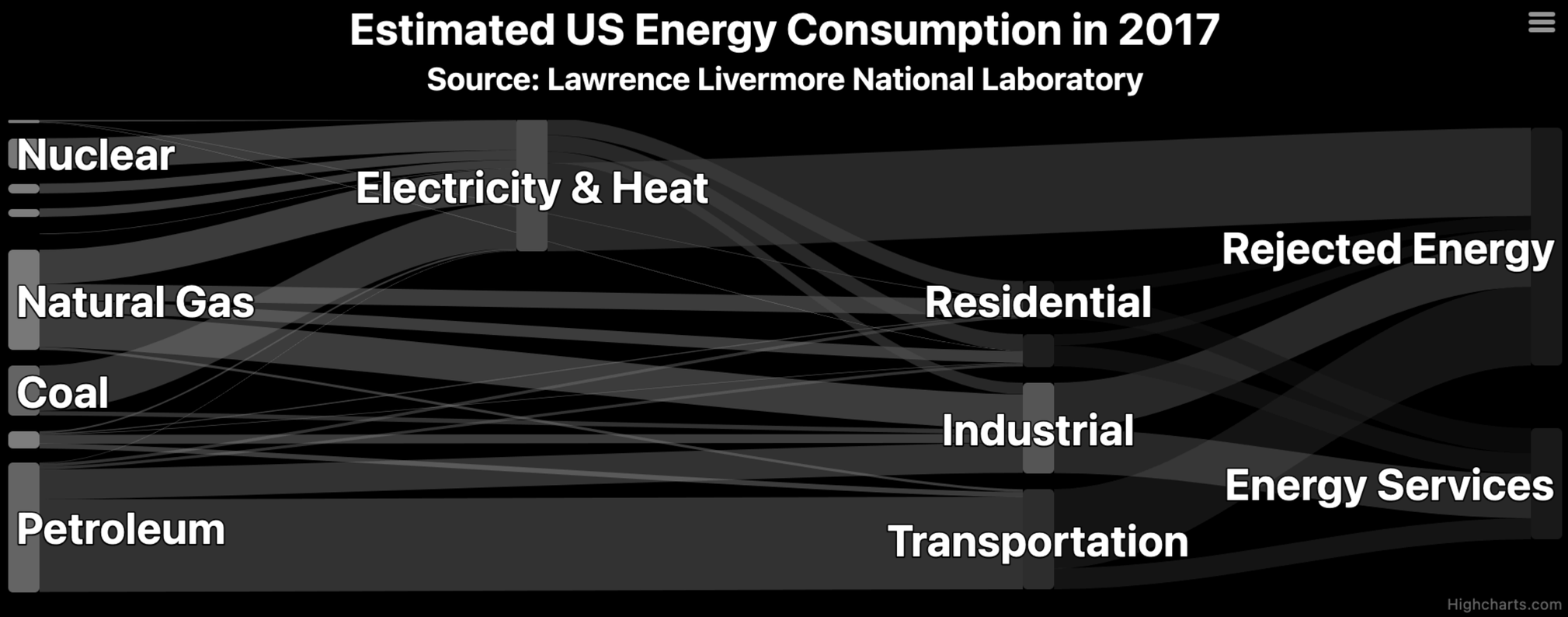
Bad news...



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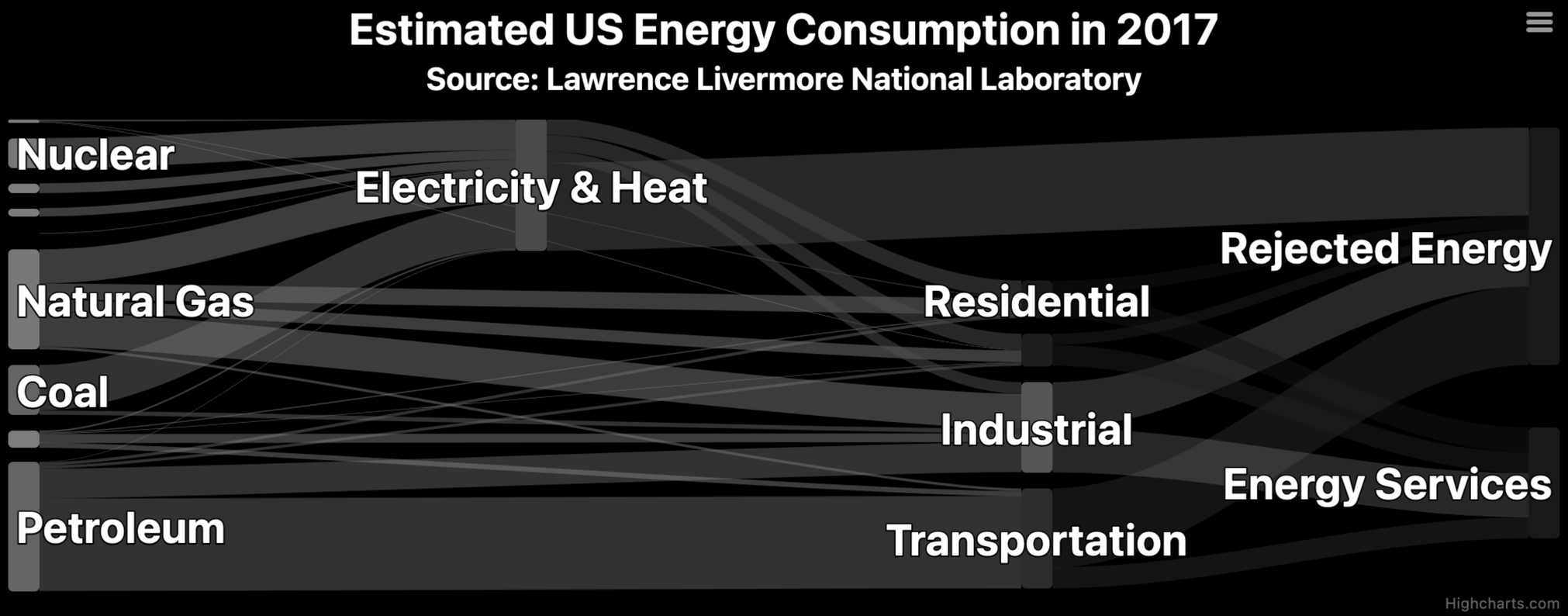
Bad news...

This design has accessibility issues too



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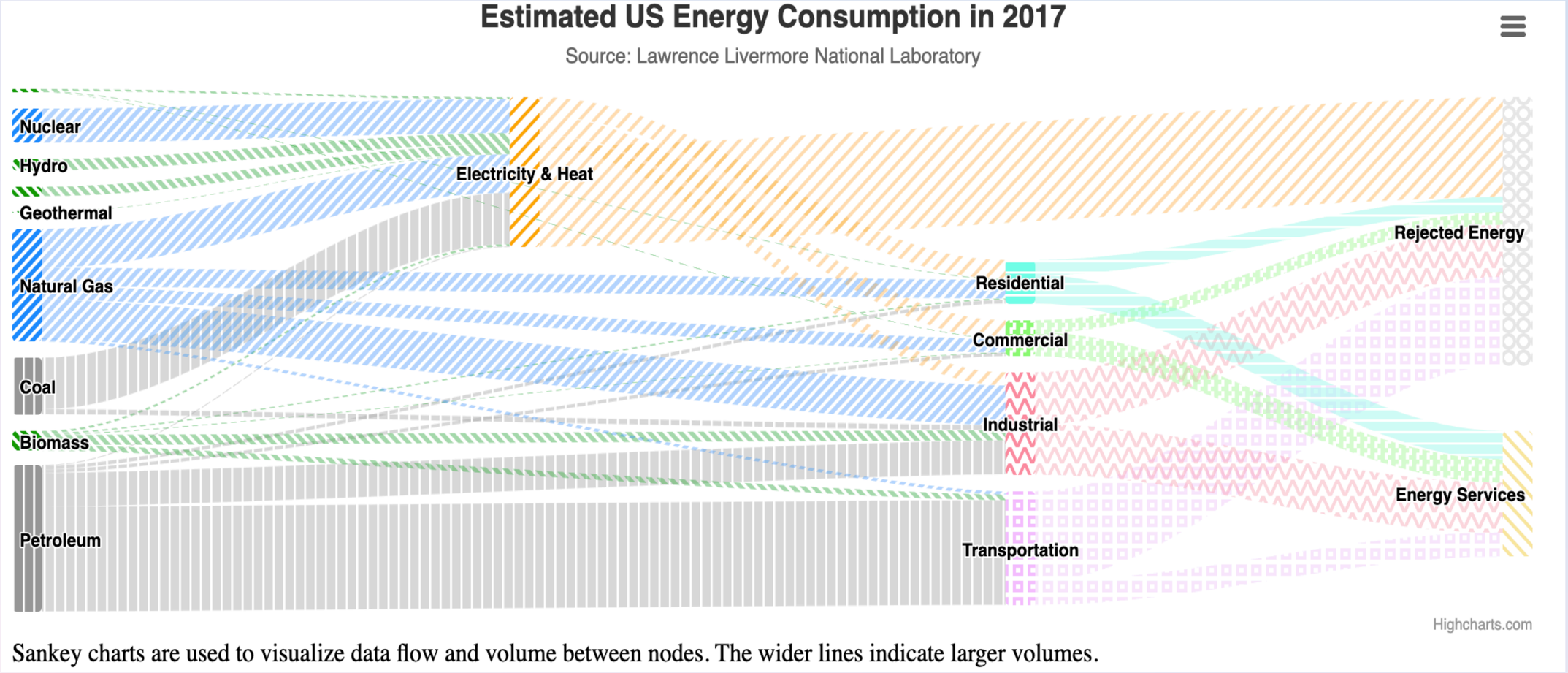
There is no such thing as a single, perfect visualization



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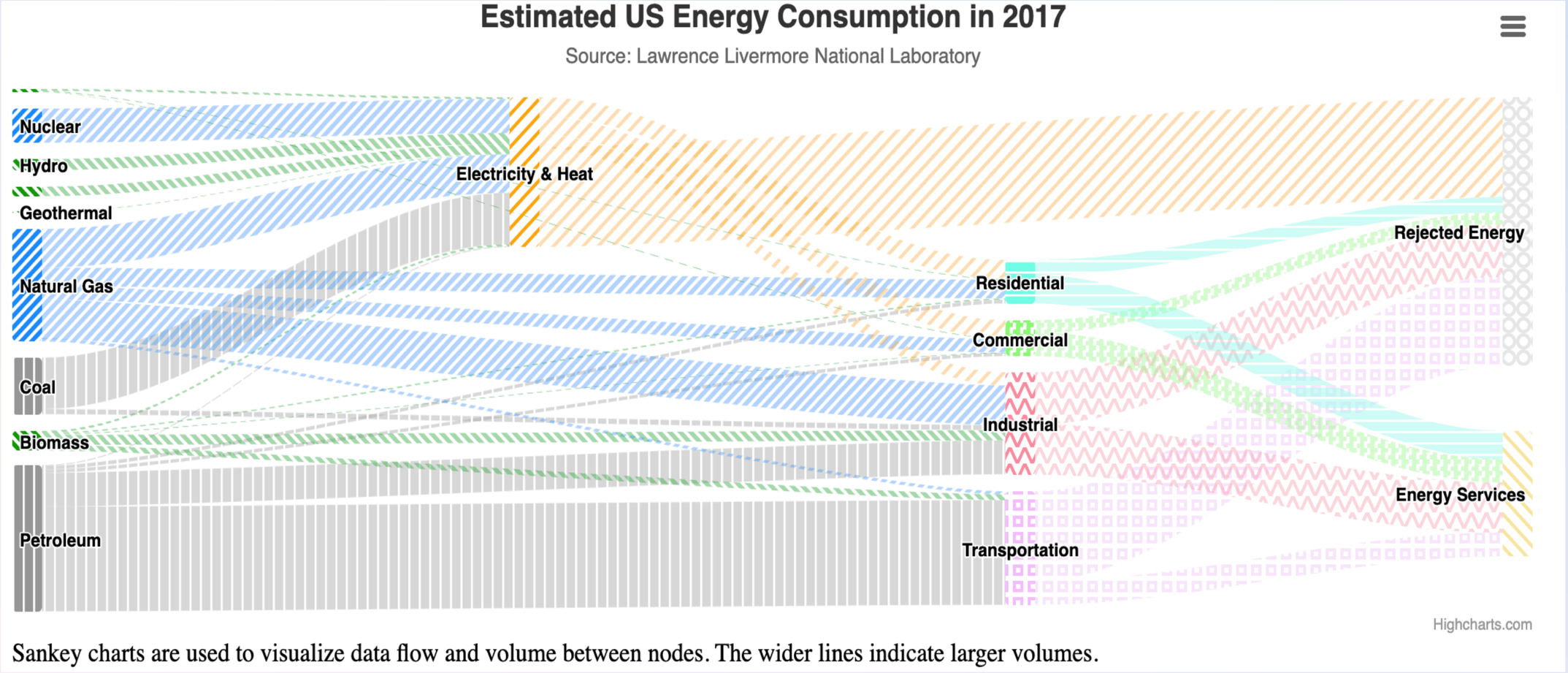
One design *cannot* fit all



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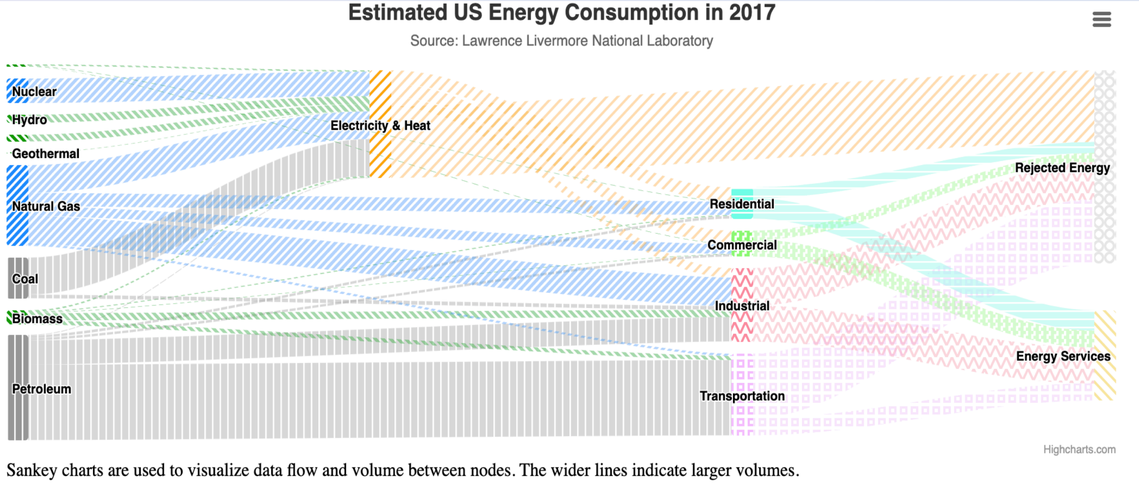
Why should our chart designs be one-size-fits-all?

Flexible

Does the user have ways to change or adjust presentational and operational aspects of this design, according to their needs and preferences?

Good design enables *personalization*



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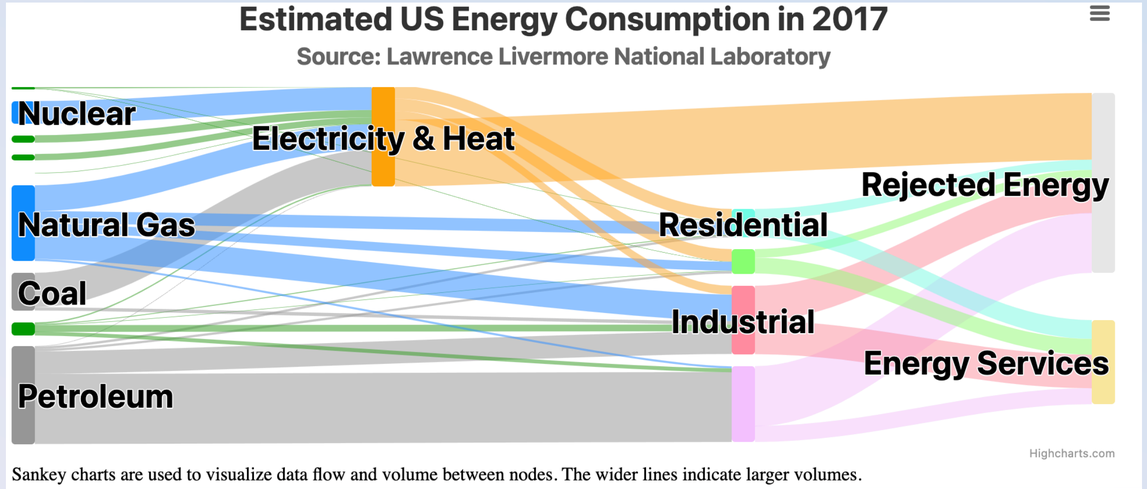

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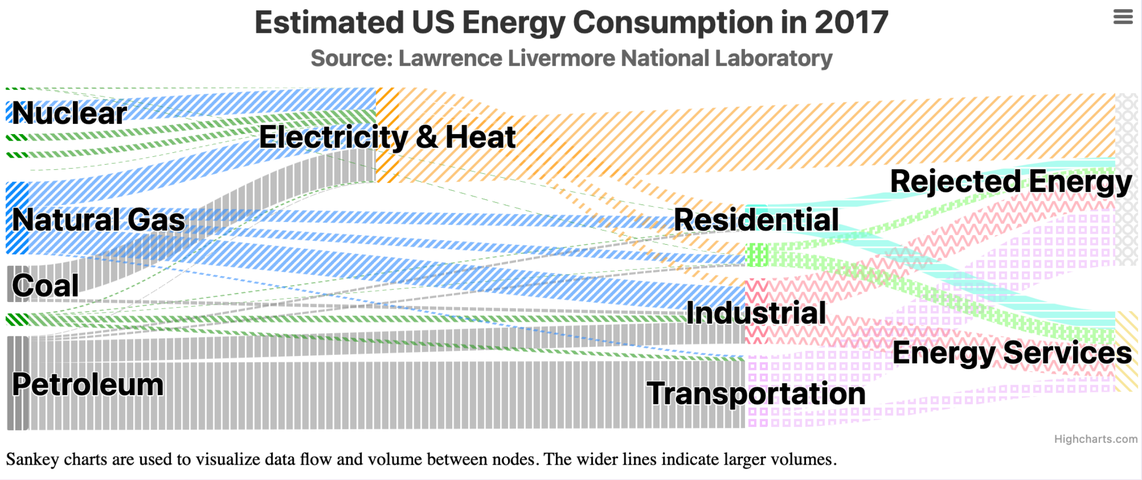

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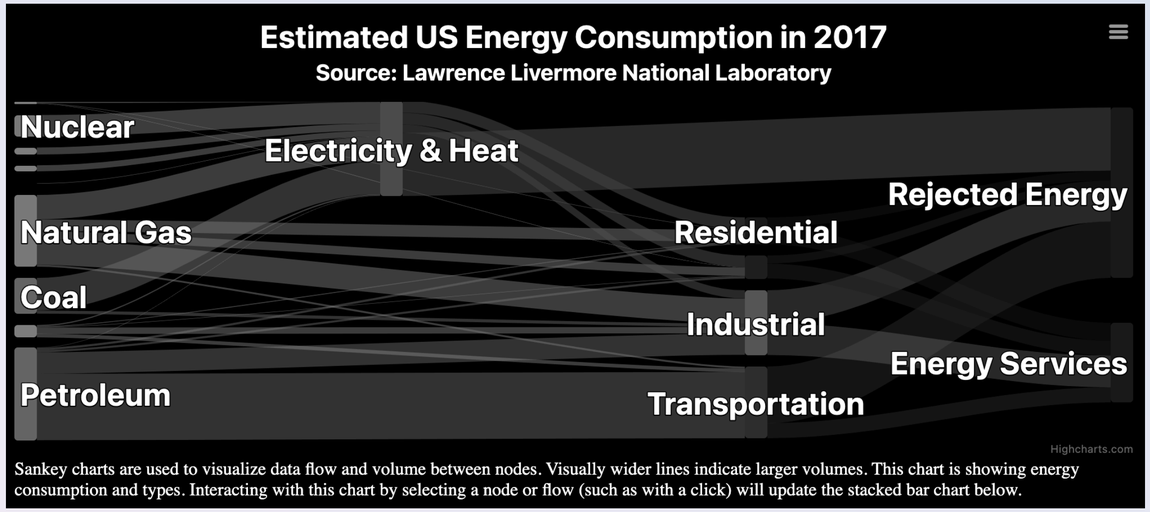

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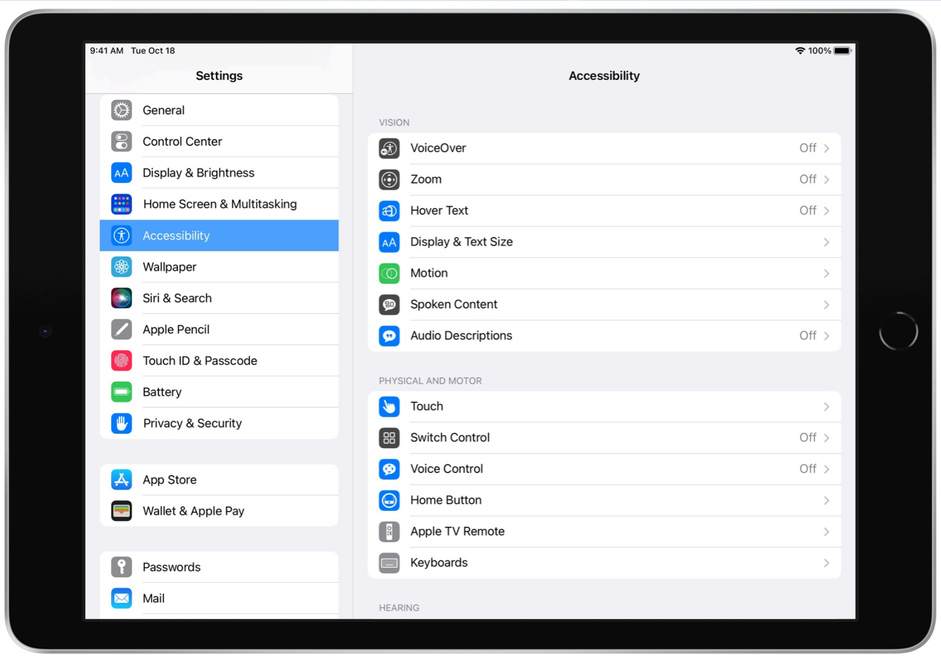
[Interactive demo link]

We have been enabling personalization for years

Video games

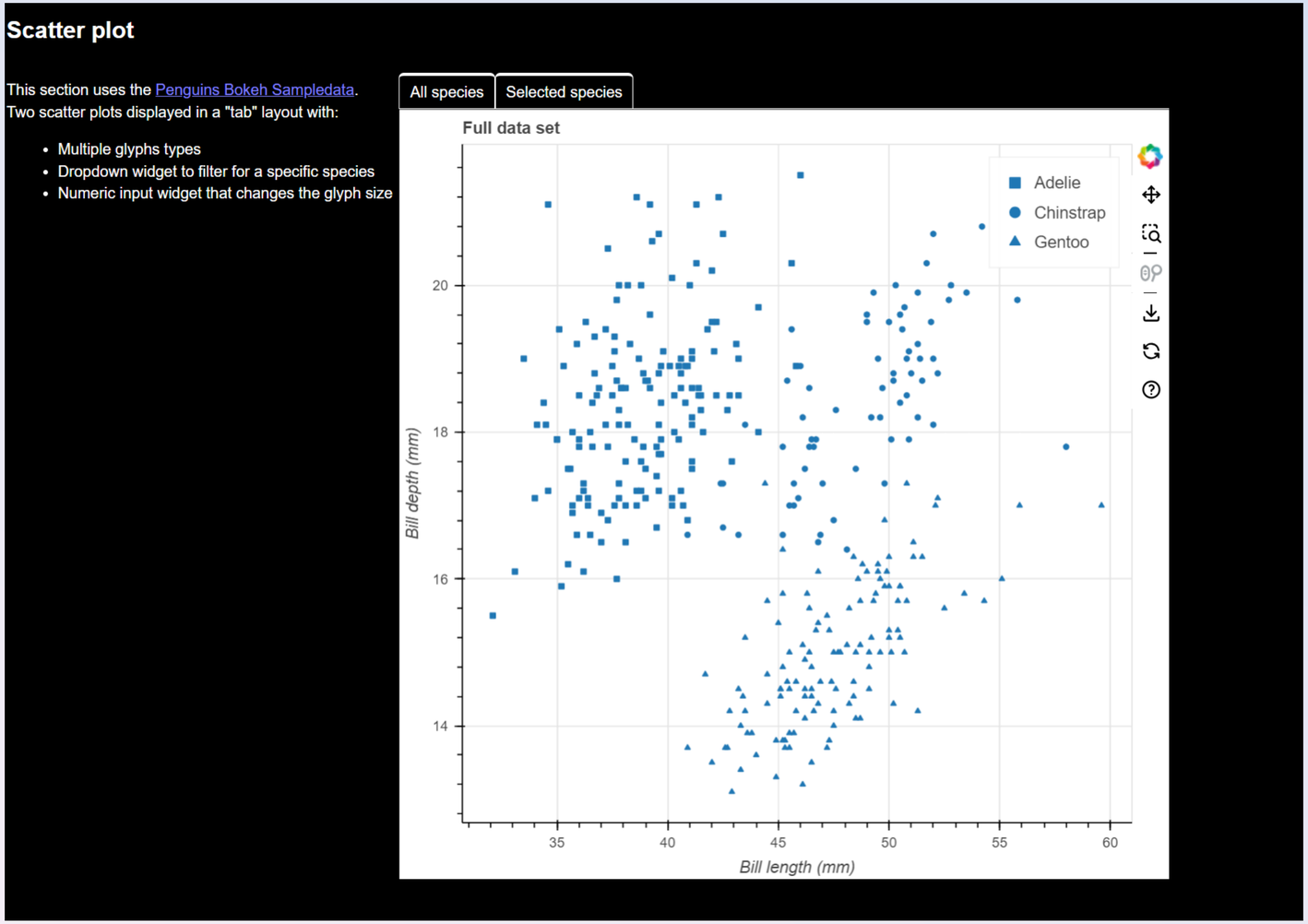
The Last of Us 2 has more than 60 settings

Devices and operating systems



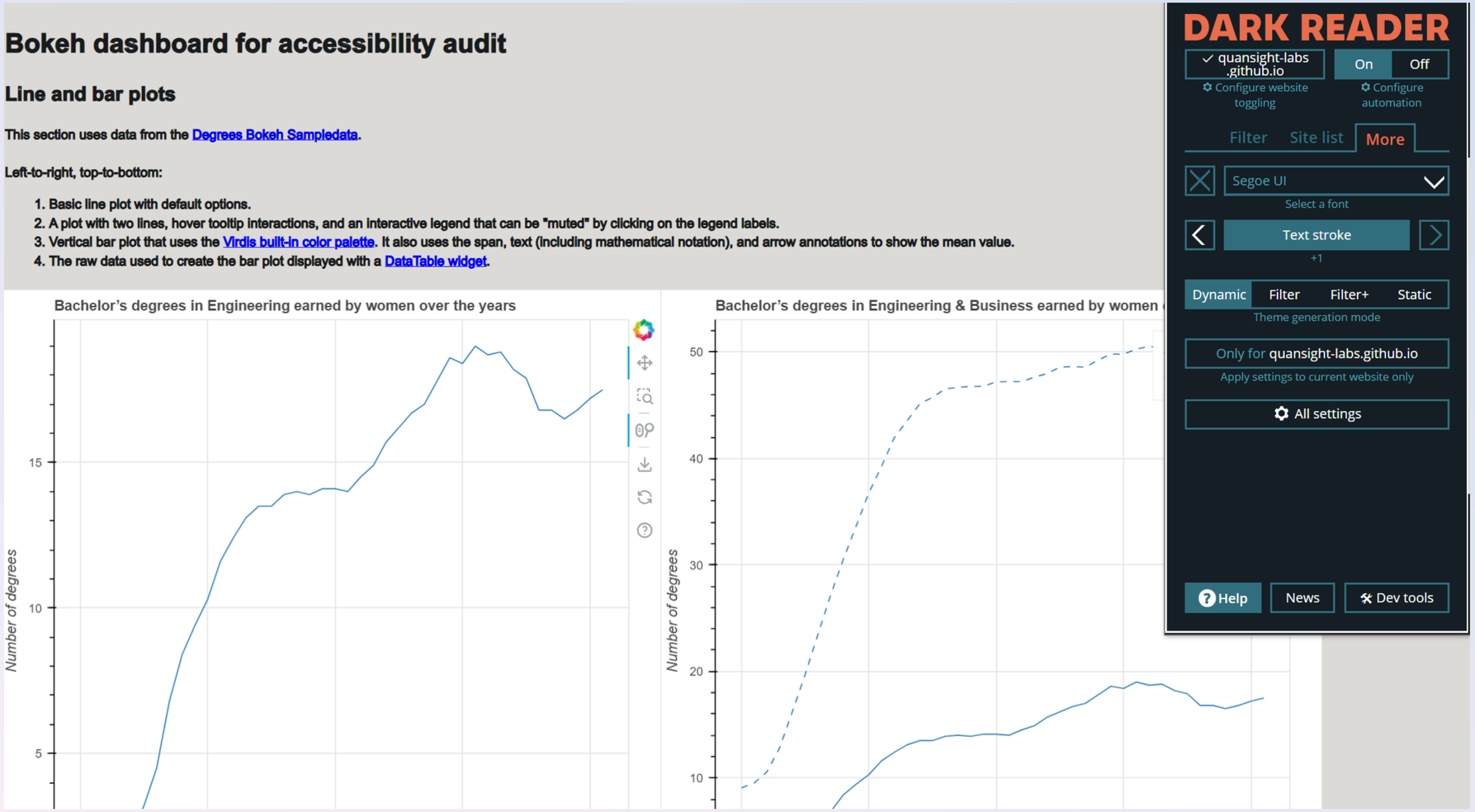
"Make it yours" is the motto for Apple's accessibility personalization

Try changing contrast



Source: Our audit of Bokeh's ecosystem

Try changing font styling



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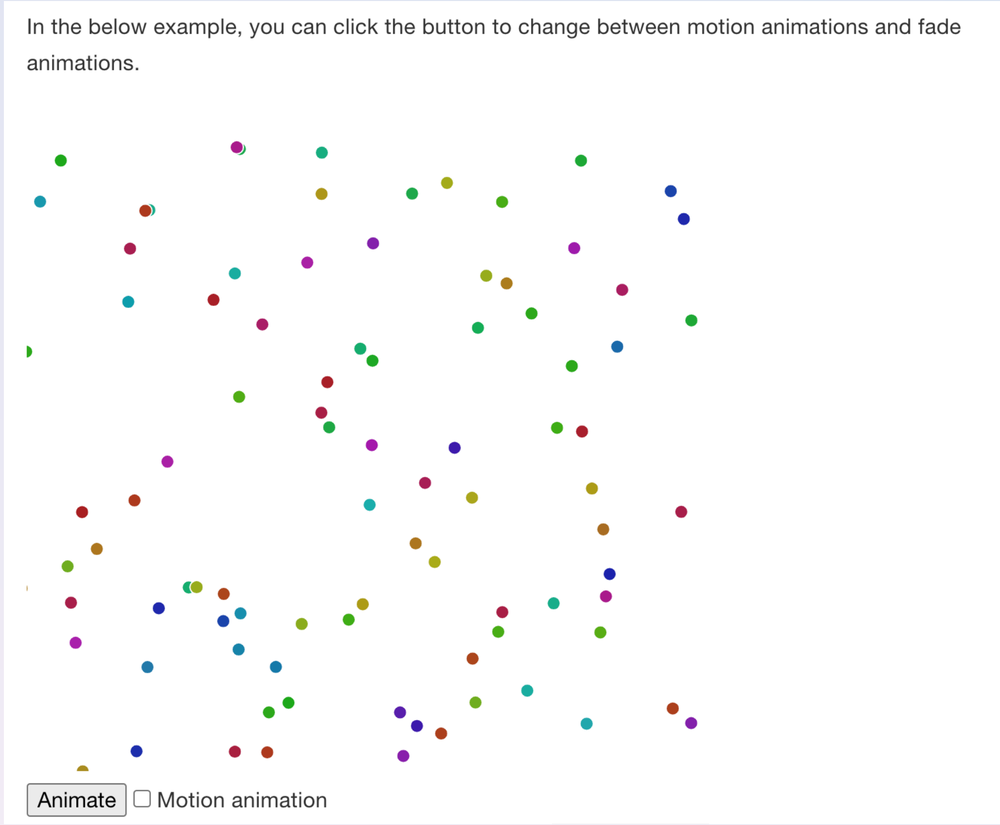
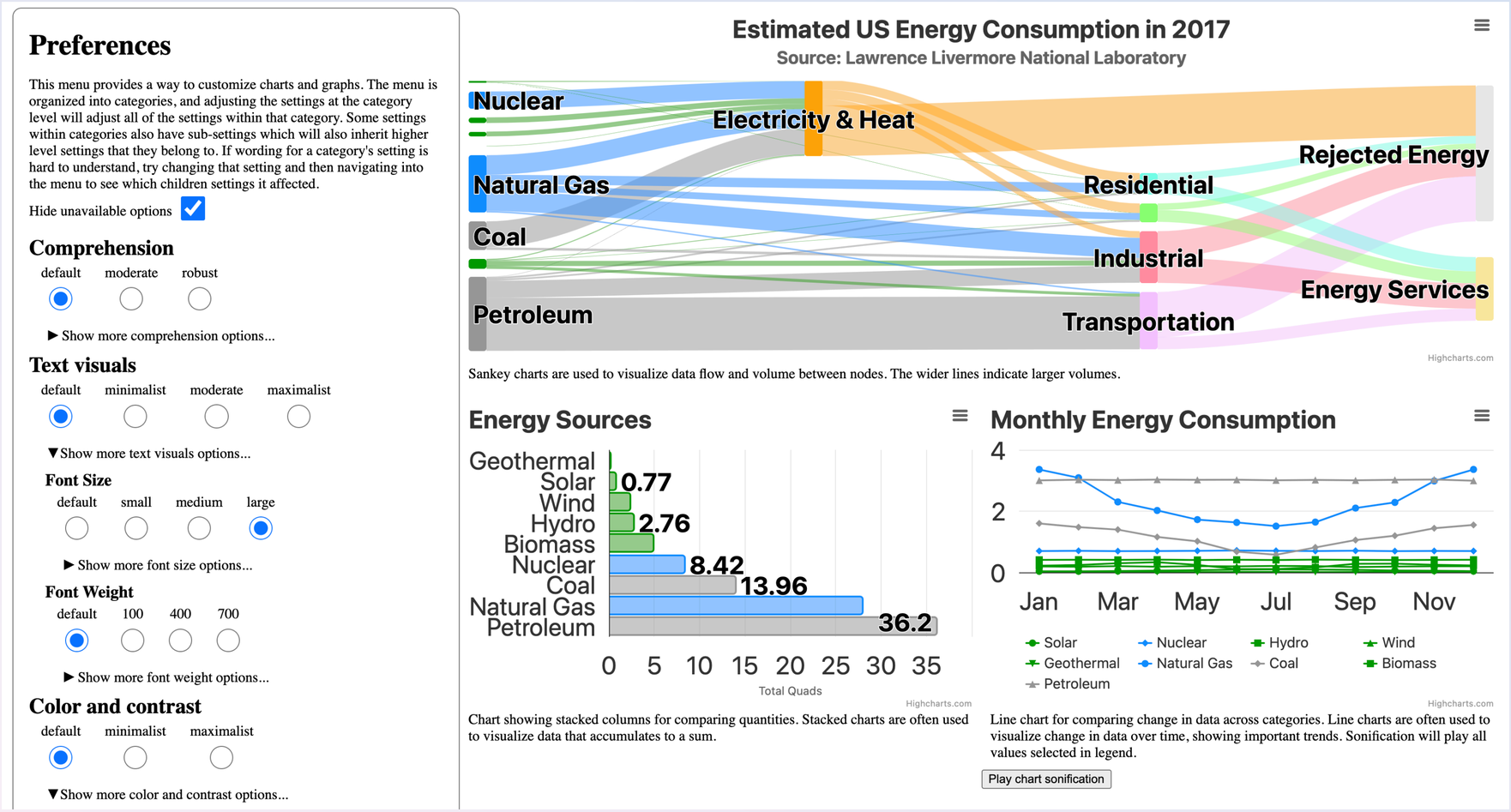
Try reducing motion



Source: Counterpoint, by Sivaraman et al

And consider enabling *more* personalization too!



Flexible Evaluation Toolkit:

1. **Does your visualization import existing personalization?**
    1. Test system contrast (light and dark, see: our Bokeh Audit)
    2. Test font color/size/stroke/spacing (see: our Bokeh Audit)
    3. Test for motion reduction (see: Counterpoint)
2. **Is your flexibility also *assistive*?** Is personalization easy to find, convenient to use, and persistent?