

I am hyped for this competition, and I enjoy the focus on surviving the night instead of a pure PVP experience. However, there are a few things I do not like / could cause problems:

- Wood should not be completely consumed by the middle of the game as it is the only way to increase your city size (win condition) without a way to store it. Thus, it should regrowth or be able to survive the night inside a cart (and not be converted to fuel)
- The rules are complicated compared to similar competitions (e.g. Halite III and IV). Having three resources just to be converted into a fourth one seems odd. The additional research system only to enable coal and uranium does not add much strategic depth as well because doing research does not cost anything and can be done anyway.
- Roads are a nice addition without needing additional action to build it but could be too hard to destroy/pillage.

I have made some suggestions, mainly to strengthen the identity of each resource type:

- The main problem is the direct conversion of all three different resource types into fuel which is mandatory at the end of each day as you move your units on top of your cityTiles. This makes storing all three resources impossible. Thus, my first idea sounds rather drastic: get rid of fuel as a visible resource altogether.
- Burning fuel in the night as the core mechanic of this competition can be maintained by converting resources only at the moment when they are needed. In addition, there should be a fixed order to do so: start with coal, use uranium only if there is no coal left, use wood last.
- You could also slightly change the fuel parameters to further improve coal as the main fuel source and allow the wood to regrowth (but not coal and uranium) so that the game cannot stall while it remains important to manage the overall resource collection.

This change ensures that wood and coal act as two distinct resource types with a different purpose (building vs. fuel). I would like to add a similar treatment to uranium:

- Uranium can be used as a light to work at night next to it. This can be achieved without the need for additional actions: Instead of using whole units of resources to satisfy their night needs, a cart can use one single uranium. Moreover, every worker inside a small radius (something like 3 tiles) has no fuel cost at all. I am not sure whether or not you should keep the 2x more base cooldown inside the radius. This will make carts superior compared to workers and I would add a small building cost (using wood as well) to compensate for it.

Because every city now stores the three initial resources instead of fuel there are a few additional changes to make:

- Stored Wood can be used to build new cityTiles which are adjacent if the corresponding worker does not have enough wood in their cargo.
- I am not sure if the Transfer action is necessary at all. If we allow workers on top of carts, we can transfer the workers' cargo to carts passively. However, if you want to keep the Transfer action it should work between units and cityTiles as well. In particular, a cart should be able to be loaded with uranium stored in the city before night if you consider the idea above.

I am not sure if it is mandatory to keep the research mechanic but if it stays there are some improvements to be made as well. Most importantly, there must be an opportunity cost:

- One simple idea is a direct connection to building units: Research does reduce the number of units you can build, i.e. cityTiles that have a $\text{cooldown} > 1$ (because they researched) do not count as friendly cityTile towards the maximum number of workers one can have. However, I

do not like the fact that you must bookmark every cityTiles which is on cooldown because of the research action to make this possible.

- Another Idea is using workers to do the research instead (but without the need for one additional action): Workers on top of cityTiles (only during the day) can produce research points by using the CENTER move action. This would heavily slow down the collection rate (high opportunity cost) and I prefer this approach. Because the base cooldown of workers is lower compared to the cityTiles the needed pre-requisite research points must be increased to compensate for it.

Last, research may need some additional perks:

- Add the action “build Cart” to the list as the first research which can be unlocked.
- Make some parameters of your city/workers scale with research points. There are many ways to do it: increase carrying capacity (but reduce the starting values by a large amount), increase collection efficiency (the number of resources removed from the map remains constant, but your units receive an additional bonus), reduced base cooldown... These parameters can scale linear with research points or jump sharply at given steps
- A very drastic change, but I can research points as the primary win condition instead of the number of city tiles.

I know, this is a lot to consider, and each change should be carefully weighed in terms of whether additional complexity in the game logic makes it worthwhile versus enabling tactical depth of play. As a quick summary, it would be nice to introduce some core identity to the three different resource types and it is necessary to opportunity cost to research if you want to keep it.