

ANALYSIS OF AMENDED BILL

Franchise Tax Board

Author: Parra Analyst: Nicole Kwon Bill Number: AB 1285

Related Bills: See Legislative History Telephone: 845-7800 Amended Date: April 10, 2007

Attorney: Daniel Biedler Sponsor: _____

SUBJECT: Research Expenses & Alternative Incremental Credit Conformity/Greenhouse Gas Emission Reduction Technologies

SUMMARY

This bill would allow a qualified research expense credit for an amount paid or incurred to develop technologies to reduce greenhouse gas emissions.

SUMMARY OF AMENDMENTS

The April 10, 2007, amendments struck the previous provisions relating to intent language providing a tax exemption for research and development expenses incurred for developing or improving products or technology related to reducing greenhouse gas emissions and replaced them with provisions allowing a qualified research expense credit for amounts paid or incurred to develop technologies to reduce greenhouse gas emissions.

PURPOSE OF THE BILL

According to the author's office, the purpose of this bill is to encourage businesses to increase their research and development programs to reduce greenhouse gas emissions.

EFFECTIVE/OPERATIVE DATE

As a tax levy, this bill would be effective immediately and specifically operative for taxable years beginning on or after January 1, 2008, and before January 1, 2014.

POSITION

Pending.

Board Position:	Department Director	Date
<input type="checkbox"/> S		
<input type="checkbox"/> SA		
<input type="checkbox"/> N		
<input type="checkbox"/> NA		
<input type="checkbox"/> O		
<input type="checkbox"/> OUA		
<input type="checkbox"/> NP		
<input type="checkbox"/> NAR		
<input checked="" type="checkbox"/> PENDING	Selvi Stanislaus	6/8/07

ANALYSIS

FEDERAL/STATE LAW

Qualified research credit

Existing federal and California law provides a tax credit for “qualified research” equal to 20% (15% for California) of the amount by which a taxpayer’s qualified research expenses for a taxable year exceed its base amount for that year. Qualified research expenses eligible for the research tax credit consist of:

- (1) in-house expenses of the taxpayer for wages and supplies attributable to “qualified research;”
- (2) certain time-sharing costs for computer use in “qualified research;” and
- (3) 65% of amounts paid or incurred by the taxpayer to certain other persons for “qualified research” conducted on the taxpayer’s behalf (so-called contract research expenses).

Under federal law starting in 2005, the Energy Tax Incentives Act (ETIA) of 2005 provides that 100% of amounts paid or incurred by the taxpayer to eligible small businesses, universities, and federal laboratories for qualified energy research would constitute “qualified research” expenses as contract research expenses, rather than 65% of “qualified research” expenditures allowed under present law. An eligible small business for this purpose is a business in which the taxpayer does not own a 50% or greater interest, and the business has employed, on average, 500 or fewer employees in the two preceding calendar years. California does not conform to the increase to 100% of amounts paid or incurred by the taxpayer as contract research expenses.

University basic research credit

In addition, corporations are allowed a research tax credit for “basic research” in an amount equal to 20% (24% for California) of the corporate cash expenses (including grants or contributions) paid for basic research conducted by universities (and certain nonprofit scientific research organizations) in excess of a base amount for that year.

Qualified energy research credit

Starting in 2005, the ETIA modified the research credit to allow a federal research credit equal to 20% of the taxpayer’s expenditures on qualified energy research undertaken by an energy research consortium. California does not conform to this change. The amount of federal credit claimed is determined only with regard to such expenditures by the taxpayer within the taxable year. Unlike the general rule for the research credit, the 20% federal credit for research by an energy research consortium applies to all such expenditures, not only those in excess of a base amount, however determined.

An energy research consortium is a qualified research consortium as under present law that also is organized and operated primarily to conduct energy research and development in the public interest and to which at least five unrelated persons paid, or incurred amounts, to such organization within the calendar year. In addition, to be a qualified energy research consortium, no single person shall pay or incur more than 50% of the total amounts received by the research consortium during the calendar year.

Alternative incremental research credit (AIRC) regime

Taxpayers are allowed to elect an AIRC regime. If a taxpayer elects to be subject to this alternative regime, the taxpayer is assigned a three-tiered fixed-base percentage (that is lower than the fixed-base percentage otherwise applicable under present law) and the federal credit rate likewise is reduced to 2.65%, 3.2%, and 3.75%. The AIRC rates are modified for California purposes to be 1.49%, 1.98%, and 2.48%, respectively.

Under federal law starting in 2006, the Tax Relief and Health Care Act (TRHCA) of 2006 increased the rates of the federal AIRC to 3% (rather than 2.65%), 4% (rather than 3.2%), and 5% (rather than 3.75%). California does not conform to these increased rates. The AIRC rates for California purposes continue to be 1.49%, 1.98%, and 2.48%, respectively.

Alternative simplified credit

Under federal law starting in 2006, the TRHCA created, at the election of the taxpayer, an alternative simplified credit for “qualified research” expenses. California does not conform to this change. The federal alternative simplified research is equal to 12% of qualified research expenses that exceed 50% of the average qualified research expenses for the three preceding taxable years. The rate is reduced to 6% if a taxpayer has no qualified research expenses in any one of the three preceding taxable years.

An election to use the federal alternative simplified credit applies to all succeeding taxable years, unless revoked with the consent of the Secretary. An election to use the federal alternative simplified credit may not be made for any taxable year for which an election to use the federal alternative incremental credit is in effect. A transition rule applies that permits a taxpayer to elect to use the federal alternative simplified credit in lieu of the alternative incremental credit if such election is made during the taxable year that includes January 1, 2007. The transition rule only applies to the taxable year that includes that date.

Additional California modifications

As under federal law, only corporations qualify for the “university basic research credit.” The terms “qualified research” and “basic research” include only research conducted in California. In computing gross receipts, only gross receipts from the sale of property held for sale in the ordinary course of business and delivered or shipped to a purchaser within California will be included. Qualified research expenses are modified to exclude any amounts paid or incurred for tangible personal property that is eligible for the exemption from sales or use tax under California law.

Under California law, “basic research” is modified to include any basic or applied research, including scientific inquiry or original investigation for advancement of scientific or engineering knowledge or the improved effectiveness of commercial products, except the term does not include any of the following:

1. Basic research conducted outside California.
2. Basic research in social sciences, arts, or humanities.
3. Basic research for purposes of improving a commercial product if the improvements relate to style, taste, cosmetic, or seasonal design factors.
4. Any expenditure paid or incurred to ascertain the existence, location, extent, or quality of any deposit of ore or other mineral, including oil or gas.

California law also provides special treatment for taxpayers engaged in biopharmaceutical research activities or other biotechnology research and development activities. For these taxpayers, payments to qualifying organizations that qualify for the credit include payments to research hospitals that are owned by institutions of higher education and certain charitable research hospitals designated as a "specialized laboratory cancer center" that has received Clinical Cancer Research Center status from the National Cancer Institute.

California does not conform to the changes made to the research credit by the ETIA and the TRHCA.

The California credit is permanent, and therefore the federal termination date of December 31, 2007, does not apply.

THIS BILL

This bill would provide, for each taxable year beginning on or after January 1, 2008, and before January 1, 2014, a qualified research expense credit equal to an amount paid or incurred to develop technologies to reduce greenhouse gas emissions.

This bill would define "qualified research" to mean research that is conducted in this state and is dedicated to the development of technologies intended to reduce greenhouse gas emissions.

This bill would fully conform to the federal AIRC for taxable years beginning on or after January 1, 2008.

This bill would specifically prohibit, for each taxable year beginning on or after January 1, 2008, a taxpayer from claiming both the regular qualified research credit allowed under current state law and the qualified research credit provided in this bill.

This bill would allow the carryover of the unused qualified research expense credit until the credit amount is exhausted.

This bill would specify a repeal date of January 1, 2014, for the credit provided in this bill.

IMPLEMENTATION CONSIDERATIONS

The department has identified the following implementation concerns. Department staff is available to work with the author's office to resolve these and other concerns that may be identified.

The bill specifies the meaning of "qualified research" as research dedicated to the development of technologies "intended to reduce greenhouse gas emissions." The bill, however, is silent about how this "intention to reduce" can be measured or otherwise ascertained. The author's office may want to clarify how this intention to reduce is to be measured in order for the department to administer the provisions of the bill and avoid disputes with taxpayers.

This bill does not limit the number of years for the carryover period. The department would be required to retain the carryover on the tax forms indefinitely because an unlimited credit carryover period is allowed. Recent credits have been enacted with a carryover period limitation since experience shows credits typically are exhausted within eight years of being earned.

This bill would specify a repeal date of January 1, 2014. The credit provided by this bill would be for taxable years beginning on or after January 1, 2008, and before January 1, 2014. Credit provisions are generally repealed as of December 1st of the last calendar year in which the credit could be claimed to avoid confusion between calendar and fiscal year taxpayers. The appropriate repeal date for this credit would be December 1, 2014.

TECHNICAL CONSIDERATION

On page 5, line 10 and page 10, line 5, “purchase” should be replaced with “purchaser.”

LEGISLATIVE HISTORY

AB 1651 (Arambula, 2007/2008) would create a tax credit for qualified capital equipment used to reduce greenhouse gas emissions. AB 1651 is in the Assembly Revenue & Taxation Committee.

AB 1527 (Arambula, 2007/2008) would create two marketable tax credits relating to the clean technology industry. AB 1527 is in the Assembly Revenue & Taxation Committee.

AB 751 (Lieu, 2007/2008) would raise the qualified research expenses from 15% to 20% and fully conform to the federal AIRC for taxable years beginning on or after January 1, 2007. AB 751 is in the Assembly Revenue & Taxation Committee.

SB 359 (Runner, 2007/2008) would, among other things, increase the Qualified Research Expense Credit from 15% to 16% and conform to the federal AIRC. SB 359 is currently in the Senate Revenue and Taxation Committee.

AB 2032 (Lieu, 2005/2006) would have increased the amount of the Qualified Research Expense Credit from 15% to 18%. AB 2032 failed to pass out of the Assembly Revenue & Taxation Committee.

PROGRAM BACKGROUND

The department annually releases a report on state tax expenditures. The 2006 State Tax Expenditure Report contains information regarding the usage of the Research Expense Credit, a copy of which is attached as Appendix A.

OTHER STATES' INFORMATION

The states surveyed include *Florida, Illinois, Massachusetts, Michigan, Minnesota, and New York*. These states were selected due to their similarities to California's economy, business entity types, and tax laws.

Florida allows corporate taxpayers to claim a corporate income tax credit for tax years beginning on or after January 1, 2007, for certain “eligible costs” for renewable energy technologies investment. *Florida* lacks a comparable credit for personal income taxpayers because *Florida* has no state personal income tax.

Illinois corporate and individual taxpayers may claim an income tax credit for qualified expenditures that are used for increasing research activities in *Illinois*. The credit equals 6½% of the qualifying expenditures.

Massachusetts allows corporate taxpayers to claim an income tax credit for qualified expenditures that are used for increasing research activities in *Massachusetts*. The credit is 15% of the basic research payments and 10% of qualified research expenses conducted in *Massachusetts*.

Minnesota allows corporate taxpayers a credit equal to 5% for qualified research expenses up to \$2 million. The amount of the credit is reduced to 2.5% for expenses exceeding the first \$2 million.

Michigan allows corporate taxpayers a credit for pharmaceutical research and for a percentage of the compensation for services paid by the taxpayer that is engaged in research and development of a hybrid system for propelling motor vehicles. An eligible taxpayer may claim a credit against the Single Business Tax equal to 6.5% of the excess of qualified research expenses paid in the tax year that relate to pharmaceutical-based business activity in *Michigan* paid during the three immediately preceding tax years.

Beginning in 2005, *New York* allows a credit for qualified emerging technology companies. The credit is equal to 18% of the cost of research and development property, 9% of the qualified research expenses, or the costs of high-technology training expenditures paid by the taxpayer. The credit is limited to \$250,000 per taxable year.

FISCAL IMPACT

The department's costs to administer this bill cannot be determined until implementation concerns have been resolved, but are anticipated to be minor. As the bill continues to move through the legislative process, costs will be identified and an appropriation will be requested.

ECONOMIC IMPACT

Revenue Estimate:

The revenue impact of this bill is estimated to be as shown in the following table:

Estimated Revenue Impact of AB 1285 Effective for tax years BOA 1/1/2008 Enacted by 6/1/2007 (\$ in Millions)			
2007-08	2008-09	2009-10	2010-11
-\$15	-\$60	-\$95	-\$100

This estimate does not consider the possible changes in employment, personal income, or gross state product that could result from this bill.

Revenue Discussion:

Because expenditures for research intended to reduce greenhouse gas emissions are already qualified for the existing California research credit, the revenue impact of this bill would be due mostly to raising the California research credit rates to the federal levels.

The higher research credit rates under this bill would tend to increase the amount of credit generated by 33%. Based on the analysis of the department's corporation credit samples, an estimate is made that raising the research credit rates to the federal levels would increase the amount of the state research credit actually used by 14%.

As currently written, this bill could have negative impact on some taxpayers that currently benefit from the maximum fixed-base percentage and that have both greenhouse research and non-greenhouse research expenditures. This negative impact, however, would not be significant due to the rather broad definition of qualified greenhouse expenditures defined in this bill. Most taxpayers would be able to classify their expenditures as non-greenhouse and avoid the loss of credit.

Many research types could qualify for this new greenhouse research credit. An assumption is made that approximately 50% of all corporate research expenditures could qualify for the credit provided in this bill. The total research credit used by corporations in 2008 is expected to reach about \$1.07 billion. The revenue impact of this bill is estimated at \$75 million ($\$1.07 \text{ billion} \times 14\% \times 50\% = \75 million).

The 2008 number is converted to future years based on the Department of Finance projection of corporate profit. Tax year estimates are converted to cash flow fiscal year estimates.

LEGISLATIVE STAFF CONTACT

Nicole Kwon
Franchise Tax Board
845-7800
haeyoung.kwon@ftb.ca.gov

Brian Putler
Franchise Tax Board
845-6333
brian.putler@ftb.ca.gov

Appendix A

The California R&D credit is a credit that normally is taken in conjunction with the Federal Research Credit. The calculation of the amount of research expenses creditable in California generally conforms to the calculation for federal purposes, with the exception that the California credit only applies to research activities conducted in California.

At the federal level, there are two reasons to encourage R&D. The first is that, without extra incentives, industry will typically do less R&D work than would be optimal for society. This is because R&D activity often produces “positive externalities;” i.e. benefits to people other than the person doing the R&D. The federal R&D credit reduces the after-tax cost of R&D investments, which should lead to an increase in R&D activity. Since state R&D credits also reduce the after-tax cost of R&D, they too will induce an increase in the overall level of R&D spending. The second purpose of the federal R&D credit is to encourage taxpayers to do their R&D in the United States, rather than in another country.

Since the structure of the California R&D credit generally conforms to that of the federal credit, the California credit will produce both of these same effects. It will contribute to an overall increase in R&D activity, and it will encourage R&D activity to be undertaken in California rather than elsewhere. Because California’s contribution to total R&D spending is smaller than the federal government’s contribution, the first effect – global increases in R&D activity -- is somewhat less important to state policy than to federal policy. The second effect -- regional competition -- is a relatively more important motivator for state policy. This is because it may be easier for some R&D firms to move their activity to another state than it would be for them to move it to another country, and many states besides California offer R&D credit. Therefore, a California credit may be necessary for the state to remain competitive with these other states in attracting and maintaining research business activity.

Both effects of the California R&D credit, the increase in the overall amount of R&D activity, and the increase in the proportion of this activity that takes place in California, must be considered in evaluating the success of the California R&D credit. The desirability of the increase in overall R&D activity is dependent on the level of the federal R&D credit (and credits offered by other states and countries). If the federal credit is too low, the added R&D incentives provided by states collectively could generate productive additional R&D activity. Alternatively, if the federal credit has already induced optimal levels of R&D, any increases in overall R&D spending induced by additional state credits will be inefficient and hurt overall economic performance. It is not known whether the federal R&D credit is currently set at the optimal level.

The R&D credit may be viewed as successfully maintaining the competitiveness of the California R&D industry only if R&D activity is undertaken in California that would not have been undertaken here in the absence of the credit. The amount of R&D activity that would not have taken place in California in the absence of the credit is unknown. Credits granted for R&D that would have occurred even in the absence of the credit may be considered a windfall.

There are two possible benefits to attracting the R&D business to California. The first is the addition of the R&D jobs themselves. If this were the only benefit, the R&D industry should be singled out for this special benefit only if jobs in this industry are substantially more desirable than jobs in other industries in the state. The second potential benefit from bringing R&D to California is that other

California businesses may be able to adopt innovations developed locally more rapidly than they can adopt innovations developed elsewhere. If this is the case, many California businesses, not just those receiving this credit, will gain an advantage over their rivals in other states. This advantage is not a result of being able to obtain technological information more quickly. Given the global communications network, information can be transported across continents relatively quickly and without cost. The advantage to California may come through something economists call *economies of agglomeration*. *Economies of agglomeration* are defined as “a reduction in production costs that results when firms in the same or related industries locate near one another.”

Thus, for example, if the R&D credit encourages some pharmaceutical companies to locate their research facilities in an area of California, that will, likewise, encourage the growth of pharmaceutical research support firms (such as material suppliers, pharmaceutical manufacturers, universities doing biological and chemical research, chemical engineers) to be attracted to that area. Subsequently, with the growth of the support industries, other pharmaceutical firms will be attracted to the area. There are clearly many agglomeration economies within California (high-technology in Silicon Valley and motion pictures in Hollywood are two obvious examples). However, many factors contribute to the development and growth of agglomeration economies. Because of the complexity of agglomeration economies, the extent to which the California R&D 20 credit has actually encouraged the development or growth of any agglomeration economies is not known.

We also note that less than one-third of this credit is actually available to reduce tax in the year that it is generated. The inability to use the credit (because of a lack of tax to reduce) undoubtedly reduces the incentive provided by the existence of the credit.