

The profit vector  $\boldsymbol{c}$  lies in the cone generated by the normals for the hops and the corn constraint.

## **Strong Duality**

## **Theorem 2 (Strong Duality)**

Let P and D be a primal dual pair of linear programs, and let  $z^*$  and  $w^*$  denote the optimal solution to P and D, respectively. Then

$$z^* = w^*$$