

# timpi

## Staking

## Staking and Delegation in Neutaro (NTMPI)

### Introduction

Did you know that you can put your Neutaro (NTMPI) tokens to work? There are many different features of the Neutaro blockchain that make them special, but in this article, we're going to focus on delegation, which is the ability of users who are not validators to contribute to the governance of Timpi, its future, and the security of the Neutaro chain. For your contribution, you will receive rewards in return.

If you haven't already, be sure you have a look at this [introductory Cosmos article](#) for a foundational overview of the Cosmos.

### Delegated Proof of Stake

Like the majority of Cosmos blockchains, Neutaro (NTMPI) runs the CometBFT consensus algorithm to keep it secure. This is a delegated proof of stake (dPOS) algorithm, which means that validators need to commit a certain amount of staked tokens in order to participate in consensus.

As a reward for abiding by the rules of the protocol and contributing to its security, a block reward of tokens is distributed to all validators every time a new block is added. Since a greater proportion of staked tokens means higher economic security, non-validators (who I will now just refer to as 'users') can delegate their tokens to an active validator and share the rewards for their contribution to Neutaro (NTMPI). This is important, since running a reliable validator in Neutaro requires considerable technical knowledge.

## Delegation and Shares

Suppose you have 1000 Neutaro (NTMPI) and TimpiTap is an active validator with 1000 Neutaro currently staked (Note: These numbers are for illustrative purposes only, to make the math easy!). If you so desire, you can choose to delegate your Neutaro to TimpiTap, which will bring their total staked Neutaro to 2000.

The first thing users should know is that even though your Neutaro has been committed to the TimpiTap staking pool, they do not have [control over my funds](#)<sup>1</sup>. Delegation is a *non-custodial* feature.

**The validator can never send your funds somewhere else.**

**and you can always halt the delegation and withdraw your funds back to your wallet.**

(as long as they don't get *slashed* more on this later)

Users should also note that all Cosmos chains have an *unbonding period*, which is a pre-determined amount of time after you withdraw where your funds will not accrue transaction rewards but can also not be sent to other addresses. **Neutaro's (NTMPI) unbonding period is currently 90 Days**, however the 17% APY is guaranteed for the first 12 months from TDE including the unbonding period. A governance proposal will be submitted to reduce the unbonding time to 21 days.

This is a drawback, but it is also a critical security feature of CometBFT consensus so it is something you should consider before delegating your tokens.

You can check the unbonding period for your favorite Cosmos chain [here](#). This means you need to wait 90 days after you undelegated before you can transfer your Neutaro (NTMPI) freely again.

## Risks

As is normally the case, to get these rewards, you have to understand the risks involved and be willing to participate. Let's start with the most basic one: If you delegate to a validator whose commission rate is 100%, it shouldn't take you long to figure out that you will receive no rewards! If your goal is to increase the number of tokens you own, you should avoid these validators entirely.

You can always check the commission rates of the various validators by looking [here](#), and it is always worth doing this before you make your selection. At the time of writing, there are **no** validators on Neutaro (NTMPI) charging 100% commission.

## But all the other validators are safe, right?

Well... if you read the articles on CometBFT consensus, you'll know that Cosmos chains can handle up to 1/3 faulty or malicious validators. But that's not the end of the story. All Cosmos chains can decide how they want to punish validators who commit different kinds of offenses. The most common are downtime and double signing, so let's look at what happens to your stake in these two situations.

If your validator goes offline and signs no blocks for a certain period of time (called the signed blocks window) they will be 'jailed' for the jail duration. This means that even if they come back online, they will be prevented from signing blocks until the jail duration has ended.

Both the signed blocks window and the jail duration are parameters that can be changed through governance, but at the time of writing they are 5000 blocks and 600 seconds (about 10 minutes) on Neutaro

(NTMPI). If your validator is jailed for downtime, you can expect a slap on the wrist — 1% of their stake will be slashed. This means that 1% of YOUR stake will also be slashed.

A far worse case scenario is that your validator double signs. You may have read in the CometBFT article that this means they attest to the validity of two conflicting states of the blockchain. This could cause a fork in the chain, and this is very bad. Two things will happen once this offense is discovered<sup>3</sup>:

1. Your validator’s stake (and thus your stake) will be slashed 5%.
2. Your validator will be tombstoned — blacklisted from producing blocks for that blockchain. This means that you will cease earning rewards as soon as the network agrees that the offense has been committed. You can redelegate to a new validator, but you will not receive rewards for any time you continue delegating to the offending validator.

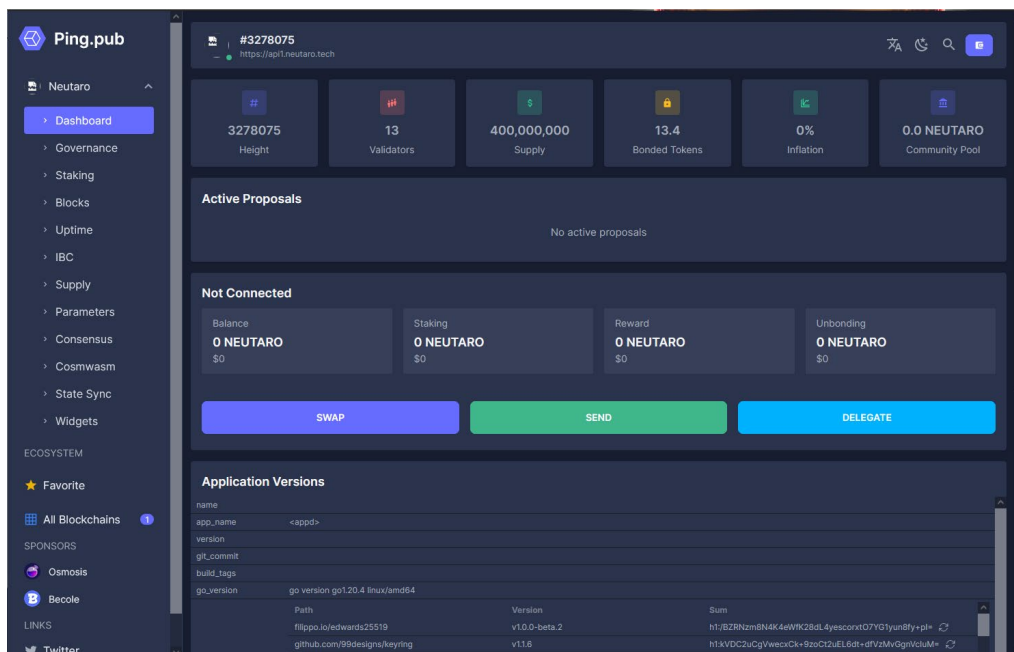
## Conclusion

The economic security of Cosmos chains is dependent on good validators safeguarding it, and delegators putting their faith in the validators that they think are doing a great job. Hopefully in this article you’ve understood:

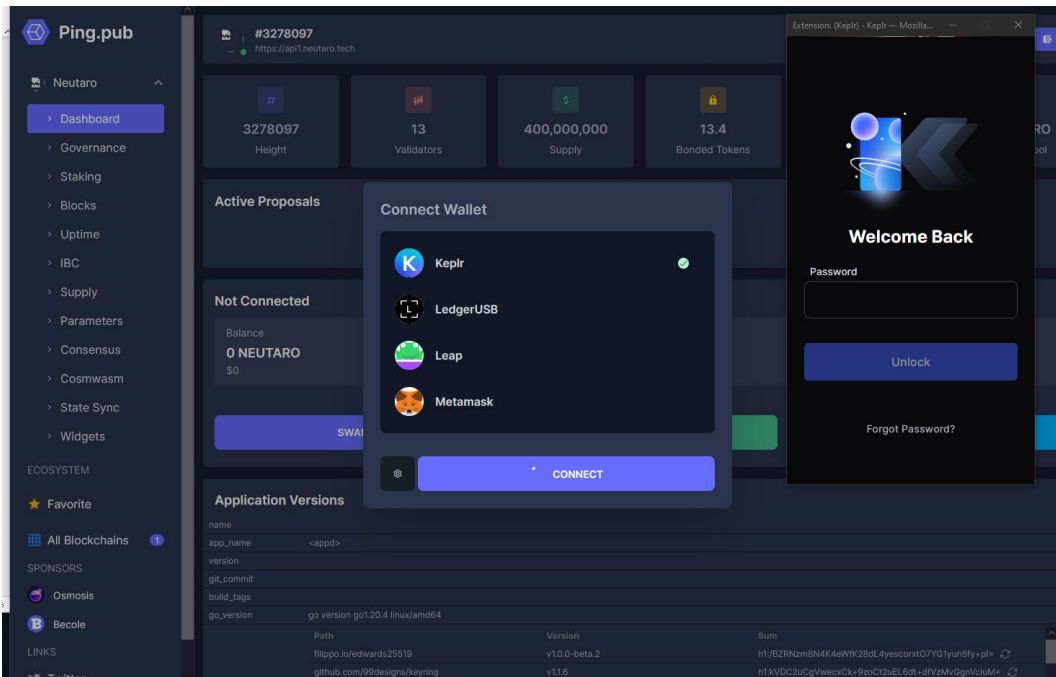
- That Cosmos delegation is non-custodial
- That you can earn rewards with your assets by delegating them to active Validators
- That if your validator has technical problems or misbehaves, **some** of your funds will be at risk.

### How to stake Neutaro (NTMPI) tokens to an existing validator.

Go to your chain explorer like [Neutaro.tech](https://api1.neutaro.tech)

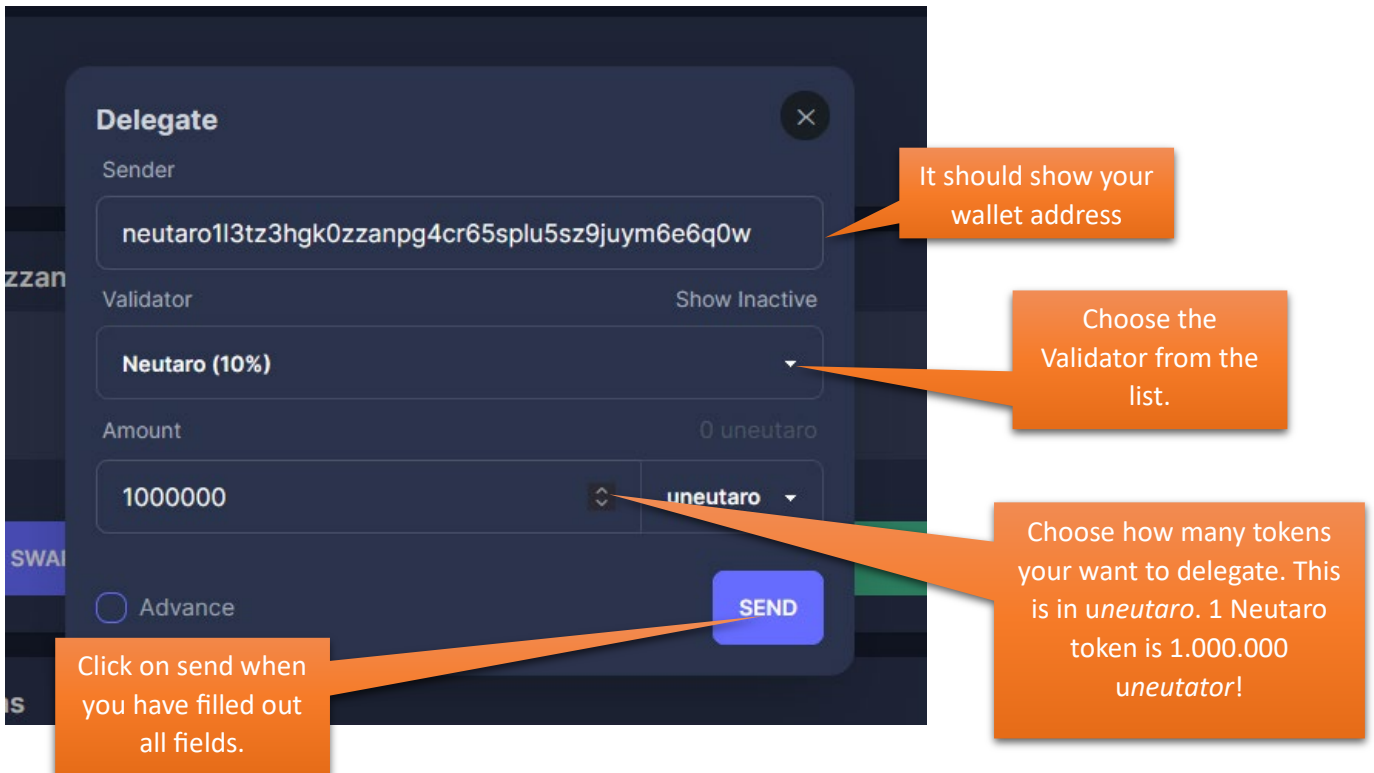


There, connect your wallet by clicking on the connect wallet icon in upper right corner. Choose your wallet, in this example we use Keplr and connect the explorer page to your wallet.



Accept the connection request in your Keplr wallet app.

Click on Delegate and fill out the details in the new window.



**Description:**

**Sender:** This is your wallet address

**Validator:** Choose from the list of validators that are available.

**Amount:** This is the number of *uneutaro* you want to delegate. The unit that the blockchain uses internally is *uneutaro*. This is done because the blockchain itself can't handle floating numbers like 1.456. In order to allow a smaller amount, *uneutator* is used. 1 Neutaro (NTMPI) token is 1.000.000 *uneutaro*.

**Example:**

If you want to stake 100 Neutaro (NTMPI) tokens, you need to fill into the field 100.000.000.

$$100 \times 1.000.000 = 100.000.000$$